

1790455007-Taxwell  
Warsaw, Howard  
Christie

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC.  
22200 ILLINOIS ROUTE 9, POST OFFICE BOX 614  
TREMONT, ILLINOIS 61568-0614  
PHONE NO. (309) 925-5551 FAX NO. (309) 925-5606

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LETTER OF TRANSMITTAL

TO: Illinois Environmental Protection Agency  
1021 North Grand Avenue East, Box 19276  
Springfield, Illinois 62794-9276  
ATTENTION: Mr. Chris Nickel

DATE: December 6, 2000  
JOB NO.: 9890  
RE: CAP & Budget

IEPA/BOL

WE ARE SENDING YOU:

- REPORT       LETTER       CONTRACT & RATE SHEET
- MAPS/DRAWINGS       DOCUMENTS REQUIRING SIGNATURE
- REIMBURSEMENT DOCUMENTATION       OTHER

COPIES	DESCRIPTION
2	Corrective Action Plan & Budget for the Warsaw ITCO site located on Illinois Route 122 in Minier, Illinois

THESE ARE TRANSMITTED AS CHECKED BELOW:

- REIMBURSEMENT SUBMITTAL     FOR APPROVAL     AS NEEDED FOR REPORT
- COPY FOR YOUR RECORDS       SIGNATURE REQUIRED     AS REQUESTED

REMARKS:

Chris,

Please find enclosed the above mentioned documentation for your review. As always, please feel free to contact our office with any questions or comments. Thank you!

FROM: Gaye Lynn Green; Office Manager  
Midwest Environmental Consulting & Remediation Services, Inc.

RELEASABLE

MAR 29 2001

REVIEWER MM

R0001

# Midwest Environmental Consulting & Remediation Services Inc.

22200 Illinois Route 9 • P.O. Box 614

Tremont, IL 61568-0614

Phone: (309) 925-5551 • Fax: (309) 925-5606

November 30, 2000

Mr. Chris Nickell  
Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Re: LPC #1790455007 – Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 981987 and 991610  
LUST Technical File

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**IEPA/BOL**

Dear Mr. Nickell:

Attached please find the High Priority Site Investigation Corrective Action Plan (CAP) and Budget for the subject site. Midwest Environmental Consulting & Remediation Services, Inc. (MECRS) recommends that a phased approach to corrective action activities at the site be implemented consisting of the required investigation, to be followed by recommended remedial activities.

The attached report summarizes the investigation completed to date and proposes additional investigation required to complete the vertical and horizontal definition of the soil and groundwater contamination. A budget covering the costs incurred and the anticipated costs for investigation and report preparation is attached for your review. Once definition of the extent of contamination is completed, an amended High Priority CAP and Budget will be submitted for Agency Approval. The High Priority CAP will include the results of the investigation completed and the proposed method(s) of remediation. It is anticipated that a Tiered Approach to Cleanup Objectives (TACO) study will be implemented at the site to facilitate closure of the subject incident.

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MAR 29 2001

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC.

**REVIEWER MM**  
**R0002**

If you have any questions or comments, please contact our office.

Sincerely,

Midwest Environmental Consulting and Remediation Services, Inc.



Allan M. Green  
President

GLH/glg  
cc: Mr. Howard Warsaw  
Attachments  
Job No. 9890

Leaking Underground Storage Tank Program  
**High Priority Site Investigation Corrective Action Plan**

**Incident Location:** Warsaw - ITCO  
Route 122  
Minier, Illinois – Tazewell Co.

**Prepared for:** Howard Warsaw  
Route 122  
Minier, Illinois 61759

**Prepared by:** Midwest Environmental Consulting  
and Remediation Services, Inc.  
22200 Illinois Route 9  
Post Office Box 614  
Tremont, Illinois 61568-0614  
Contact: Allan Green – President

**For Review by:** Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
Contact: Mr. Chris Nickell

# High Priority Site Investigation Corrective Action Plan

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**IEPA UST Owner/Operator Form**

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

**Underground Storage Tank Owner/Operator:**

*Please indicate below the type of plan/report that is being submitted to the Agency at this time. This form must be attached to all plans and reports submitted to the Agency pursuant to 35 Ill. Adm. Code 732 and 415 ILCS 5/57-57.17. Please check all that apply.*

20 Day Certification	_____		
45 Day Report	_____		
Free Product Removal Report	_____		
		Initial Submittal	Amended Submittal
Site Classification Plan	_____	_____	_____
Site Classification Plan Budget	_____	_____	_____
Site Classification Completion Report	_____	_____	_____
Groundwater Monitoring Plan (Low Priority)	_____	_____	_____
Groundwater Monitoring Plan Budget (Low Priority)	_____	_____	_____
Groundwater Monitoring Results (Low Priority)	_____	_____	_____
Professional Engineer Certification (Low Priority)	_____	_____	_____
Corrective Action Plan (High Priority)	_____	X	_____
Corrective Action Plan Budget (High Priority)	_____	X	_____
Corrective Action Completion Report (High Priority)	_____	_____	_____
Professional Engineer Certification (High Priority)	_____	_____	_____
Corrective Action Completion Report (35 IAC Section 732.300(b), 732.400(b) or (c))	_____	_____	_____
Professional Engineer Certification (35 IAC Section 732.300(b), 732.400(b) or (c))	_____	_____	_____

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I certify under penalty of law that this document was prepared by me or under my direction or supervision. This information is to the best of my belief and knowledge, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine for knowing violations.

**Owner**  
Name: Howard Warsaw  
Title: Owner  
Signature: Howard Warsaw  
Date: 12-27-00

**Operator**  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

**IEPA Corrective Action Plan Form**

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Corrective Action Plan**

**A. Site Identification**

IEMA Incident # (6 digit): 981987/991610 IEPA Generator # (10 digit): 1790455007  
Site Name: Warsaw, Howard  
Site Address (Not a P.O. Box): Route 122  
City: Minier County: Tazewell

**B. Site Information**

1. Will the owner/operator seek reimbursement from the Underground Storage Tank Fund? Yes  No
2. If yes, is the budget attached? Yes  No
3. Is this an amended plan? Yes  No
4. Identify the material released: gasoline
5. This Corrective Action Plan is being submitted pursuant to:
- a. 35 Ill. Adm. Code Section 731.166:
- i. A release of petroleum from a UST was reported to IEMA prior to September 13, 1993 and the owner/operator has **NOT** elected to proceed under Title XVI of the Environmental Protection Act N/A
- ii. The material released was not petroleum. N/A
- b. 35 Ill. Adm. Code Section 732.404:
- i. A groundwater quality standard or objective for any applicable indicator contaminant has been exceeded at the property boundary line or 200 feet from the leaking UST. YES
- ii. The leaking UST system is within the setback zone or regulated recharge area of a potable water supply well. NO
- iii. There is evidence that migration of petroleum or petroleum vapors may threaten human health or human safety. NO

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iv. Class III Special Resource Groundwater exists within 200 feet of the site. NO

v. A surface body of water has been adversely affected by the presence of a visible sheen or free product layer. NO

c. 35 Illinois Administrative Code Section 732.312 N/A

### C. Proposed Methods of Remediation

1. Soil Investigation to provide required information for remedial design.
2. Groundwater Investigation to provide required information for remedial design.

### D. Soil and Groundwater Investigation Results

Provide the following:

1. Description of investigation activities performed to define the extent of soil and/or groundwater contamination;
2. Analytical results and cleanup objectives in tabular format;
3. Laboratory reports;
4. Boring logs;
5. Monitoring well logs;
6. Site maps to scale and oriented north showing:
  - a. Soil sample locations;
  - b. Monitoring well locations;
  - c. The plume of soil and groundwater contamination based on analytical results.

### E. Technical Information - Corrective Action Plan

Provide the following:

1. A discussion of how the corrective action plan shall remediate each of the criteria which caused the site to be classified as High Priority;
2. Engineering design specifications, diagrams, calculations, manufacturers's specifications, systems analyses, site maps, etc.;
3. A list of sampling parameters and corresponding cleanup objectives;
4. The basis for determining sampling parameters and cleanup objectives;
5. Media sampling plan to verify completion of remediation;
6. A discussion of the proposed system(s) effectiveness in remediating the contaminated soil and/or groundwater;
7. A description and results of bench/pilot studies;
8. Itemized cost estimates of alternative versus conventional technologies;
9. For alternative technologies the following must be provided:
  - a. A demonstration that the proposed technology has a substantial likelihood of achieving compliance with all applicable regulations and all corrective action

- remediation objectives necessary to comply with the Environmental Protection Act and the regulations and to protect human health and the environment;
- b. A demonstration that the proposed technology will not adversely affect human health or the environment;
  - c. Copies of all Agency permits necessary to authorize the use of the alternative technology;
  - d. Results of the monitoring program implemented to determine whether the proposed technology will achieve compliance with the applicable regulations and remediation objectives.

**F. Signatures**

I certify under penalty of law that this plan, supporting documents and all attachments were prepared under my direction or supervision. To the best of my knowledge and belief, this plan, supporting documents and all attachments are true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<b>Owner</b>	<b>Operator</b>
Name: <u>Howard Warsaw</u>	Name: _____
Title: <u>Owner</u>	Title: _____
Address: <u>Route 122</u>	Address: _____
<u>Minier, IL 61759</u>	_____
Phone: <u>(309) 392-2626</u>	Phone: _____
Signature: <u>Howard Warsaw</u>	Signature: _____
Date: <u>12-4-00</u>	Date: _____

**Consultant**

Firm: Midwest Environmental Consulting & R. S., Inc.

Contact: Allan Green

Title: President

Address: 22200 Illinois Route 9, PO Box 614

Tremont, Illinois 61568

Phone: (309) 925-5551

Signature: Allan M. Green

Date: 11/30/00

**Section 1**  
**Introduction**

## Section 1. Introduction

The subject site is currently a gasoline service station and farm implement dealer located on Route 122 in Minier, Illinois. The area is developed for commercial, residential and agricultural use. An area map and 200' radius map are provided in Figures 1 and 5, respectively.

Three underground storage tanks (USTs) were removed from the site on July 6, 1999. The three tanks (1-2,000 gallon, 2-500 gallon) were used for gasoline. Details of the UST removal/free product removal activities can be found in the Report of Early Action/ Amended 45-Day Report dated August 31, 1999 and the Free Product Removal Report dated August 26, 1999.

A Physical Soil Classification, pursuant to IEPA Method Two, was performed by Midwest Environmental Consulting and Remediation Services, Inc. (MECRS) on May 4, 2000. One (1) Physical Soil Classification boring, doubling as a migration pathway boring (B-1), one (1) boring placed within 5 feet of boring B-1 for the collection of shelby tubes for physical soil testing (B-1a), and six (6) additional migratory pathway borings (MW-1 through MW-4, B-2, and B-3) were completed by Whitney & Associates of Peoria, Illinois under the supervision of MECRS. The Site Classification Completion Report dated July 10, 2000 was submitted to IEPA and details the findings of the investigation. In a letter dated October 20, 2000, the IEPA approved the report and the classification of "High Priority".

The purpose of this High Priority Site Investigation CAP is to propose the investigation necessary to prepare the High Priority CAP. The budget for CAP investigation costs previously incurred and those costs anticipated for additional investigation and preparation of the High Priority CAP is attached for IEPA approval.

**Section 2**

**Results of the Investigation Completed to Date**

## Section 2. Results of the Investigation Completed to Date

On May 4, 2000, three soil borings were drilled and four groundwater monitoring wells were installed to investigate soil and groundwater conditions on site. Soil boring and monitoring well locations are shown on Figure 2. A list of all reports previously submitted to IEPA is presented in Appendix E.

The site is predominantly underlain by silty clay mixtures, silty sand, and clayey silt with a sandy gravel bed from 10-13 feet below ground surface (bgs). During drilling, groundwater was first encountered at depths ranging between 9 and 13 feet bgs. Static water levels in the monitoring wells have ranged between 5.5 and 8 feet bgs across the site. Groundwater flow direction has been calculated to be moving generally from east to west across the site. Soil boring logs and monitoring well diagrams are provided in Appendix A. Piezometric surface maps/groundwater elevation maps are presented in Figures 3 and 4. Depth to groundwater measurements are presented in Table 2 and in Appendix C.

The approximate horizontal extent of onsite soil contamination has been defined. Complete horizontal definition of the offsite contaminant plume has not yet been completed. Soil samples collected from soil borings B-2 (4-6), B-2 (6-8), B-2 (8-10), B-3 (6-8), B-3 (8-10), MW-4 (4-6), MW-4 (6-8) drilled on May 4, 2000 indicated concentrations of petroleum hydrocarbons above IEPA Tier 1 Cleanup Objectives.

The approximate vertical extent of onsite soil contamination has been defined. A cross section showing the generalized site geology, the depth of the soil samples collected from each boring, and the concentrations of benzene detected at each location is provided in Figure 7. The cross section location map is provided in Figure 6.

The horizontal extent of groundwater contamination has been defined to the south and west of the site. The estimated extent of groundwater contamination onsite is shown on Figure 8. An additional groundwater monitoring well has been proposed onsite west of the contaminant plume to better define its extents. Three additional borings and two additional borings/monitoring wells have been proposed offsite to the north and east to define the extents of the contaminant plume. The estimated location of these additional proposed soil borings/monitoring wells is shown on Figure 9.

Soil boring logs and monitoring well diagrams are presented in Appendix A. Laboratory data sheets are provided in Appendix B. Soil and groundwater analytical data collected to date are presented in Tables 1 and 2. The potentiometric surface maps for the two sampling events are presented in Figures 3 and 4 respectively.

**Section 3**

**Anticipated Cleanup Methods**

### Section 3. Anticipated Cleanup Methods

#### Following completion of the CAP investigation:

To reduce the concentrations of petroleum hydrocarbons in the soil onsite, MECRS initially proposes the use of magnesium peroxide to promote biological breakdown and natural attenuation of petroleum hydrocarbons remaining in the soil. Magnesium peroxide is a white odorless powder that, when mixed with water, slowly introduces oxygen into the subsurface.

It is anticipated that magnesium peroxide will also be used to treat the contaminated groundwater in-situ. Injection of magnesium peroxide will further enhance the breakdown of petroleum hydrocarbons in the groundwater. The exact locations, depths of injection, methods of application and required volume of magnesium peroxide will be based on the extent of the groundwater contaminant plume as determined by the proposed investigation. Biological parameters will be collected from all wells installed to determine the presence of microorganisms. Similar studies have previously been accepted by the IEPA for evidence that the microorganisms required for enhanced hydrocarbon biodegradation are present in the soil.

Final cleanup requirements will likely be based on a Tiered Approach to Cleanup Objectives (TACO) evaluation of the site. Further information detailing the cleanup methods will be submitted to IEPA upon completion of the preliminary corrective action investigation.

**Section 4**

**Additional Investigation Required**

#### Section 4. Additional Investigation Required

To complete definition of the extent of soil contamination, soil samples will be collected from seven additional locations. Three soil borings will be converted to groundwater monitoring wells to help delineate the extent of groundwater contamination. Soil borings will be sampled continuously in an attempt to determine the extent of soil contamination. Proposed boring locations include:

- 1) The southwest corner of the existing station building in front of the pole barn. This boring will be completed as a monitoring well if warranted;
- 2) Southeast of boring B-2 on the residential property east of the site. The exact location of this boring is dependent on access approval from the property owner and underground utility locations;
- 3) East of boring B-2 on the residential property east of the site. The exact location of this boring is dependent on approval from property owner and underground utility locations. This boring will be completed as a monitoring well if warranted;
- 4) To the northeast of monitoring well MW-4 on the residential property east of the site. The exact location of this boring is dependent on approval from property owner and underground utility locations;
- 5) North of monitoring well MW-4 across Route 122. The exact location of this boring is dependent on approval from property owner and underground utility locations. This boring will be completed as a monitoring well if warranted;
- 6) North of boring B-3 across Route 122. The exact location of this boring is dependent on approval from property owner and underground utility locations.
- 7) In the area of the most contamination directly north of the former UST locations. This boring will be drilled to collect data for the TACO parameters: natural organic carbon fraction, soil bulk density, and a sample for ex-situ hydraulic conductivity testing.

To complete the definition of the groundwater plume, two off-site wells and one onsite well will be installed at boring locations 1, 3, and 5 (listed above).

Access agreements between the offsite property owners and Howard Warsaw will need to be obtained before proceeding with the investigation. Proposed boring and monitoring well locations are shown in Figure 9.

**Table 1**  
**Soil Analytical Data**

**TABLE 1.**  
**Soil Analytical Results**  
**Warsaw-ITCO**  
**Minier, IL**

Sample ID:	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/00	<2.0	<2.0	<2.0	<5.0	<11.0
B-2, 4-6'	5/3/00	<b>810</b>	1,300	1,700	6,500	10,310
B-2, 6-8'	5/3/00	<b>600</b>	220	420	1,900	3,140
B-2, 8-10'	5/3/00	<b>21,000</b>	<b>41,000</b>	<b>47,000</b>	<b>190,000</b>	<b>299,000</b>
B-3, 6-8'	5/3/00	<b>400</b>	120	210	460	1,190
B-3, 8-10'	5/3/00	<b>2,300</b>	2,100	<b>31,000</b>	110,000	145,400
MW-1, 6-8'	5/4/00	<2.0	<2.0	<2.0	<5.0	<11.0
MW-2, 8-10'	5/3/00	<2.0	<2.0	<2.0	<5.0	<11.0
MW-3, 8-10'	5/3/00	<2.0	<2.0	6	<5.0	<14.7
MW-4, 4-6'	5/4/00	<b>230</b>	220	870	2,500	3,820
MW-4, 6-8'	5/4/00	<b>300</b>	1,200	5,400	20,000	26,900

Notes:

1. All results in parts per billion (ppb).
2. IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethyl-benzene	Xylenes (total)	BTEX
30	12,000	13,000	150,000	175,030.0

3. All bolded values are above Tier 1 Residential Cleanup Objectives

**Table 2**  
**Groundwater Analytical Data**

**Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois**

Sample #	Date	DTW	GWE	Benzene	Toluene	E-benzene	Xylenes	Total BTEX
<b>MW-1</b>	<b>Elevation Top of Casing =</b>			<b>99.62</b>				
	5/12/00	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3
	10/24/00	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4
<b>MW-2</b>	<b>Elevation Top of Casing =</b>			<b>99.28</b>				
	5/9/00	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0
	10/24/00	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0
<b>MW-3</b>	<b>Elevation Top of Casing =</b>			<b>100</b>				
	5/9/00	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0
	10/24/00	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0
<b>MW-4</b>	<b>Elevation Top of Casing =</b>			<b>99.84</b>				
	5/9/00	5.90	93.94	2600	12000	4500	18000	37100
	10/24/00	7.80	92.04	2300	5200	4000	13000	24500

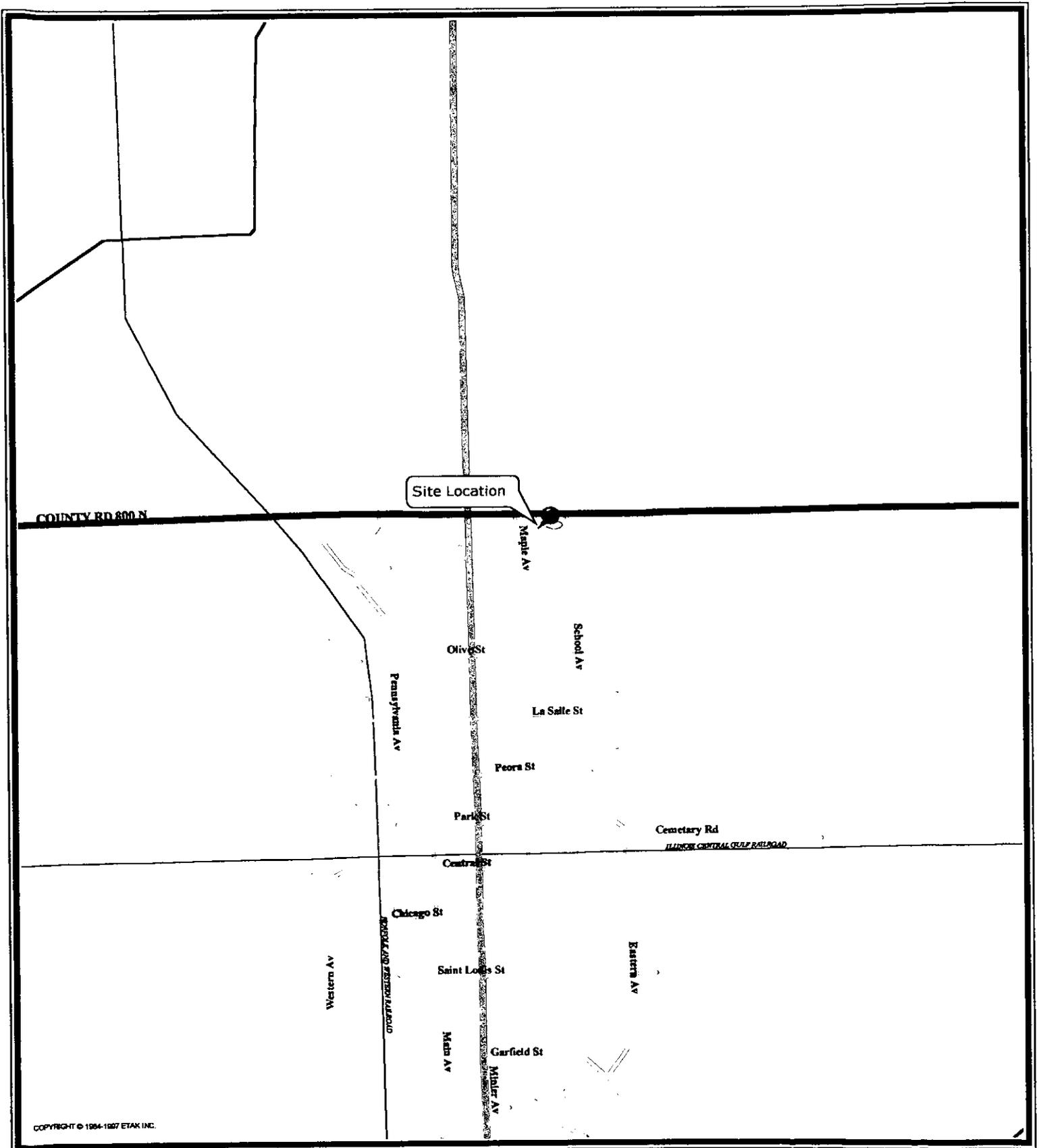
**Notes:**

1. All results in parts per billion (ppb).
2. IEPA Generic Cleanup Objectives:
 

<u>Benzene</u>	<u>Total BTEX</u>
5.0 ppb	11,705 ppb
3. -- = No data available
4. MDL = Method Detection Limit
5. DTW = Depth to Water
6. GWE = Groundwater Elevation referenced to datum point
7. NA = Not analyzed this event

**Figure 1**  
**Area Map**

# Area Map

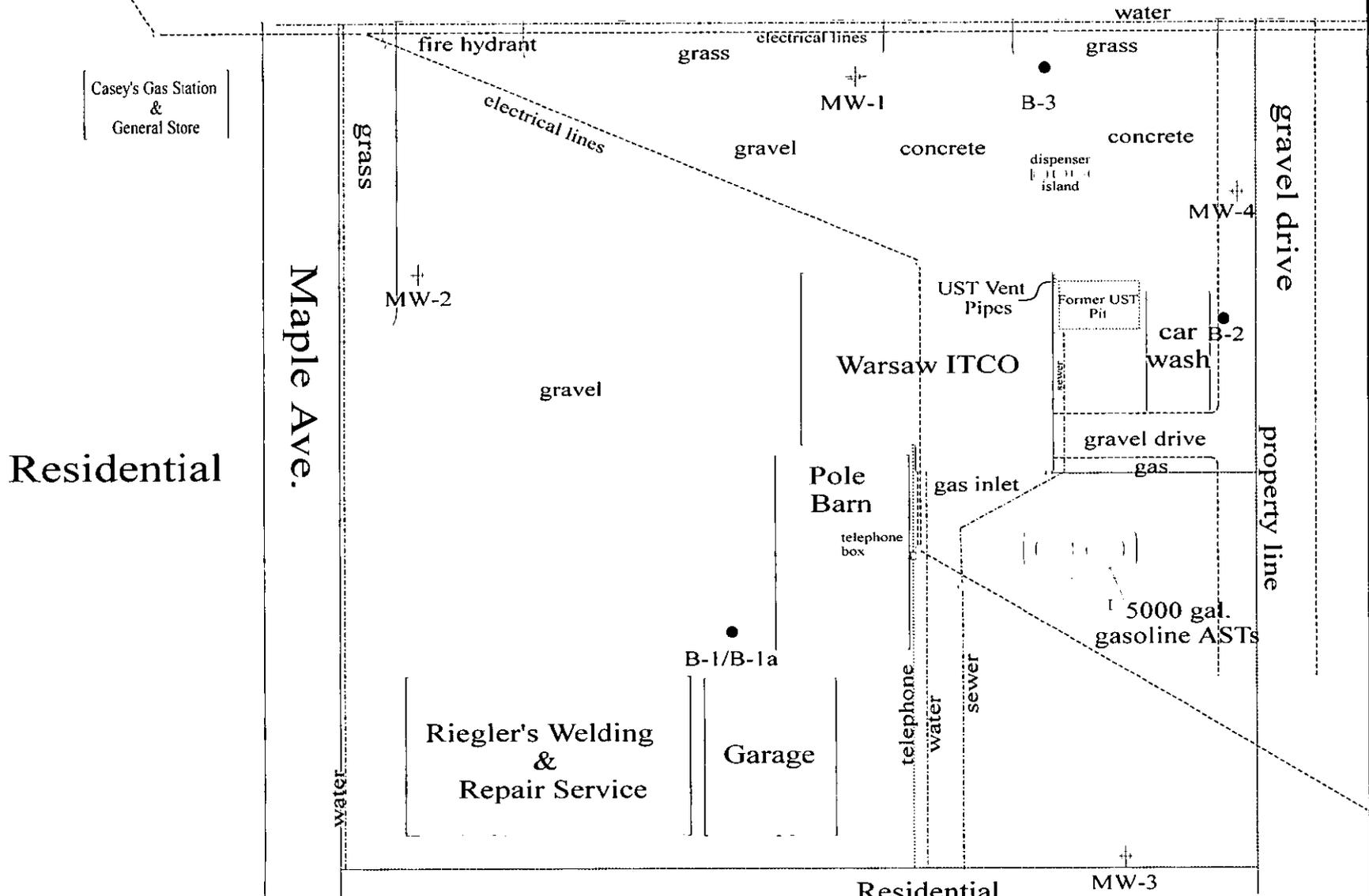


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**Figure 2**

**Monitoring Well and Soil Boring Location Map**

# Route 122



Residential

Maple Ave.

gravel drive

property line

Residential

MW-3



- = Approximate Migration Pathway Boring Location
- + = Approximate Monitoring Well Location

**FIGURE 2**  
**Boring and Monitoring**  
**Well Location Map**  
**Warsaw ITCO**  
**Minier, IL**

Date: 5/8/00	Drawn By: TKB
PRJN: 9890	Approved By: AMG

**M.E.C.R.S., INC.**  
**R0027**

**Figure 3**

**Piezometric Surface Map 5/9/00**

# Route 122

Casey's Gas Station  
&  
General Store

Maple Ave.

Residential

93.77'  
MW-2

94.0'

94.04'  
MW-1

93.94'  
MW-4

gravel drive

Warsaw ITCO

car wash

Pole Barn

property line

93.8'

5000 gal.  
gasoline ASTs

Riegler's Welding  
&  
Repair Service

Garage

93.9'  
MW-3  
93.91

Residential



0' 40'  
APPROXIMATE  
SCALE

- = Approximate Migration Pathway Boring Location
- ⊕ = Approximate Monitoring Well Location

**FIGURE 3**  
Piezometric Surface Map  
Warsaw ITCO  
Minier, IL

Date: 5/9/00

Drawn By: TKB

PRJN: 9890

Approved By: AMG

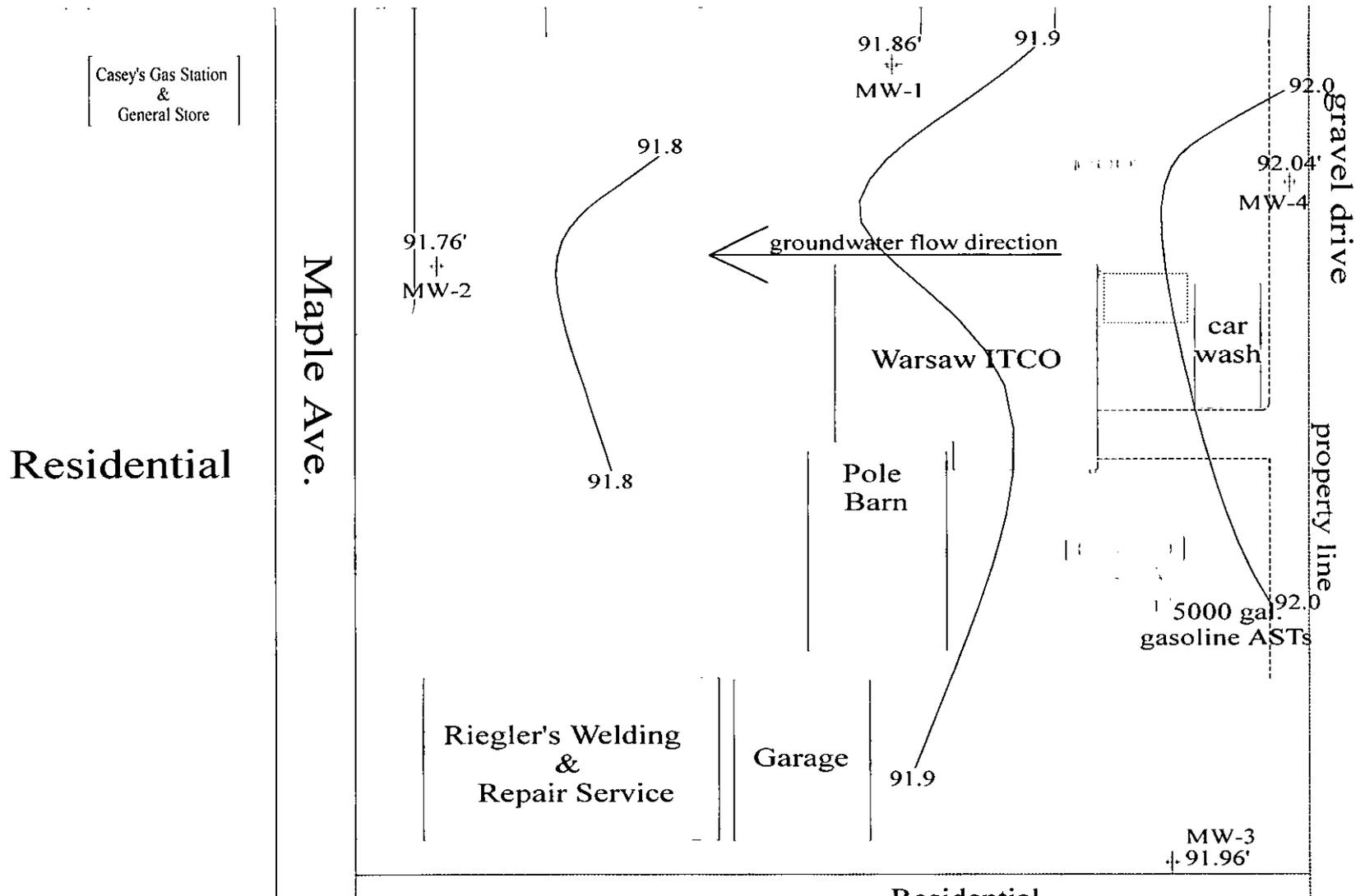
**M.E.C.R.S., INC.**

R0029

**Figure 4**

**Piezometric Surface Map – 10/24/00**

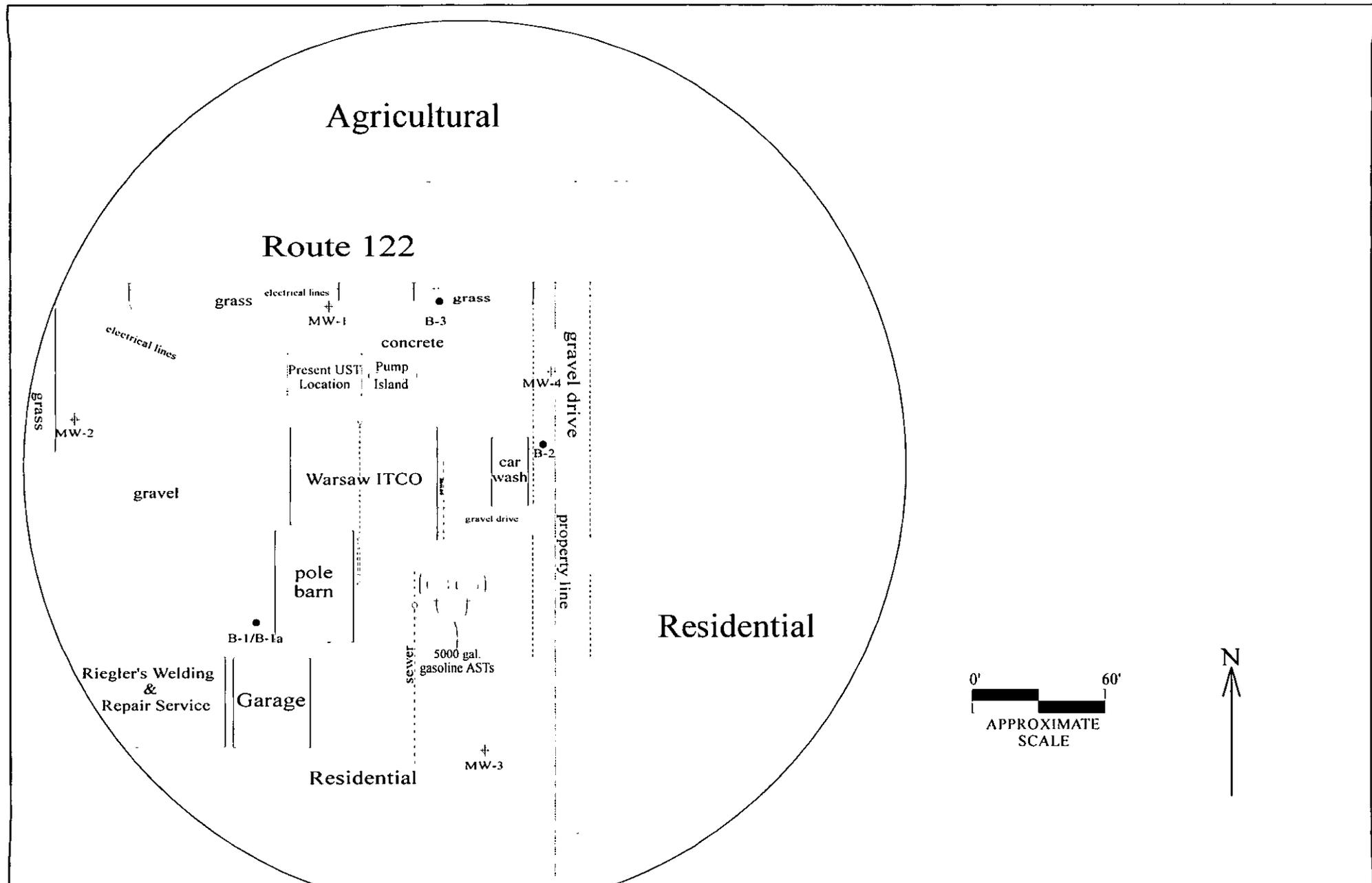
# Route 122



- = Approximate Migration Pathway Boring Location
- ⊥ = Approximate Monitoring Well Location

<b>FIGURE 4</b> <b>Piezometric Surface Map</b> <b>Warsaw ITCO</b> <b>Minier, IL</b>	Date: 10/24/00	Drawn By: GLH
	PRJN: 9890	Approved By: AMG
<b>M.E.C.R.S., INC.</b> <b>R0031</b>		

**Figure 5**  
**200 Feet Radius Map**



**FIGURE 5**  
**200' Radius Map**  
**Warsaw ITCO**  
 Minier, IL

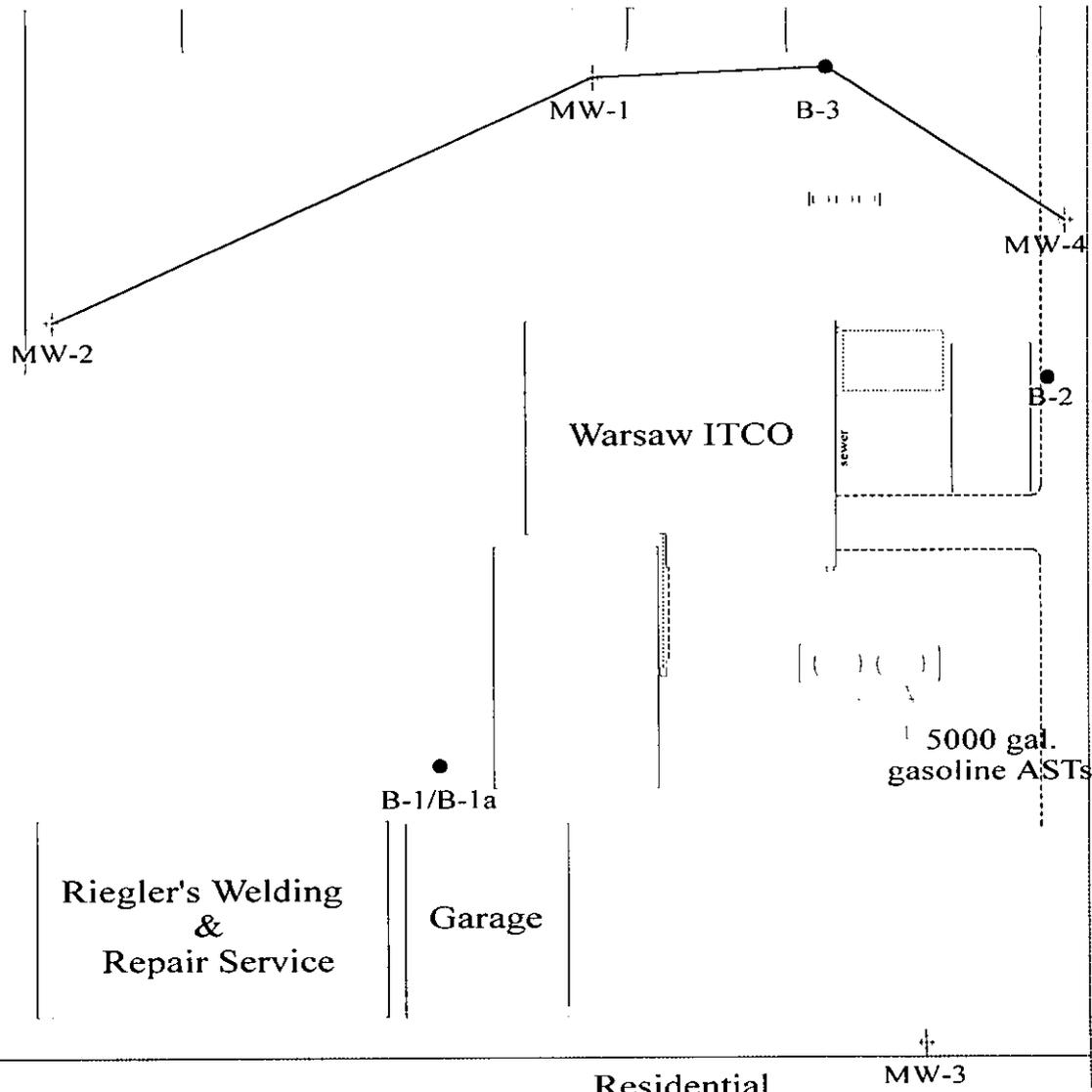
DATE: 5/30/00	DRAWN BY: TKB
JOB NO.: 9890	APPROVED BY: AMG

**M.E.C.R.S., Inc.**  
 R0033

**Figure 6**  
**Cross Section Location Map**

# Route 122

Maple Ave.



- = Approximate Migration Pathway Boring Location
- ⊥ = Approximate Monitoring Well Location

**FIGURE 6**  
**Cross Section Location Map**  
**Warsaw ITCO**  
**Minier, IL**

Date: 5/8/00	Drawn By: TKB
PRJN: 9890	Approved By: AMG

**M.E.C.R.S., INC.**  
**R0035**

**Figure 7**

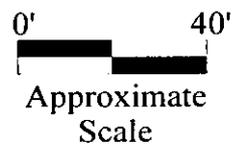
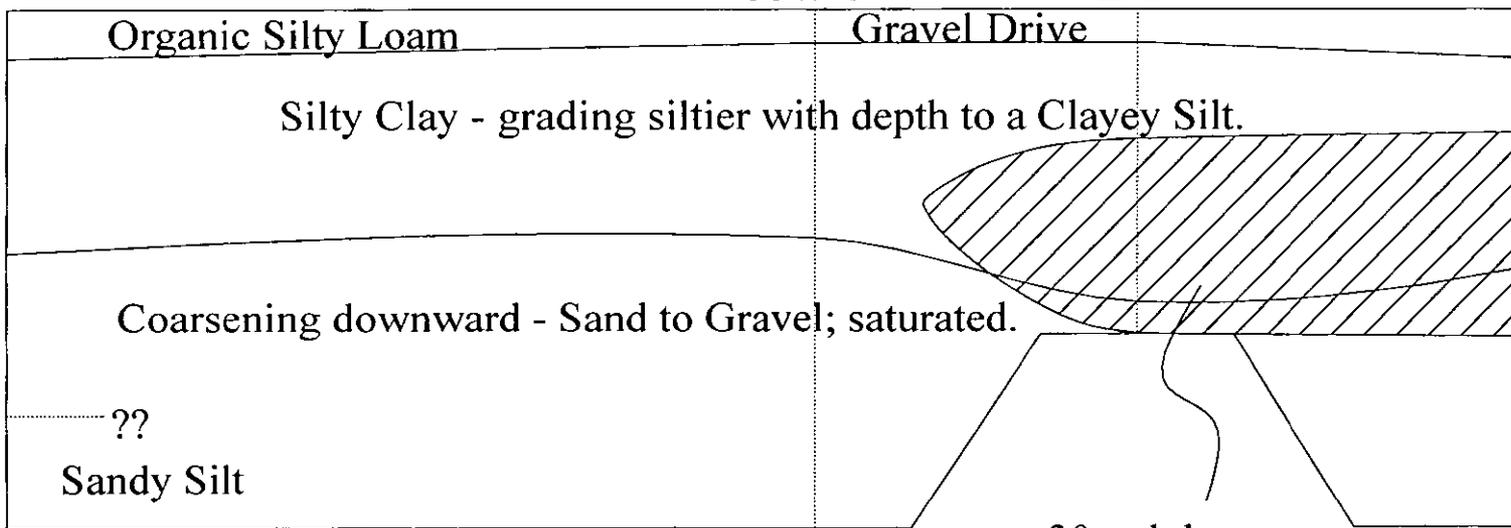
**Geologic Cross Section and Vertical Extent of Soil Contamination**

MW-2

MW-1

B-3

MW-4



\*\*NOTE: 5X Vertical Exaggeration

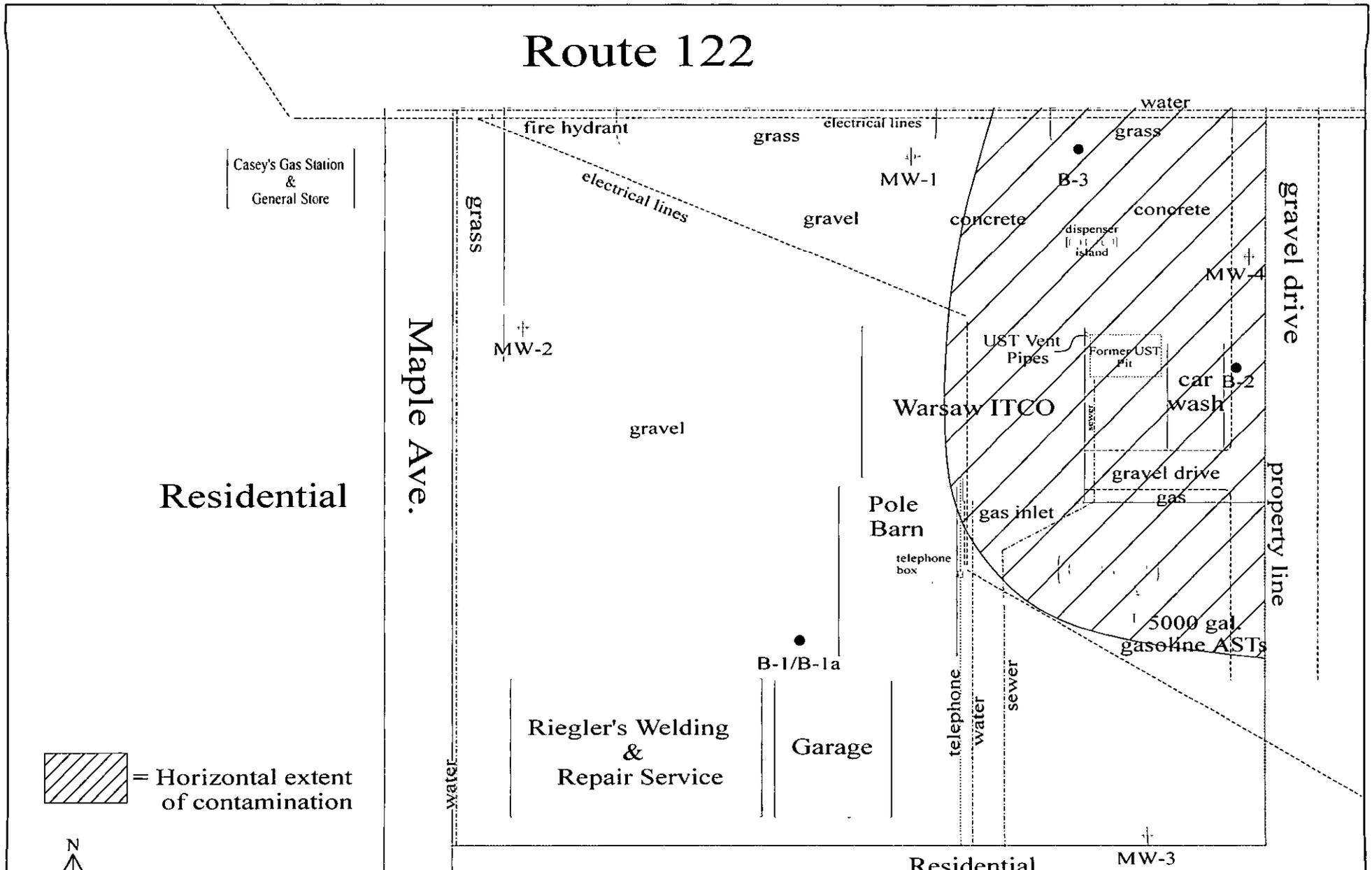
<b>FIGURE 7</b> Generalized Geologic Cross Section & Vertical Extent of Soil Contamination Warsaw - ITCO, Minier, IL	
DATE: 10/25/00	DRAWN BY: GLH
PRJN: 9890	APPROVED BY: AMG

**M.E.C.R.S., Inc.**

**Figure 8**

**Horizontal Extent of Soil and Groundwater Contamination**

# Route 122



 = Horizontal extent of contamination



0'  40'  
APPROXIMATE SCALE

- = Approximate Migration Pathway Boring Location
- + = Approximate Monitoring Well Location

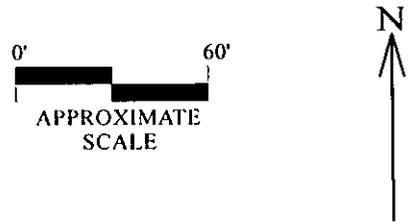
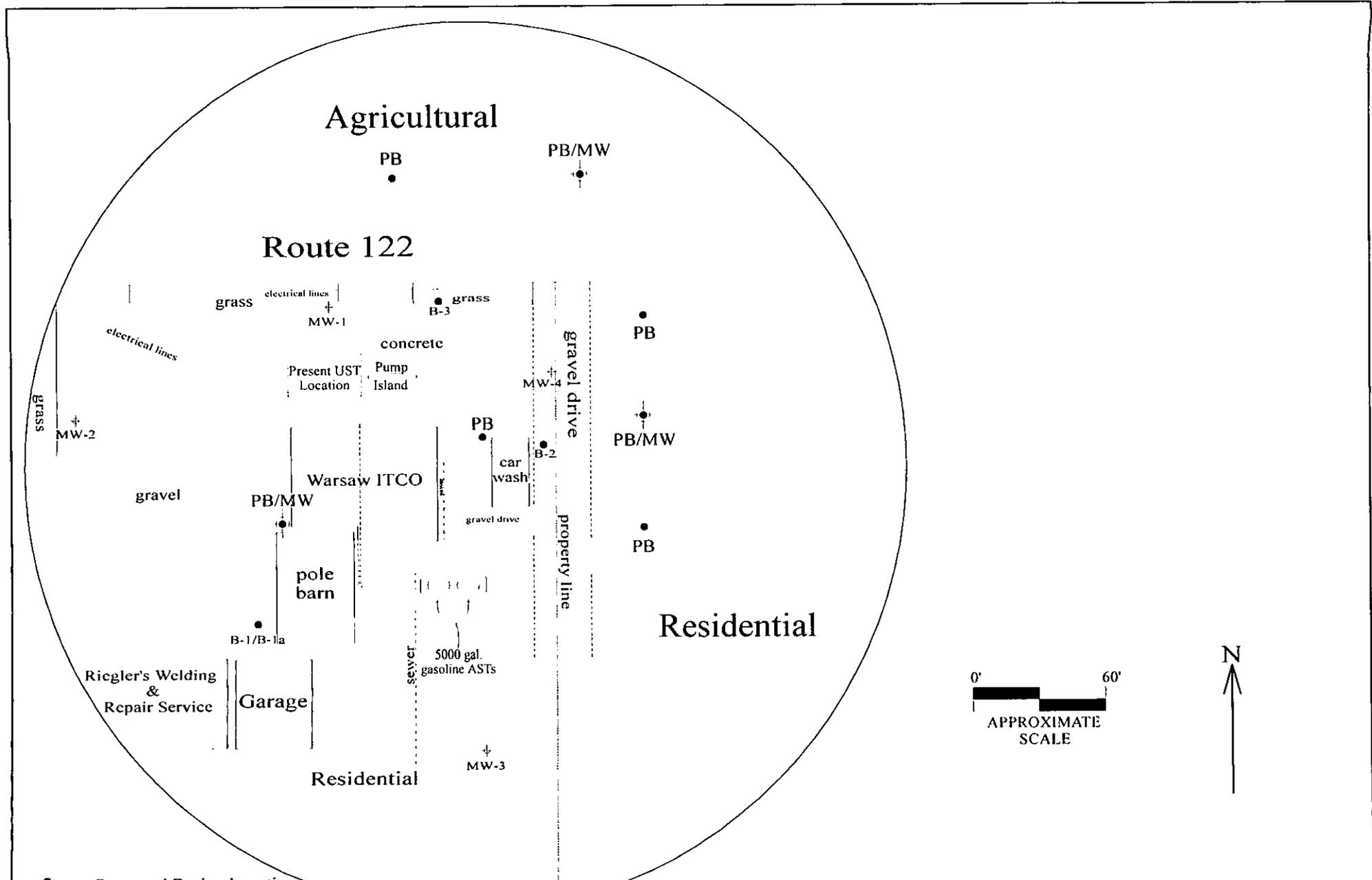
**FIGURE 8**  
**Known Horizontal Extent of Soil and Groundwater Contamination Map**  
**Warsaw ITCO**  
**Minier, IL**

Date: 10/25/00	Drawn By: GLH
PRJN: 9890	Approved By: AMG

**M.E.C.R.S., INC.**  
**R0039**

**Figure 9**

**Proposed Boring and Monitoring Well Locations**



- = Proposed Boring Location
- PB  
|  
+ = Proposed Boring/Monitoring Well Location
- + = Existing Monitoring Well Location
- MW-3
- B-2 = Existing Boring Location

<b>FIGURE 9</b> Proposed Boring & Monitoring Well Location Map Warsaw ITCO Minier, IL	DATE: 10/25/00	DRAWN BY: GLH
	JOB NO.: 9890	APPROVED BY: AMG
<b>M.E.C.R.S., Inc.</b> R0041		

**Appendix A**

**Boring Logs and Monitoring Well Diagrams**

GEOLOGIC DRILL LOG				PROJECT Warsaw/ITCO		PROJECT NUMBER 9890		SHEET NO. 1 of 1		HOLE NUMBER B-1	
SITE Route 122; Minier, IL				COORDINATES		LOGGED BY TB		CHECKED BY TB			
BEGUN 5/3/00		COMPLETED 5/3/00		DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger		BORING DIA. 6"		TOTAL DEPTH 26	
CORE RECOVERY (FT./%) 24 / 100		CORE BOXES 0		SAMPLES 12		CASING STICKUP		GROUND ELEV.		DEPTH/ELEV. GROUND WATER 9	
SAMPLE TYPE Split Spoon				CASING DIA/LENGTH		NOTES					
SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	HNu (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	SAMPLE	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.		
B-1, 9					1.5			SILTY CLAY loam (OL); Black, moist, firm, no odor.	B-1, 8-10' = Soil sample collected from split spoon for chemical analysis of BTEX.		
	SS	2.0/2.0			5		SILTY CLAY (CL-ML); Brown w/ gray mottling, moist, firm, no odor.				
	SS	2.0/2.0			7.0		SILTY SAND (SM); Reddish brown, wet, soft, no odor. fines.				
	SS	2.0/2.0			10.0		saturated, coarsening downward				
	SS	2.0/2.0			10.0		grades to SANDY GRAVEL (GP); Saturated, coarse grained, no odor.				
	SS	2.0/2.0			13.0		CLAYEY SILT (ML); Gray, moist, firm, no odor, trace fine sand.				
	SS	2.0/2.0			15						
	SS	2.0/2.0			16.0		SILTY CLAY till (CL-ML); Gray, slightly moist, hard, trace gravel, unweathered till.				
	SS	2.0/2.0			20						
	SS	2.0/2.0			25						
	SS	2.0/2.0			26.0						
							26.0			Bottom of boring at 26 feet.	

GEOLOGIC DRILL LOG				PROJECT Warsaw/ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER B-1a
SITE Route 122; Minier, IL			COORDINATES		LOGGED BY TB		CHECKED BY TB	
BEGUN 5/3/00	COMPLETED 5/3/00	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 6"	TOTAL DEPTH 16
CORE RECOVERY (FT./%) 4 / 100		CORE BOXES 0	SAMPLES 2	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 9	DEPTH/ELEV. TOP OF ROCK	
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES			
SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	HNu (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
P1,9-11	ST	2.0/2.0			1.5		SILTY CLAY loam (OL); Black, moist, firm, no odor.	P1,'depth' = Shelby tubes collected at depth for physical soil testing and classification.
					5		SILTY CLAY (CL-ML); Brown w/ gray mottling, moist, firm, no odor.	
7.0		SILTY SAND (SM); Reddish brown, wet, soft, no odor. fines.						
10.0		saturated, coarsening downward						
10.0		grades to SANDY GRAVEL (GP); Saturated, coarse grained, no odor.						
13.0		CLAYEY SILT (ML); Gray, moist, firm, no odor, trace fine sand.						
P2,14-16	ST	2.0/2.0			15			
					16.0		Bottom of boring at 16 feet.	
					20			
					25			
					30			
					35			

GEOLOGIC DRILL LOG				PROJECT Warsaw/ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER B-2	
SITE Route 122; Minier, IL			COORDINATES		LOGGED BY TB		CHECKED BY TB		
BEGUN 5/3/00	COMPLETED 5/3/00	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 6"	TOTAL DEPTH 10	
CORE RECOVERY (FT./%) 8 / 100		CORE BOXES 0	SAMPLES 4	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 8.5		DEPTH/ELEV. TOP OF ROCK	
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES				
SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	H <sub>2</sub> O (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	SAMPLE	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
					1.5			GRAVEL driveway	
B-2, 5	SS	2.0/2.0			5			CLAYEY SILT (ML); Gray-green, moist, soft, petroleum odor.	B-2, 'depth' = Soil sample collected from split spoon for chemical analysis of BTEX.
B-2, 7	SS	2.0/2.0			8.5			SAND (SW); Saturated, strong petroleum odor, medium grained, few fines.	
B-2, 9	SS	2.0/2.0			10.0			Bottom of boring at 10 feet.	
					15				
					20				
					25				
					30				
					35				

<b>GEOLOGIC DRILL LOG</b>			PROJECT Warsaw/ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER B-3
SITE Route 122; Miner, IL			COORDINATES		LOGGED BY TB		CHECKED BY TB
BEGUN 5/3/00	COMPLETED 5/3/00	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger		BORING DIA. 6"	TOTAL DEPTH 10
CORE RECOVERY (FT./%) 8 / 100		CORE BOXES 0	SAMPLES 4	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 9	DEPTH/ELEV. TOP OF ROCK
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES		

SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	HNU (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	SAMPLE	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
					1.0			SILT loam (OL); Black, moist, firm.	
	SS	2.0/2.0						SILTY CLAY (CL); Gray with brown mottling, moist, firm, no petroleum odor.	
B-3, 7	SS	2.0/2.0			5			grades reddish brown with gray mottling, moist to wet.	B-3, 'depth' = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0						strong petroleum odor	
B-3, 9	SS	2.0/2.0			9.0				
					10.0			SAND (SW); Saturated, strong petroleum odor, medium grained, few fines. <i>Bottom of boring at 10 feet.</i>	
					15				
					20				
					25				
					30				
					35				

GEOLOGIC DRILL LOG				PROJECT Warsaw/ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER MW-1
SITE Route 122; Minier, IL			COORDINATES		LOGGED BY TB		CHECKED BY TB	
BEGUN 5/4/00	COMPLETED 5/4/00	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 8"	TOTAL DEPTH 16
CORE RECOVERY (FT./%) 14 / 100		CORE BOXES 0	SAMPLES 7	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 7		DEPTH/ELEV. TOP OF ROCK
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES			
SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	H <sub>2</sub> O (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
MW-1, 7					1.0		GRAVEL drive	MW-1, 6-8' = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0			4.0		SILTY CLAY (CL); Reddish brown with gray mottling, moist, firm, no odor.	
	SS	2.0/2.0			5		grades CLAYEY SILT (ML); Gray with reddish brown mottling, moist, firm, no odor.	
	SS	2.0/2.0			7.0			
	SS	2.0/2.0			10		SAND (SW); Saturated, medium grained, with fines and gravel	
	SS	2.0/2.0			15		grain size coarsens with depth, grades to gravel.	
	SS	2.0/2.0			16.0		Bottom of boring at 16 feet.	
					20			
					25			
					30			
					35			

# WELL CONSTRUCTION LOG

PROJECT  
Warsaw/ITCO

PROJECT NUMBER  
9890

WELL NUMBER  
**MW-1**  
CASING STICKUP

SITE  
Route 122; Minier, IL

COORDINATES

GROUND SURFACE ELEVATION

Soil Boring Cross-Reference **MW-1**  
Town and City Minier  
County and State Tazewell, IL

Installation Date (s) 5/4/00

Drilling Method Hollow Stem Auger  
Drilling Contractor Whitney & Associates  
Drilling Fluid none

Development Technique (s) / Dates

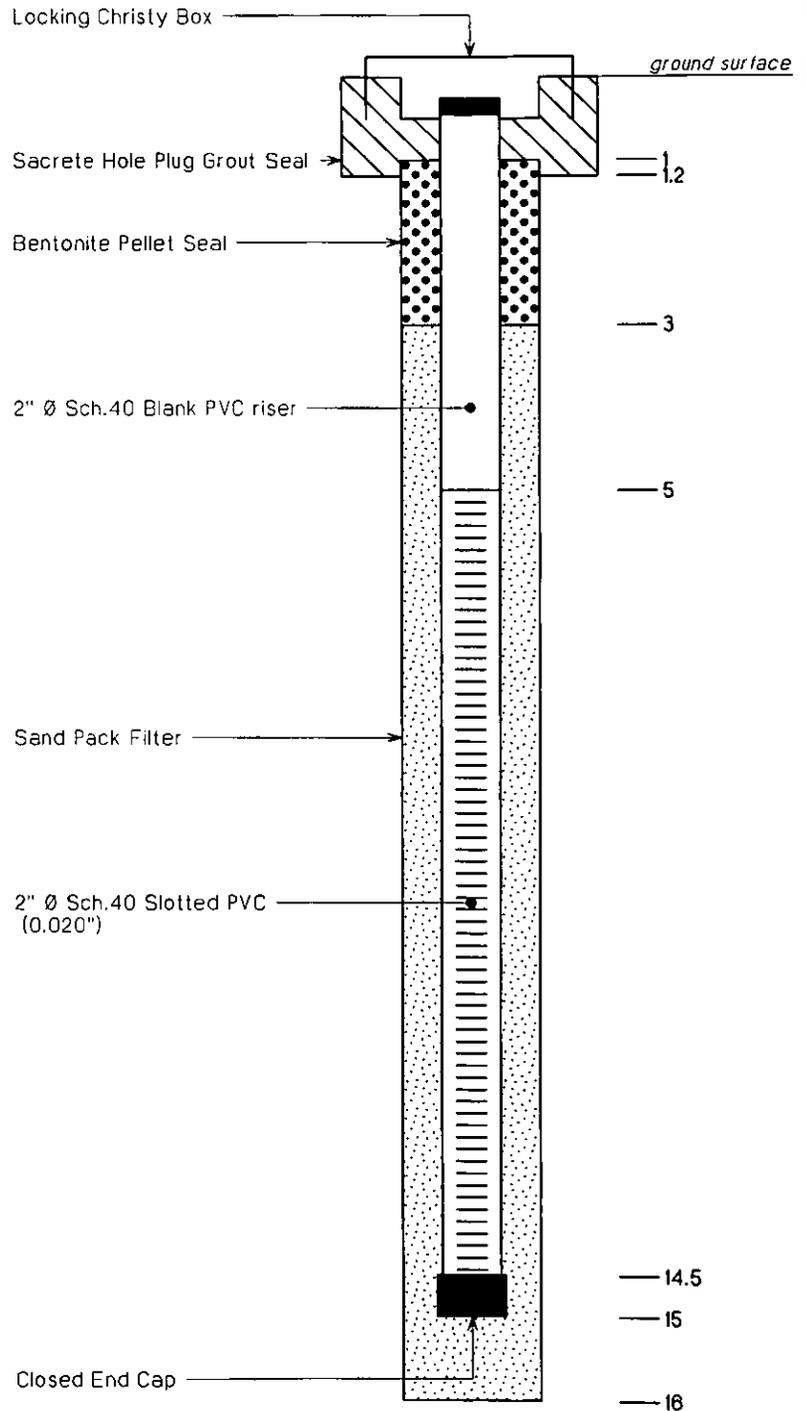
Fluid Loss During Drilling (gals) \_\_\_\_\_  
Water Removed During Development (gals)  
\_\_\_\_\_

Static Depth to Water Date \_\_\_\_\_  
Static Depth to Water (feet) \_\_\_\_\_

Well Purpose Monitor groundwater quality.

Remarks \_\_\_\_\_

Prepared By T BIRKY  
Date Prepared 5/8/00



GEOLOGIC DRILL LOG				PROJECT Warsaw/ITCO		PROJECT NUMBER 9890		SHEET NO. 1 of 1	HOLE NUMBER MW-2
SITE Route 122; Minier, IL			COORDINATES			LOGGED BY TB		CHECKED BY TB	
BEGUN 5/3/00	COMPLETED 5/3/00	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 8"	TOTAL DEPTH 16	
CORE RECOVERY (FT./%) 14 / 100		CORE BOXES 0	SAMPLES 7	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 7.5		DEPTH/ELEV. TOP OF ROCK	
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES				
SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	H <sub>2</sub> O (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.	
MW-2, 9	SS	2.0/2.0			1.5		SILT loam (OL); Black, moist, firm, with gravel.	MW-2, 8-10' = Soil sample collected from split spoon for chemical analysis of BTEX.	
	SS	2.0/2.0			5		SILTY CLAY (CL); Brown with gray mottling, moist, firm, no odor.		
	SS	2.0/2.0			7.5		grades with more silt		
	SS	2.0/2.0			10		SAND (SW); Brown, saturated, no odor, with significant fines.		
	SS	2.0/2.0			12.5		grades with gravel, few fines.		
	SS	2.0/2.0			15		SANDY SILT (ML); Gray, wet to saturated, trace gravel.		
					16.0		Bottom of boring at 16 feet.		
					20				
					25				
					30				
					35				

# WELL CONSTRUCTION LOG

PROJECT  
Warsaw/ITCO

PROJECT NUMBER  
9890

WELL NUMBER  
**MW-2**  
CASING STICKUP

SITE  
Route 122; Minier, IL

COORDINATES

GROUND SURFACE ELEVATION

Soil Boring Cross-Reference **MW-2**  
Town and City Minier  
County and State Tazewell, IL

Installation Date (s) 5/3/00

Drilling Method Hollow Stem Auger  
Drilling Contractor Whitney & Associates  
Drilling Fluid none

Development Technique (s) / Dates

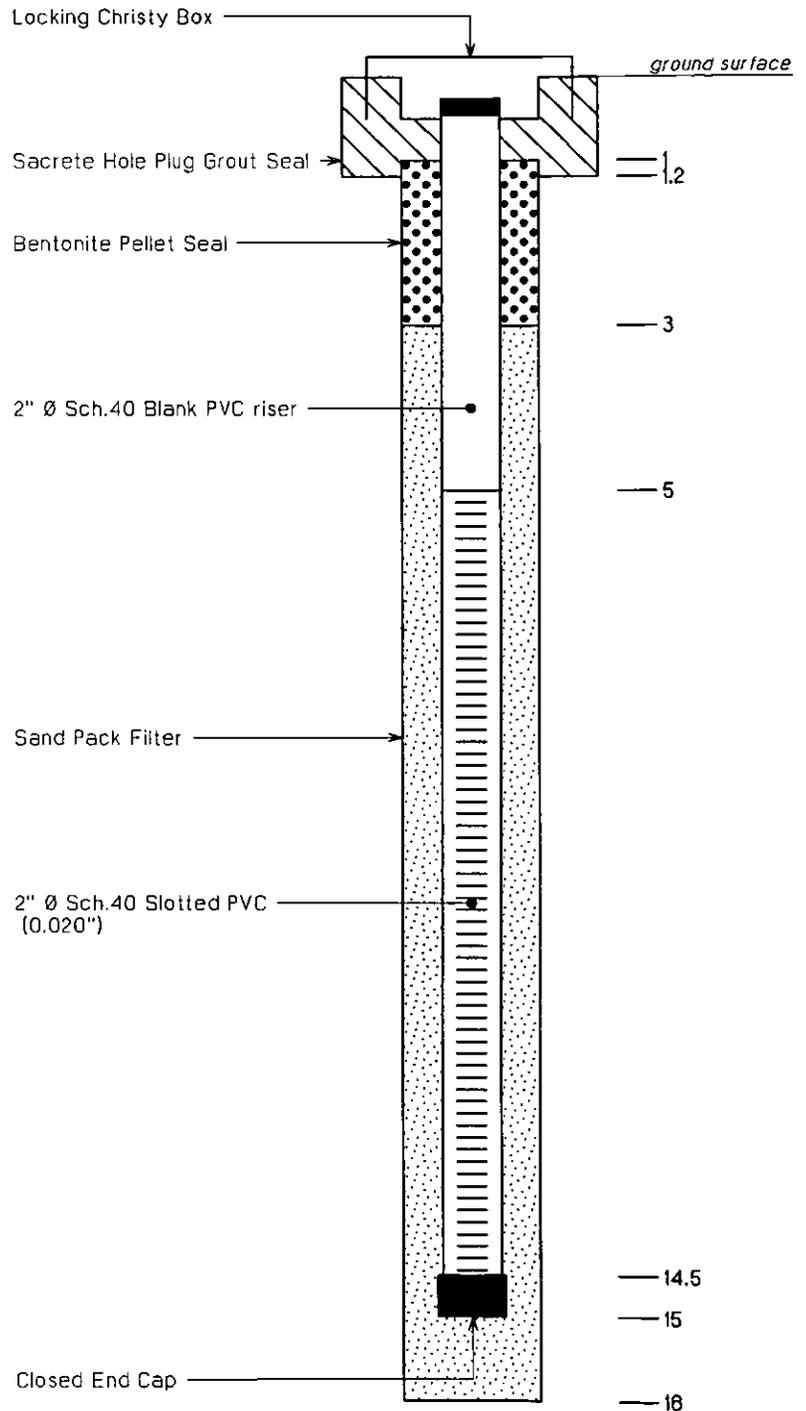
Fluid Loss During Drilling (gals) \_\_\_\_\_  
Water Removed During Development (gals)  
-

Static Depth to Water Date \_\_\_\_\_  
Static Depth to Water (feet) \_\_\_\_\_

Well Purpose Monitor groundwater quality.

Remarks

Prepared By T BIRKY  
Date Prepared 5/8/00



GEOLOGIC DRILL LOG			PROJECT Warsaw/ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER MW-3	
SITE Route 122; Miner, IL		COORDINATES		LOGGED BY TB		CHECKED BY TB		
BEGUN 5/3/00	COMPLETED 5/3/00	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger		BORING DIA. 8"	TOTAL DEPTH 16	
CORE RECOVERY (FT./%) 14 / 100		CORE BOXES 0	SAMPLES 7	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 9	DEPTH/ELEV. TOP OF ROCK	
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES			
SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	HNu (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG SAMPLE	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
MW-3, 9					1.0		SILT loam (OL); Black, moist, firm.	MW-3, 8-10' = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0					SILTY CLAY (CL); Gray with brown mottling, moist, firm, no odor.	
	SS	2.0/2.0			5			
	SS	2.0/2.0						
	SS	2.0/2.0			9.0			
	SS	2.0/2.0			10		SAND (SW); Saturated, no odor, medium grain size.	
					15			
					16.0		Bottom of boring at 16 feet.	
					20			
					25			
					30			
					35			

<b>WELL CONSTRUCTION LOG</b>		PROJECT Warsaw/ITCO	PROJECT NUMBER 9890	WELL NUMBER <b>MW-3</b>
SITE Route 122: Miner, IL	COORDINATES	GROUND SURFACE ELEVATION		CASING STICKUP

Soil Boring Cross-Reference MW-3  
 Town and City Minier  
 County and State Tazewell, IL

Installation Date (s) 5/3/00

Drilling Method Hollow Stem Auger  
 Drilling Contractor Whitney & Associates  
 Drilling Fluid none

Development Technique (s) / Dates  
 \_\_\_\_\_  
 \_\_\_\_\_

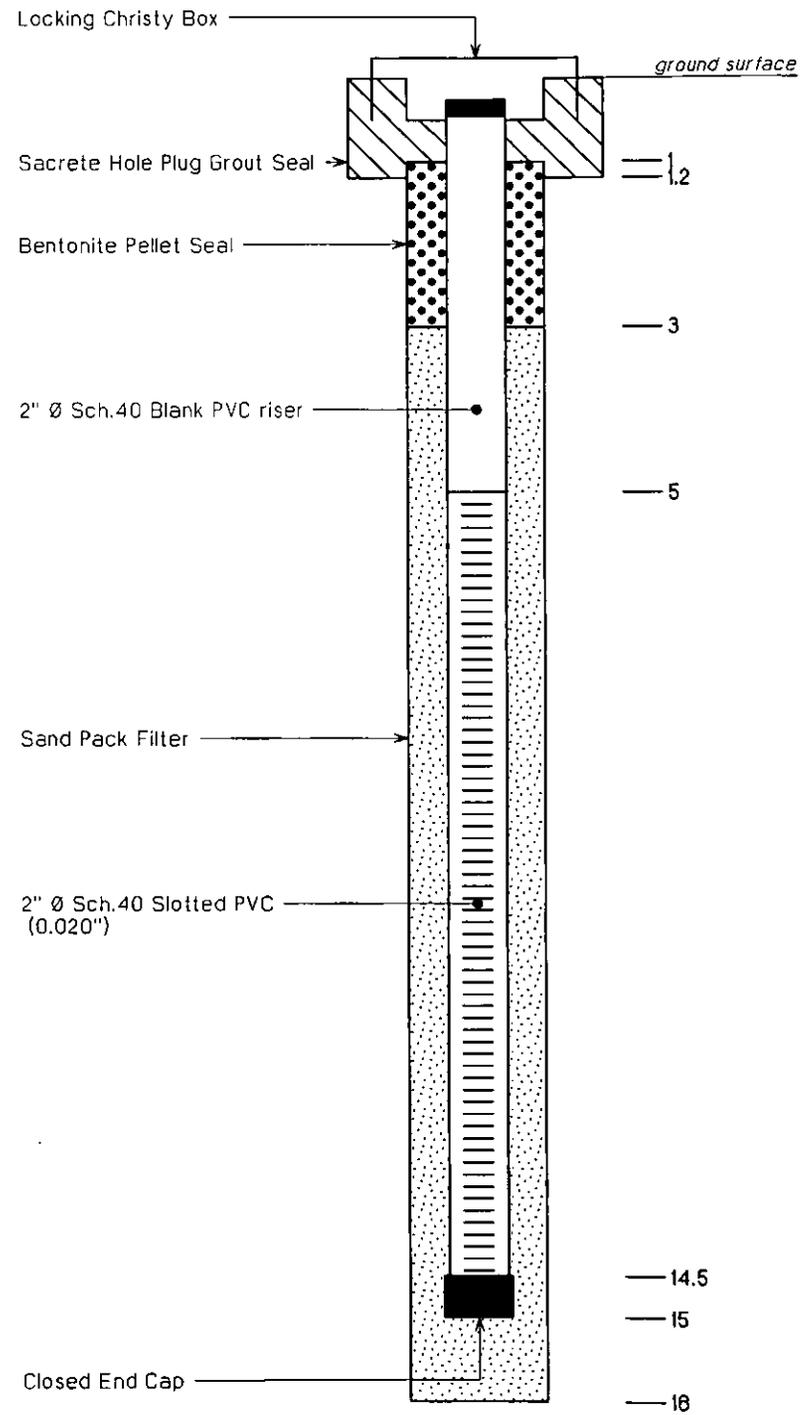
Fluid Loss During Drilling (gals) \_\_\_\_\_  
 Water Removed During Development (gals)  
 \_\_\_\_\_

Static Depth to Water Date \_\_\_\_\_  
 Static Depth to Water (feet) \_\_\_\_\_

Well Purpose Monitor groundwater quality.

Remarks \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Prepared By T BIRKY  
 Date Prepared 5/8/00



GEOLOGIC DRILL LOG				PROJECT Warsaw/ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER MW-4	
SITE Route 122; Miner, IL			COORDINATES			LOGGED BY TB		CHECKED BY TB	
BEGUN 5/4/00	COMPLETED 5/4/00	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 8"	TOTAL DEPTH 16	
CORE RECOVERY (FT./%) 14 / 100		CORE BOXES 0	SAMPLES 7	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 7		DEPTH/ELEV. TOP OF ROCK	
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES				
SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	H2O (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	SAMPLE	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
					1.5			GRAVEL drive	
MW-4, 5	SS	2.0/2.0			4.0			SILTY CLAY (CL); Green with brown mottling, moist, firm, slight to moderate petroleum odor.	MW-4, 'depth' = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0			5			grades CLAYEY SILT (ML); Gray with brown mottling, moist, firm, slight to moderate petroleum odor.	
MW-4, 7	SS	2.0/2.0			8.0			SAND (SW); Saturated, medium grained, few fines, petroleum odor.	
	SS	2.0/2.0			10			grain size coarsens with depth, grades to gravel.	
	SS	2.0/2.0			15				
	SS	2.0/2.0			16.0			Bottom of boring at 16 feet.	
					20				
					25				
					30				
					35				

# WELL CONSTRUCTION LOG

PROJECT  
Warsaw/ITCO

PROJECT NUMBER  
9890

WELL NUMBER  
**MW-4**  
CASING STICKUP

SITE  
Route 122; Minier, IL

COORDINATES

GROUND SURFACE ELEVATION

Soil Boring Cross-Reference **MN-4**  
Town and City Minier  
County and State Tazewell, IL

Installation Date (s) 5/4/00

Drilling Method Hollow Stem Auger  
Drilling Contractor Whitney & Associates  
Drilling Fluid none

Development Technique (s) / Dates

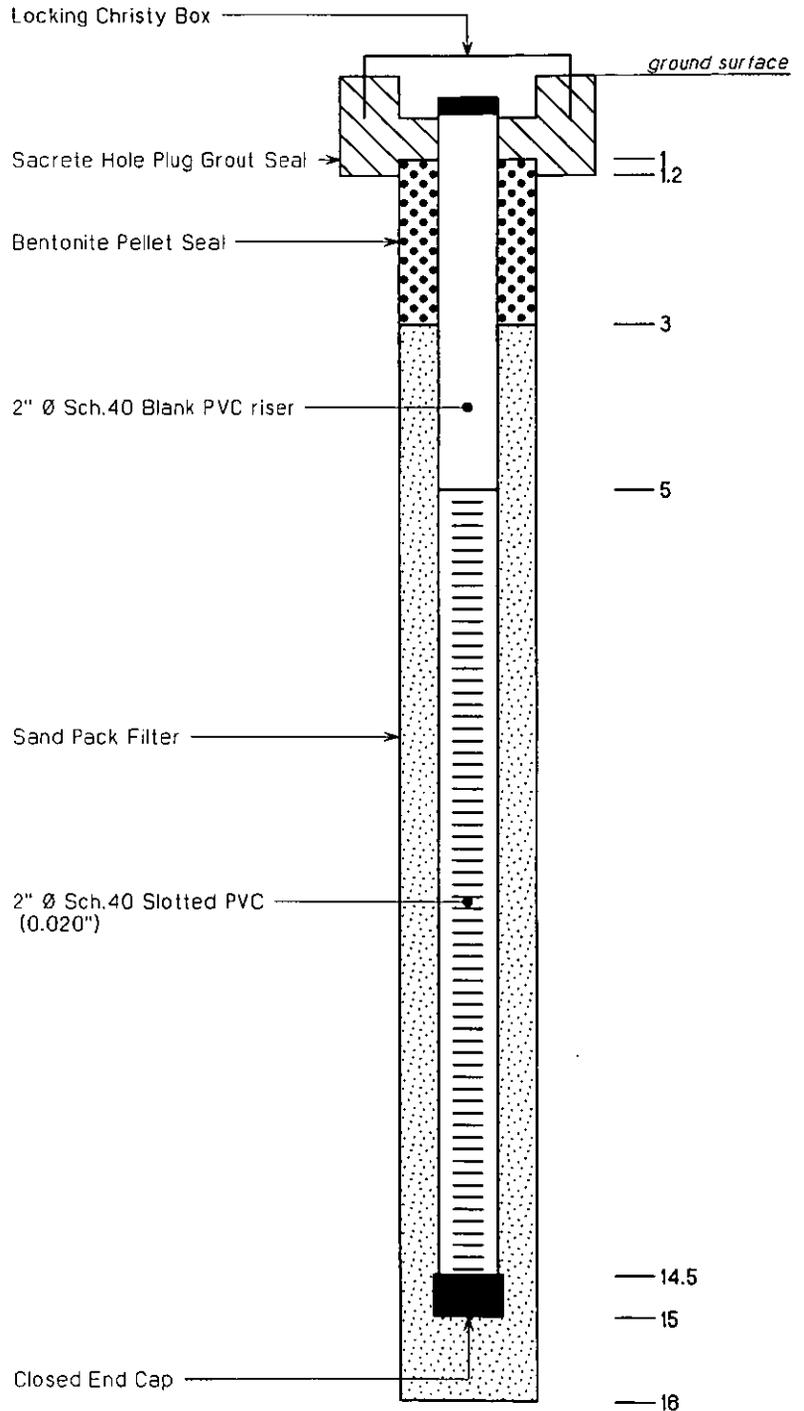
Fluid Loss During Drilling (gals) \_\_\_\_\_  
Water Removed During Development (gals) \_\_\_\_\_

Static Depth to Water Date \_\_\_\_\_  
Static Depth to Water (feet) \_\_\_\_\_

Well Purpose Monitor groundwater quality.

Remarks \_\_\_\_\_

Prepared By T BIRKY  
Date Prepared 5/8/00



**Appendix B**  
**Laboratory Data Sheets**

October 31, 2000

Midwest Environmental Consulting  
Attn: Todd Birky  
22200 Illinois Route 9  
P.O. Box 614  
Tremont, IL 61568-0614

RE: Project 9890  
Warsaw-ITCO  
PO: 9890

Dear Mr. Todd Birky:

Enclosed is a copy of your laboratory report and invoice for submittal 35401-4. This submittal was completely received on October 25, 2000. All analyses have been validated and comply with our Quality Control program statistics unless otherwise noted.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,



Lisa M. Harvey  
Project Chemist

Enclosure

**STATEMENT OF DATA QUALIFICATIONS**

All analyses have been validated and comply with our Quality Control Program. No qualifications required.

Page 1 - End of Statement of Data Qualifications

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**Note:** This document is included as a part of the analytical report for the above referenced project and submittal, and should be retained as a permanent record thereof.

**ANALYTICAL REPORT**

Midwest Environmental Consulting  
 Proj: Project 9890  
 Warsaw-ITCO  
 Subm: October 24, 2000 Water

Submittal Number: 35401- 4  
 Location:  
 Contact: Lisa M. Harvey  
 Phone: (616) 975-4500

	MW-1	MW-2	MW-3	Quantitation Limit	Units
Lab Sample No:	264062	264063	264064		
<b>BTEX Parameters - 8021W</b>					
<b>USEPA Method 8021 -Water</b>					
Benzene	2.4	<1.0	<1.0	1.0	ug/L
Toluene	<1.0	<1.0	<1.0	1.0	ug/L
Ethylbenzene	<1.0	<1.0	<1.0	1.0	ug/L
Xylene (Total)	<3.0	<3.0	<3.0	3.0	ug/L

Sampled by:	G. Heuer	G. Heuer	G. Heuer
Date Sampled:	10/24/00	10/24/00	10/24/00
Time Sampled:	11:44	10:23	11:00
Date Received:	10/25/00	10/25/00	10/25/00
Time Received:	13:35	13:35	13:35

**ANALYTICAL REPORT**

**Midwest Environmental Consulting**  
Proj: Project 9890  
Warsaw-ITCO  
Subm: October 24, 2000 Water

Submittal Number: 35401- 4  
Location:  
Contact: Lisa M. Harvey  
Phone: (616) 975-4500

	MW-4	Quantitation Limit	Units
Lab Sample No:	264065		
<b>BTEX Parameters - 8021W</b>			
<b>USEPA Method 8021 -Water</b>			
Benzene	2300	200	ug/L
Toluene	5200	200	ug/L
Ethylbenzene	4000	200	ug/L
Xylene (Total)	13000	600	ug/L

Sampled by: G. Heuer  
Date Sampled: 10/24/00  
Time Sampled: 12:30  
Date Received: 10/25/00  
Time Received: 13:35

Page 2 - End of Analytical Report

METHODS PAGE

Parameter: BTEX Parameters - 8021W USEPA Method 8021 -Water  
Method: Halogenated and Aromatic Volatiles by GC  
Application: WATER Reference Citation: USEPA-8021B  
Analyst: Timothy M. Eldridge (TME ) Date Analyzed: 10/27/00

Sample Number	Sample Description	Analytical Batch	QC Batch
264062	MW-1	163610	59015-127
264063	MW-2	163610	59015-127
264064	MW-3	163610	59015-127
264065	MW-4	163610	59015-127



**TriMatrix**  
Laboratories, Inc.

# Chain of Custody Record

COC No.

No 66842

5560 Corporate Exchange Court SE • Grand Rapids, MI 49512

Project Manager <b>Todd Birky</b>		Project Name <b>MECRS Warsaw-ITCO-Minier, IL</b>				No's Correspond to Bottle Packing List	7°	For Lab Use Only		
Project No. <b>9890</b>		Sampler (Print) <b>GLHEUER</b>						Rack/Tray No: <b>715 W-4</b>		
		Sampler Signature <b>Gregory L. Heuer</b>						Lab Project # <b>35401.4</b>		
Date Sampled	Time Sampled	Matrix*	Composite	Grab	Sample Identification	No. of Containers	Container Type	Analysis Required/Comments	Sample No.	Filtered Date/Time
10/24/00	11:44am	WTR		✓	MW-1	2	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	BTEX	264062	02
↓	10:23am	↓		✓	MW-2	2	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	↓	264063	↓
↓	11:00am	↓		✓	MW-3	2	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	↓	264064	↓
↓	12:30pm	↓		✓	MW-4	2	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	↓	264065	↓
							1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20			
							1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20			
							1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20			
							1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20			
							1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20			
							1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20			

Relinquished By: **Gregory L. Heuer** Date/Time: **10/24/00** Received By: **[Signature]** Date/Time: **10/25/00** Logged in By: **[Signature]** Date/Time: **10/26/00**

\* Matrix: Water (WTR), Wastewater (WW), Soil (SOIL), Sludge (SLG), Air, Oil, Waste (WASTE)

**FEDEx 1:35pm**

**R0061**

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Laboratory Certification for Chemical Analysis**

**A. Site Identification**

IEMA Incident # (6 digit): 981987/991610 IEPA Generator # (10 digit): 1790455007  
Site Name: Warsaw, Howard  
Site Address (Not a P.O. Box): Route 122  
City: Minier County: Tazewell

**B. Sample Collector**

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
2. Chain of custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

GH  
(initial)

GH  
(initial)

GH  
(initial)

GH  
(initial)

**C. Laboratory Representative**

I certify that:

1. Proper chain of custody procedures were followed as documented on the chain of custody forms.
2. Sample integrity was maintained by proper preservation. *7.c\**
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

Uma  
(initial)

Uma  
(initial)

Uma  
(initial)

Uma  
(initial)

5. Sample holding times were not exceeded.

LM  
(initial)

6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses.

LM  
(initial)

#### D. Signatures

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

#### Sample Collector

#### Laboratory Representative

Name: Greg Heuer  
Title: Environmental Technician  
Company: MECRS  
Address: 22200 IL 9 BOX 614  
Tremont IL 61568  
Phone: (309) 925-5551  
Signature: Gregory H. Heuer  
Date: 10/24/00

Name: LISA Haavey  
Title: Project Chemist  
Company: Trimatrix Laboratory  
Address: 5560 Corporate Exchange Ct.  
Grand Rapids MI 49512  
Phone: 616 975 4500  
Signature: [Signature]  
Date: 10.31.00

May 22, 2000

Midwest Environmental Consulting  
Attn: Todd Birky  
22200 Illinois Route 9  
P.O. Box 614  
Tremont, IL 61568-0614

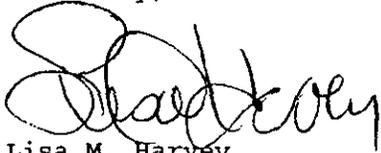
RE: Project 9890  
Warsaw-ITCO  
PO: 9890

Dear Mr. Todd Birky:

Enclosed is a copy of your laboratory report and invoice for submittal 35401-2. This submittal was completely received on May 12, 2000. All analyses have been validated and comply with our Quality Control program statistics unless otherwise noted.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,



Lisa M. Harvey  
Project Chemist

Enclosure

**STATEMENT OF DATA QUALIFICATIONS**

All analyses have been validated and comply with our Quality Control Program. No qualifications required.

Page 1 - End of Statement of Data Qualifications

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**Note:** This document is included as a part of the analytical report for the above referenced project and submittal, and should be retained as a permanent record thereof.

**ANALYTICAL REPORT**

Midwest Environmental Consulting  
 Proj: Project 9890  
 Warsaw-ITCO  
 Subm: May 9, 2000 Waters

Submittal Number: 35401- 2  
 Location:  
 Contact: Lisa M. Harvey  
 Phone: (616) 975-4500

	MW-2	MW-3	MW-4	Quantitation Limit	Units
Lab Sample No:	250266	250267	250268		
<b>BTEX Parameters - 8021W</b>					
<b>USEPA Method 8021 -Water</b>					
Benzene	<1.0	<1.0	2600	Varies	ug/L
Toluene	<1.0	<1.0	12000	Varies	ug/L
Ethylbenzene	<1.0	<1.0	4500	Varies	ug/L
Xylene (Total)	<3.0	<3.0	18000	Varies	ug/L

Sampled by:	G. Heuer	G. Heuer	G. Heuer
Date Sampled:	05/09/00	05/09/00	05/09/00
Time Sampled:	11:37	13:10	14:05
Date Received:	05/12/00	05/12/00	05/12/00
Time Received:	09:25	09:25	09:25

Page 1 - End of Analytical Report

METHODS PAGE

Parameter: BTEX Parameters - 8021W USEPA Method 8021 -Water  
Method: Halogenated and Aromatic Volatiles by GC  
Application: WATER Reference Citation: USEPA-8021B  
Analyst: Timothy M. Eldridge (TME ) Date Analyzed: 05/19/00

Sample Number	Sample Description	Analytical Batch	QC Batch
250266	MW-2	156676	54352-118
250267	MW-3	156676	54352-118
250268	MW-4	156675	54352-119



The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 5/17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Laboratory Certification for Chemical Analysis**

**A. Site Identification**

IEMA Incident # (6 digit): 981987/991610 IEPA Generator # (10 digit): 1790455007  
Site Name: Warsaw ITCO  
Site Address (Not a P.O. Box): Rt. 122  
City: Minier County: Tazewell

**B. Sample Collector**

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
2. Chain of custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

GH  
(initial)

GH  
(initial)

GH  
(initial)

GH  
(initial)

**C. Laboratory Representative**

I certify that:

1. Proper chain of custody procedures were followed as documented on the chain of custody forms.
2. Sample integrity was maintained by proper preservation.
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

[Signature]  
(initial)

[Signature]  
(initial)

[Signature]  
(initial)

[Signature]  
(initial)

- 5. Sample holding times were not exceeded.
- 6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses.

  
(initial)

  
(initial)

**D. Signatures**

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Sample Collector**

**Laboratory Representative**

Name: Gregory L. Heuer  
 Title: environmental technician  
 Company: Midwest Environmental  
 Address: 22200 IL 9 Box 614  
Tremont IL 61568  
 Phone: (309) 925-5551  
 Signature: Gregory L. Heuer  
 Date: 5/9/00

Name: Lisa Harvey  
 Title: Project Chemist  
 Company: Teimateix Laboratory  
 Address: 5500 Corporate Exchange Ct  
Grand Rapids MI 49512  
 Phone: 616 275 4500  
 Signature: Lisa Harvey  
 Date: 5/23/00



May 19, 2000

Midwest Environmental Consulting  
Attn: Todd Birky  
22200 Illinois Route 9  
P.O. Box 614  
Tremont, IL 61568-0614

RE: Project 9890  
Warsaw-ITCO  
PO: 9890

Dear Mr. Todd Birky:

Enclosed is a copy of your laboratory report and invoice for submittal 35401-3. This submittal was completely received on May 15, 2000. All analyses have been validated and comply with our Quality Control program statistics unless otherwise noted.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Lisa M. Harvey  
Project Chemist

Enclosure

**ANALYTICAL REPORT**

Midwest Environmental Consulting  
Proj: Project 9890  
Warsaw-ITCO  
Subm: May 12, 2000 Water Sample

Submittal Number: 35401- 3  
Location:  
Contact: Lisa M. Harvey  
Phone: (616) 975-4500

	MW-1	Quantitation Limit	Units
Lab Sample No:	250355		
<b>BTEX Parameters - 8021W</b>			
<b>USEPA Method 8021 -Water</b>			
Benzene	4.3	1.0	ug/L
Toluene	<1.0	1.0	ug/L
Ethylbenzene	<1.0	1.0	ug/L
Xylene (Total)	<3.0	3.0	ug/L

Sampled by: T. Birky  
Date Sampled: 05/12/00  
Time Sampled: 13:30  
Date Received: 05/13/00  
Time Received: 11:50

Page 1 - End of Analytical Report

METHODS PAGE

Parameter: BTEX Parameters - 8021W USEPA Method 8021 -Water  
Method: Halogenated and Aromatic Volatiles by GC  
Application: WATER Reference Citation: USEPA-8021B  
Analyst: Timothy M. Eldridge (TME ) Date Analyzed: 05/18/00

Sample Number	Sample Description	Analytical Batch	QC Batch
-----	-----	-----	-----
250355	MW-1	156537	54259-117

**STATEMENT OF DATA QUALIFICATIONS**

All analyses have been validated and comply with our Quality Control Program. No qualifications required.

Page 1 - End of Statement of Data Qualifications

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**Note:** This document is included as a part of the analytical report for the above referenced project and submittal, and should be retained as a permanent record thereof.

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, submitted or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Laboratory Certification for Chemical Analysis**

**A. Site Identification**

IEMA Incident # (6 digit): 981987 IEPA Generator # (10 digit): 1790455007  
Site Name: Warsaw - ITCO  
Site Address (Not a P.O. Box): Route 122  
City: Minier County: Tazewell

**B. Sample Collector**

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
2. Chain of custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

TB  
(initial)  
TB  
(initial)  
TB  
(initial)  
TB  
(initial)

**C. Laboratory Representative**

I certify that:

1. Proper chain of custody procedures were followed as documented on the chain of custody forms.
2. Sample integrity was maintained by proper preservation.
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

[Signature]  
(initial)  
[Signature]  
(initial)  
[Signature]  
(initial)  
[Signature]  
(initial)

- 5. Sample holding times were not exceeded.
- 6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses.

  
(initial)

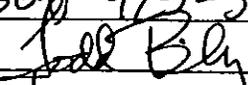
  
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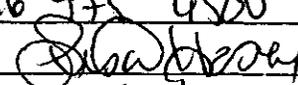
**D. Signatures**

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Sample Collector**

**Laboratory Representative**

Name: T. Birky  
 Title: Environmental Geologist  
 Company: M.E.C.R.S.  
 Address: 22200 IL Rte 9.  
Tremont, IL 61568  
 Phone: (309) 975-5551  
 Signature:   
 Date: 5/12/00

Name: Lisa Harvey  
 Title: Project Chemist  
 Company: ~~STL~~ ~~Co.~~ Tremontix Laboratory  
 Address: 5510 Corporate Exchange Ct.  
Grand Rapids MI 49512  
 Phone: 616 975 4500  
 Signature:   
 Date: 5/13/00



May 18, 2000

Midwest Environmental Consulting  
Attn: Todd Birky  
22200 Illinois Route 9  
P.O. Box 614  
Tremont, IL 61568-0614

RE: Project 9890  
Warsaw-ITCO  
PO: 9890

Dear Mr. Todd Birky:

Enclosed is a copy of your laboratory report and invoice for submittal 35401-1. This submittal was completely received on May 8, 2000. All analyses have been validated and comply with our Quality Control program statistics unless otherwise noted.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,



Lisa M. Harvey  
Project Chemist

Enclosure

**ANALYTICAL REPORT**

Midwest Environmental Consulting  
 Proj: Project 9890  
 Warsaw-ITCO  
 Subm: May 3&4, 2000 Soils

Submittal Number: 35401- 1  
 Location:  
 Contact: Lisa M. Harvey  
 Phone: (616) 975-4500

	B-1 8-10'	MW-2 8-10'	B-2 4-6'	Quantitation Limit	Units
Lab Sample No:	249743	249744	249745		
<b>BTEX Parameters - 8021S</b>					
<b>USEPA Method 8021 - Soil</b>					
Benzene	<2.0	<2.0	810	Varies	ug/kg
Toluene	<2.0	<2.0	1300	Varies	ug/kg
Ethylbenzene	<2.0	<2.0	1700	Varies	ug/kg
Xylene (Total)	<5.0	<5.0	6500	Varies	ug/kg

Sampled by:	T. Birky	T. Birky	T. Birky
Date Sampled:	05/03/00	05/03/00	05/03/00
Time Sampled:	00:00	00:00	00:00
Date Received:	05/06/00	05/06/00	05/06/00
Time Received:	09:00	09:00	09:00

**ANALYTICAL REPORT**

Midwest Environmental Consulting  
 Proj: Project 9890  
 Warsaw-ITCO  
 Subm: May 3&4, 2000 Soils

Submittal Number: 35401- 1  
 Location:  
 Contact: Lisa M. Harvey  
 Phone: (616) 975-4500

	B-2 6-8'	B-2 8-10'	B-3 6-8'	Quantitation Limit	Units
--	----------	-----------	----------	-----------------------	-------

Lab Sample No:	249746	249747	249748		
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**BTEX Parameters - 8021S**  
**USEPA Method 8021 - Soil**

Benzene	600	21000	400	Varies	ug/kg
Toluene	220	41000	120	Varies	ug/kg
Ethylbenzene	420	47000	210	Varies	ug/kg
Xylene (Total)	1900	190000	460	Varies	ug/kg

Sampled by:	T. Birky	T. Birky	T. Birky
Date Sampled:	05/03/00	05/03/00	05/03/00
Time Sampled:	00:00	00:00	00:00
Date Received:	05/06/00	05/06/00	05/06/00
Time Received:	09:00	09:00	09:00

**ANALYTICAL REPORT**

Midwest Environmental Consulting  
 Proj: Project 9890  
 Warsaw-ITCO  
 Subm: May 3&4, 2000 Soils

Submittal Number: 35401- 1  
 Location:  
 Contact: Lisa M. Harvey  
 Phone: (616) 975-4500

	B-3 8-10'	MW-3 8-10'	MW-4 4-6'	Quantitation Limit	Units
Lab Sample No:	249749	249750	249751		

**BTEX Parameters - 8021S**  
**USEPA Method 8021 - Soil**

	B-3 8-10'	MW-3 8-10'	MW-4 4-6'	Quantitation Limit	Units
Benzene	2300	<2.0	230	Varies	ug/kg
Toluene	2100	5.7	220	Varies	ug/kg
Ethylbenzene	31000	<2.0	870	Varies	ug/kg
Xylene (Total)	110000	<5.0	2500	Varies	ug/kg

	T. Birky	T. Birky	T. Birky
Sampled by:	T. Birky	T. Birky	T. Birky
Date Sampled:	05/03/00	05/03/00	05/04/00
Time Sampled:	00:00	00:00	00:00
Date Received:	05/06/00	05/06/00	05/06/00
Time Received:	09:00	09:00	09:00

**ANALYTICAL REPORT**

**Midwest Environmental Consulting**  
 Proj: Project 9890  
 Warsaw-ITCO  
 Subm: May 3&4, 2000 Soils

Submittal Number: 35401- 1  
 Location:  
 Contact: Lisa M. Harvey  
 Phone: (616) 975-4500

	MW-4 6-8'	MW-1 6-8'	Quantitation Limit	Units
Lab Sample No:	249752	249753		
<b>BTEX Parameters - 8021S</b>				
<b>USEPA Method 8021 - Soil</b>				
Benzene	300	<2.0	Varies	ug/kg
Toluene	1200	<2.0	Varies	ug/kg
Ethylbenzene	5400	<2.0	Varies	ug/kg
Xylene (Total)	20000	<5.0	Varies	ug/kg

Sampled by:	T. Birky	T. Birky
Date Sampled:	05/04/00	05/04/00
Time Sampled:	00:00	00:00
Date Received:	05/06/00	05/06/00
Time Received:	09:00	09:00

Page 4 - End of Analytical Report



STATEMENT OF DATA QUALIFICATIONS

All analyses have been validated and comply with our Quality Control Program. No qualifications required.

Page 1 - End of Statement of Data Qualifications

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**Note:** This document is included as a part of the analytical report for the above referenced project and submittal, and should be retained as a permanent record thereof.

**CASE NARRATIVE**

**Analysis: BTEX Parameters - 8021S**  
Halogenated and Aromatic Volatiles by GC  
SOIL USEPA-8021B

**Narrative:**

This sample was prepared in accordance to the Methanol sample extraction procedure, as outlined in USEPA Method 5030.

<b>Sample(s) Narrated:</b>	249745	B-2 4-6'
	249746	B-2 6-8'
	249747	B-2 8-10'
	249748	B-3 6-8'
	249749	B-3 8-10'
	249751	MW-4 4-6'
	249752	MW-4 6-8'

METHODS PAGE

Parameter: BTEX Parameters - 8021S USEPA Method 8021 - Soil  
 Method: Halogenated and Aromatic Volatiles by GC  
 Application: SOIL Reference Citation: USEPA-8021B  
 Analyst: Paul B. Norton (PBN ) Date Analyzed: 05/09/00

Sample Number	Sample Description	Analytical Batch	QC Batch
249743	B-1 8-10'	156206	53792-109
249744	MW-2 8-10'	156206	53792-109

Parameter: BTEX Parameters - 8021S USEPA Method 8021 - Soil  
 Method: Halogenated and Aromatic Volatiles by GC  
 Application: SOIL Reference Citation: USEPA-8021B  
 Analyst: Paul B. Norton (PBN ) Date Analyzed: 05/10/00

Sample Number	Sample Description	Analytical Batch	QC Batch
249749	B-3 8-10'	156487	53791-109
249752	MW-4 6-8'	156487	53791-109
249753	MW-1 6-8'	156206	53792-109

Parameter: BTEX Parameters - 8021S USEPA Method 8021 - Soil  
 Method: Halogenated and Aromatic Volatiles by GC  
 Application: SOIL Reference Citation: USEPA-8021B  
 Analyst: Paul B. Norton (PBN ) Date Analyzed: 05/16/00

Sample Number	Sample Description	Analytical Batch	QC Batch
249745	B-2 4-6'	156488	54218-116
249746	B-2 6-8'	156488	54218-116
249747	B-2 8-10'	156488	54218-116
249748	B-3 6-8'	156488	54218-116
249750	MW-3 8-10'	156486	54216-116
249751	MW-4 4-6'	156488	54218-116



**TriMatrix**  
Laboratories, Inc.

5560 Corporate Exchange Court SE • Grand Rapids, MI 49512

# Chain of Custody Record

COC No. **№ 63316**

PAGE 1 of 2

Project Manager		Project Name		No. of Containers	No's Correspond to Bottle Packing List	Analysis Required/Comments	For Lab Use Only		
Project No.		Sampler (Print)					Container Type	Rack/Tray No:	Sample No.
T. Birny		<del>WARSAW-ITCO</del> WARSAW-ITCO (MERS)		1	5	BTEX		249743	01
9890		TBIRNY							
Date Sampled		Time Sampled		Sample Identification		Lab Project # 3540.1			
5/3/00		—		SOIL X B-1, 8-10'		BTEX			
5/3/00		—		SOIL X MW-2, 8-10'		BTEX			
5/3/00		—		SOIL X B-2, 4-6'		BTEX			
5/3/00		—		SOIL X B-2, 6-8'		BTEX			
5/3/00		—		SOIL X B-2, 8-10'		BTEX			
5/3/00		—		SOIL X B-3, 6-8'		BTEX			
5/3/00		—		SOIL X B-3, 8-10'		BTEX			
5/3/00		—		SOIL X MW-3, 8-10'		BTEX			
5/4/00		—		SOIL X MW-4, 4-6'		BTEX			
Relinquished By:		Date/Time		Received By:		Date/Time		Logged in By:	
T. Birny		5/5/00		[Signature]		5-6-00		[Signature]	

\* Matrix: Water (WTR), Wastewater (WW), Soil (SOIL), Sludge (SLG), Air, Oil, Waste (WASTE)

FIDEX 9:00 AM

R0086



The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 5/7.17). Failure to disclose this information or to result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/47). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, submitted or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Form Management Center.

**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Laboratory Certification for Chemical Analysis**

**A. Site Identification**

IEMA Incident # (6 digit): 981987 IEPA Generator # (10 digit): 1790455007  
Site Name: Warsaw - ITCO  
Site Address (Not a P.O. Box): Route 122  
City: Minier County: Tazewell

**B. Sample Collector**

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
2. Chain of custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

TJB  
(initial)

TJB  
(initial)

TJB  
(initial)

TJB  
(initial)

**C. Laboratory Representative**

I certify that:

1. Proper chain of custody procedures were followed as documented on the chain of custody forms.
2. Sample integrity was maintained by proper preservation.
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

[Signature]  
(initial)

[Signature]  
(initial)

[Signature]  
(initial)

[Signature]  
(initial)

5. Sample holding times were not exceeded.

  
(initial)

6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses.

  
(initial)

#### D. Signatures

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

#### Sample Collector

Name: Jedd Berry  
Title: Environmental Geologist  
Company: MEKS  
Address: 22200 FL RT 9,  
Tremont, IL 61568  
Phone: (309) 925-5551  
Signature: Jedd Berry  
Date: 5/15/00

#### Laboratory Representative

Name: LISA HARVEY  
Title: Project Chemist  
Company: TRIMCHEM LABORATORY  
Address: 5500 Corporate Exchange Ct.  
GRAND RAPIDS MI 49512  
Phone: 616 975 4500  
Signature: Lisa Harvey  
Date: 5/15/00

**Appendix C**

**Monitoring Well Sampling Information Sheets**

**MONITORING WELL SAMPLING INFORMATION**

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-1

Sample Date  
10/24/00

Sample Time  
11:44 AM

Field Measurements

Well Purging Measurements

- 1. Stick-up (ground surface to top of well casing) 0 ft.
- 2. Elevation top of well casing 99.62 ft.
- 3. Depth to water from top of well casing 7.76 ft.
- 4. Elevation Groundwater Surface (#2-#3) 91.86 ft.
- 5. Total Well depth from top of well casing 15.87 ft.

- 6. Elevation bottom of well 83.75 ft.
- 7. Total vertical ft of water in well (#3-#5) or (#4-#6) 8.11 ft.
- 8. Volume of water in well (0.163 gal/ft for a 2" ID well) 1.32 gal.
- 9. Number of well volumes purged 3.40 #
- 10. Number of gallons purged (#8 x#9) 4.50 gal.

Temp. of sample (F) Field:           

Spec. Cond. (uohms) - Field:           

pH (units) - Field:           

Sample Field Filtered - Inorganics (Y/N):           

Total Dissolved Solids - Field:           

PID Reading (well opening):           

FIELD COMMENTS

Weather Conditions: Partly cloudy, 76°F

Specific Location of Sample: SEE MAP

Type of Sampling Point: Monitoring well

Sampling Method: teflon bailer

Sample Appearance: clear

Additional Comments: slight petroleum odor

Sampling Team: Greg Heuer

**MONITORING WELL SAMPLING INFORMATION**

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-2

Sample Date  
10/24/00

Sample Time  
10:23 AM

Field Measurements

Well Purging Measurements

- 1. Stick-up (ground surface to top of well casing) 0 ft.
- 2. Elevation top of well casing 99.28 ft.
- 3. Depth to water from top of well casing 7.52 ft.
- 4. Elevation Groundwater Surface (#2-#3) 91.76 ft.
- 5. Total Well depth from top of well casing 14.31 ft.

- 6. Elevation bottom of well 84.97 ft.
- 7. Total vertical ft of water in well (#3-#5) or (#4-#6) 6.79 ft.
- 8. Volume of water in well (0.163 gal/ft for a 2" ID well) 1.11 gal.
- 9. Number of well volumes purged 4.07 #
- 10. Number of gallons purged (#8 x#9) 4.50 gal.

Temp. of sample (F) Field:           

Spec. Cond. (uohms) - Field:           

pH (units) - Field:           

Sample Field Filtered - Inorganics (Y/N):           

Total Dissolved Solids - Field:           

PID Reading (well opening):           

FIELD COMMENTS

Weather Conditions: Partly sunny, 70 °F

Specific Location of Sample: SEE MAP

Type of Sampling Point: Monitoring well

Sampling Method: teflon bailer

Sample Appearance: clear

Additional Comments: no odor

Sampling Team: Greg Heuer

**MONITORING WELL SAMPLING INFORMATION**

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-3

Sample Date  
10/24/00

Sample Time  
11:00 AM

Field Measurements

Well Purging Measurements

- 1. Stick-up (ground surface to top of well casing) 0 ft.
- 2. Elevation top of well casing 100.00 ft.
- 3. Depth to water from top of well casing 8.04 ft.
- 4. Elevation Groundwater Surface (#2-#3) 91.96 ft.
- 5. Total Well depth from top of well casing 14.85 ft.

- 6. Elevation bottom of well 85.15 ft.
- 7. Total vertical ft of water in well (#3-#5) or (#4-#6) 6.81 ft.
- 8. Volume of water in well (0.163 gal/ft for a 2" ID well) 1.11 gal.
- 9. Number of well volumes purged 4.05 #
- 10. Number of gallons purged (#8 x#9) 4.50 gal.

Temp. of sample (F) Field: \_\_\_\_\_

Spec. Cond. (uohms) - Field: \_\_\_\_\_

pH (units) - Field: \_\_\_\_\_

Sample Field Filtered - Inorganics (Y/N): \_\_\_\_\_

Total Dissolved Solids - Field: \_\_\_\_\_

PID Reading (well opening): \_\_\_\_\_

FIELD COMMENTS

Weather Conditions: Partly cloudy, 74 °F

Specific Location of Sample: SEE MAP

Type of Sampling Point: Monitoring well

Sampling Method: teflon bailer

Sample Appearance: turbid

Additional Comments: no odor

Sampling Team: Greg Heuer

## MONITORING WELL SAMPLING INFORMATION

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-4

Sample Date  
10/24/00

Sample Time  
12:30 PM

### Field Measurements

### Well Purging Measurements

1. Stick-up (ground surface to top of well casing) 0 ft.
2. Elevation top of well casing 99.84 ft.
3. Depth to water from top of well casing 7.80 ft.
4. Elevation Groundwater Surface (#2-#3) 92.04 ft.
5. Total Well depth from top of well casing 14.34 ft.

6. Elevation bottom of well 85.50 ft.
7. Total vertical ft of water in well (#3-#5) or (#4-#6) 6.54 ft.
8. Volume of water in well (0.163 gal/ft for a 2" ID well) 1.07 gal.
9. Number of well volumes purged 3.28 #
10. Number of gallons purged (#8 x#9) 3.50 gal.

Temp. of sample (F) Field: \_\_\_\_\_

Spec. Cond. (uohms) - Field: \_\_\_\_\_

pH (units) - Field: \_\_\_\_\_

Sample Field Filtered - Inorganics (Y/N): \_\_\_\_\_

Total Dissolved Solids - Field: \_\_\_\_\_

PID Reading (well opening): \_\_\_\_\_

### FIELD COMMENTS

Weather Conditions: Partly cloudy, 78 °F

Specific Location of Sample: SEE MAP

Type of Sampling Point: Monitoring well

Sampling Method: teflon bailer

Sample Appearance: clear

Additional Comments: petroleum odor

Sampling Team: Greg Heuer

**Appendix D**  
**Soil and Groundwater Sampling Protocol**

## SOIL SAMPLING PROTOCOL

To be used when sampling soil borings for subsurface investigations.

1. Sampling Methodology - Split Spoon Sampling
  - A. All sampling equipment to be used will be cleaned and decontaminated using deionized water prior to and between samples.
  - B. Verification will be made that all boring equipment to include augers, split spoon samplers and associated equipment has been properly cleaned and decontaminated prior to initiating investigation.
  - C. All boring and associated samplers will be decontaminated in accordance with the following schedule.
    - 1.) Augers and center plugs will be decontaminated between borings using a high pressure washer or steam cleaner.
    - 2.) Split Spoon Samplers will be decontaminated between samples using a warm water Alconox wash and triple rinsing.
  - D. Samples representative of the interval retrieved will be removed and placed into new, glass jars with teflon lined lids. Proper care will be taken to minimize volatilization of possible contaminants from the sample during handling.
  - E. The sample will be allowed to sit undisturbed for a period of time sufficient for vapor equilibrium to be reached. A headspace analysis of the sample will then be conducted using a portable photoionizer detector.
  - F. A log of all borings will be recorded during sampling. The logs will include data regarding soil types and depths, anomalies, odor, HNU readings, blow counts and moisture contents.
2. Sample Storage, Handling and Transport
  - A. Samples for analysis will be immediately cooled using a thermally insulated cooler and ice. The samples will be transported, on ice, as soon as possible, to the laboratory or to the engineering office cooler to await transport to the laboratory.
  - B. No sample will be allowed to remain in the possession of the engineer or laboratory for more than two weeks prior to analysis.
  - C. A chain of custody record will be kept for all samples taken for laboratory analysis.

## SOIL SAMPLING PROTOCOL

1. Sampling Methodology - Shelby Tube Samples
  - A. All sampling equipment to be used will be cleaned and decontaminated using deionized water prior to and between samples.
  - B. Verification will be made that all boring equipment to include augers, shelby tube samplers and associated equipment has been properly cleaned and decontaminated prior to initiating investigation.
  - C. All boring and associated samplers will be decontaminated in accordance with the following schedule.
    - 1.) Augers and center plugs will be decontaminated between borings using a high pressure washer or steam cleaner.
    - 2.) Shelby tube samplers will be inspected prior to use. No samplers will be used showing indications of damage, corrosion or contamination. Samplers will not be reused or washed in the field.
  - D. Shelby tube samplers will be carefully removed to minimize sample disturbance and volatilization or contamination.
  - E. Plastic end caps will immediately be placed on the shelby tubes as they are removed.
2. Sample Storage, Handling, & Transport
  - A. Shelby tube samples will be placed in a thermally insulated cooler with ice or cooler packs (Blue Ice).
  - B. No sample will be allowed to remain in the possession of the engineer or laboratory for more than two weeks prior to analysis.
  - C. A chain of custody record will be kept for all samples taken for laboratory analysis.
  - D. No samples will be removed from the Shelby tubes except by the laboratory performing analysis.

## GROUNDWATER SAMPLING PROTOCOL

To be used when sampling groundwater monitoring wells for IEPA approved investigations.

### 1. Sampling Methodology - Bailer Method

- A. Verification will be made that all sampling equipment to include bailers, buckets, chords, water level meters, have been properly decontaminated prior to sampling initiation.
- B. All equipment will be decontaminated in accordance with the following protocol:
  - 1.) Bailers will be decontaminated between samples using Alconox wash, a 30% methanol/distilled water rinse, and a final triple rinse with distilled water.
  - 2.) Water level probes and associated equipment will be decontaminated between readings using an Alconox wash and distilled water rinse.
  - 3.) A new section of line will be used for bailing and sampling each individual well.
- C. A record of the following will be made at the time of well sampling:
  - 1.) Depth to water from top of well casing.
  - 2.) Total well depth from top of well casing.
  - 3.) Total vertical feet of water in well.
  - 4.) Number of well volumes purged.
  - 5.) Number of gallons purged.
  - 6.) Sampling methods.
  - 7.) Sample appearance.

### D. Wells will be purged and sampled using the following method:

The total vertical feet of water in the 2" ID monitor well will be multiplied by 0.163 gal./ft. in order to determine the total volume of water in the well. A total of three well volumes will be purged from the well. Groundwater samples will then be withdrawn via a stainless steel bailer and collected in 40 milliliter, properly labeled vials. The samples will be immediately placed on ice for temporary storage until the samples can be transported to an IEPA certified laboratory.

**Appendix E**

**List of Reports Previously Submitted to the IEPA**

List of Reports Previously Submitted to the IEPA

Warsaw - ITCO - Minier, IL

<b>Report Name</b>	<b>Report Date</b>
20 Day Certification	9/3/98
45 Day Report	10/1/98
Free Product Removal Report	8/26/99
45 Day Report Addendum	8/31/99
Site Classification Work Plan & Budget	10/7/99
Site Classification Completion Report	7/10/00

**Appendix F**  
**High Priority Site Investigation CAP Budget**

**BUDGET AND BILLING FORM FOR  
LEAKING UNDERGROUND STORAGE  
TANK SITES**

**A. SITE INFORMATION**

Site Name: Warsaw, Howard

Site Address: Route 122 City: Minier

Zip: 61759

County: Tazewell IEPA Generator No.: 1790455007

IEMA Incident No: 981987, 991610 IEMA Notification Date: May 19, 1999

Date this Form was Prepared: October 26, 2000

This form is being submitted as a:

- Budget Proposal
- Budget Amendment (Budget Amendments must include only the costs over the previous budget)

Amendment Number: \_\_\_\_\_

- Billing Package for costs incurred pursuant to 35 Illinois Administrative Code (IAC), Part 732 ("new program")

Name(s) of report(s) documenting the costs requested: \_\_\_\_\_

Date(s): \_\_\_\_\_

This form is being submitted for the Site Activities indicated below (check one):

- Early Action  Site Classification
- Low Priority Corrective Action  High Priority Corrective Action
- Other (indicate activities): \_\_\_\_\_

**DO NOT SUBMIT "NEW PROGRAM" COSTS AND "OLD PROGRAM"  
COSTS AT THE SAME TIME, ON THE SAME FORMS.**

A-1

**RECEIVED**  
**DEC 08 2000**  
**IEPA/BOL**

If eligible for reimbursement, where should reimbursement checks be sent? Please note that only owners or operators or USTs may be eligible for reimbursement. Therefore, payment can only be made to an owner or operator.

Pay to the order of: Howard Warsaw

Send in care of: Howard Warsaw

Address: Route 122

City: Minier State: IL Zip: 61759

Number of Petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101: X 101 or more: \_\_\_\_\_

Number of USTs at the site: 7 (Number of USTs included USTs presently at the site and USTs that have been removed.)

Number of incidents reported to IEMA: 2

Incident Numbers assigned to the site due to releases from USTs: 981987, 991610

Please list all tanks which have ever been located at the site and are presently located at the site:

Product Stored	Size (gallons)	Did UST have a release?		Incident No.	Type of Release
<u>gasoline</u>	<u>500</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>gasoline</u>	<u>500</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>gasoline</u>	<u>2,000</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>diesel</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
_____	_____	<u>Yes</u>	<u>No</u>	_____	_____
_____	_____	<u>Yes</u>	<u>No</u>	_____	_____

**B. PROPOSED BUDGET SUMMARY AND BUDGET TOTAL**

1. Investigation Costs:	<u>\$6,999.51</u>
2. Analysis Costs:	<u>\$2,712.50</u>
3. Personnel Costs:	<u>\$16,013.00</u>
4. Equipment Costs:	<u>\$276.00</u>
5. Field Purchases and Other Costs:	<u>\$453.00</u>
6. Handling Charges:	<u>\$1,071.20</u>

**TOTAL PROPOSED BUDGET = \$27,525.21**

**E. INVESTIGATION COSTS**Method I \_\_\_\_\_ Method II \_\_\_\_\_ Method III \_\_\_\_\_ Not Applicable X

1.0 **Drilling Costs** - This includes the costs for drilling labor, drill rig usage, and other drilling equipment. Borings which are to be completed as monitoring wells should be listed here. Costs associated with disposal of cuttings should not be included here. An indication must be made as to why each boring is being conducted (I.e. classification, monitoring wells, migration pathways).

3 borings to 15 feet = 45 feet to be bored for soil plume definition

3 borings to 16 feet = 48 feet to be bored for MW Install.. GW plume definition

1 boring to 15 feet = 15 feet to be bored for TACO parameters

\_\_\_\_\_ borings to \_\_\_\_\_ feet = 0 feet to be bored for \_\_\_\_\_

\_\_\_\_\_ borings to \_\_\_\_\_ feet = 0 feet to be bored for \_\_\_\_\_

Total feet to be bored: 108Borings: 108 feet X \$23.00 per foot = \$2,484.00 or

Hours \_\_\_\_\_ X \_\_\_\_\_ per hour = \_\_\_\_\_

\_\_\_\_\_ borings through \_\_\_\_\_ ft of bedrock = \_\_\_\_\_ Ft bedrock to be bored

\_\_\_\_\_ borings through \_\_\_\_\_ ft of bedrock = \_\_\_\_\_ Ft bedrock to be bored

Total Feet bedrock to be Bored: 0\_\_\_\_\_ Borings: 0 Ft bedrock x \_\_\_\_\_ per ft bedrock = \_\_\_\_\_ (or)\_\_\_\_\_ Hours x \$ \_\_\_\_\_ per hour = 02 # of Mobilizations @ \$280.00 per mobilization = \$560.00

Other Costs	Number of Units	Unit Cost	Total Cost
decontamination of augers (each)	22	\$6.25	\$135.00
cleanup of jobsite (per hour)	4	\$35.00	\$140.00
drilling through concrete (per inch)	12	\$13.75	\$165.00

subtotal \$440.00

2. **Professional Services (e.g., P.E., geologist)** - These costs must be listed in Section I, the Personnel section of the forms.

**3. Monitoring Well Installation Materials** - Costs listed here must be costs associated with well casing, well screens, filter pack, annular seal, surface seal, well covers, etc. List the items below in a time and materials format.

Materials	Number of Units	Unit Cost	Total Cost
2" ID Slotted PVC well screens (per foot)	30	\$7.81	\$234.30
2" ID Solid PVC riser (per foot)	18	\$3.81	\$68.58
Installation of 2" monitoring well material (/ft)	48	\$5.75	\$276.00
Silica sand filter pack (per foot)	36	\$8.88	\$319.68
Bentonite pellet seal (each)	3	\$112.50	\$337.50
2" Expandable caps with locks (each)	3	\$28.75	\$86.25
Flush mount manhole covers (each)	3	\$148.00	\$444.00
2" PVC well sumps (each)	3	\$6.40	\$19.20
Bentonite hole plug (per foot)	60	\$8.00	\$480.00
			\$0.00
<b>subtotal</b>			<b>\$2,265.51</b>

**4. Disposal Costs** - This includes the costs for disposing of boring cuttings and any water generated while performing borings or installing wells.

Disposal of Cuttings: 5 drums x \$250.00 per drum = \$1,250.00

Disposal of Water: \_\_\_\_\_ gallons x \_\_\_\_\_ per gallon = \$0.00

Transportation Costs: \_\_\_\_\_

Describe how the water/soil will be disposed: All contaminated cuttings will be placed in IDOT approved 55 gallon drums. The drums will then be transported by a certified waste hauler to an approved disposal facility.

**Total Investigation Costs:** \$6,999.51

**F. ANALYSIS COSTS**

1. Physical Soil Analysis - This must only include analysis costs for classification of soil types at the site.

\_\_\_\_\_ Moisture Content Samples X \_\_\_\_\_ per sample = \$0.00

\_\_\_\_\_ Soil Classification samples X \_\_\_\_\_ per sample = \$0.00

Indication method to be performed: \_\_\_\_\_

\_\_\_\_\_ Soil Particle Size Samples X \_\_\_\_\_ per sample = \$0.00

1 Ex-Situ Hydraulic Conductivity/Permeability Samples

X \$325.00 per sample = \$325.00

Indicate method to be performed: ASTM D5084-90

\_\_\_\_\_ Rock Hydraulic Conductivity/Permeability samples

X \_\_\_\_\_ per sample = \_\_\_\_\_

2 Natural Organic Carbon Fraction (foc) samples

X \$87.50 per sample = \$175.00

Indicate the ASTM or SW-846 method to be performed: \_\_\_\_\_

2 Soil Bulk Density samples X \$43.75 per sample = \$87.50

\_\_\_\_\_ samples X \_\_\_\_\_ per sample = \$0.00

\_\_\_\_\_ samples X \_\_\_\_\_ per sample = 0

\_\_\_\_\_ samples X \_\_\_\_\_ per sample = 0

\_\_\_\_\_ samples X \_\_\_\_\_ per sample = 0

2. Soil Analysis Costs - This must be for laboratory analysis only.

14 BTEX samples X \$85.00 per sample = \$1,190.00

\_\_\_\_\_ PNA samples X \$190.00 per sample = \$0.00

\_\_\_\_\_ LUST Pollutant samples X \_\_\_\_\_ per sample = \$0.00

_____	pH	samples X	_____	per sample =	<u>\$0.00</u>
_____	paint filter	samples X	_____	per sample =	<u>\$0.00</u>
_____	TCLP Lead	samples x	<u>\$100.00</u>	per sample =	<u>\$0.00</u>
_____	flash point	samples X	_____	per sample =	<u>\$0.00</u>
_____	Lab and/or Field Blank	samples X	_____	per sample =	<u>\$0.00</u>
_____	_____	samples X	_____	per sample =	<u>\$0.00</u>
_____	_____	samples X	_____	per sample =	<u>\$0.00</u>
_____	_____	samples X	_____	per sample =	<u>\$0.00</u>
_____	_____	samples X	_____	per sample =	<u>\$0.00</u>

3. Groundwater Analysis Costs - This must be for laboratory analysis only.

<u>11</u>	BTEX	samples X	<u>\$85.00</u>	per sample =	<u>\$935.00</u>
_____	PNA	samples X	_____	per sample =	<u>\$0.00</u>
_____	LUST Pollutant	samples X	_____	per sample =	<u>\$0.00</u>
_____	pH	samples X	_____	per sample =	<u>\$0.00</u>
_____	Lab and/or Field Blank	samples X	_____	per sample =	<u>\$0.00</u>
_____	flash point	samples X	_____	per sample =	<u>\$0.00</u>
_____	Lead	samples X	_____	per sample =	<u>\$0.00</u>
_____	_____	samples X	_____	per sample =	<u>\$0.00</u>
_____	_____	samples X	_____	per sample =	<u>\$0.00</u>
_____	_____	samples X	_____	per sample =	<u>\$0.00</u>
_____	_____	samples X	_____	per sample =	<u>\$0.00</u>
_____	_____	samples X	_____	per sample =	<u>\$0.00</u>

Total Analysis Costs = \$2,712.50

**G. PERSONNEL**

All personnel costs that are not included elsewhere in the budget/billing form must be listed here. Costs must be listed per task, not personnel type. The following are some examples of tasks: Drafting, data collection, plan, report or budget preparation for \_\_\_\_\_ (i.e., site classification work plan, 45 day report, or high priority corrective action budget), sampling, field oversight for \_\_\_\_\_ (i.e. drilling/well installation, corrective action, or early action), of maintenance of \_\_\_\_\_. The above list is not inclusive of all possible tasks.

Sr. Project Manager : 42 hours x \$98.00 per hour = \$4,116.00

Task to be performed for the above hours: Background research; HP Invest; reimb. Prep., TACO prelim. Offsite access

Env. Hydrogeologist : 32 hours x \$98.00 per hour = \$3,136.00

Task to be performed for the above hours: boring oversight, sampling, survey, drilling logs

Env. Hydrogeologist : 16 hours x \$98.00 per hour = \$1,568.00

Task to be performed for the above hours: Offsite access agreements, site visits, telephone, initial TACO calculations

Environmental Technician : 24 hours x \$65.00 per hour = \$1,560.00

Task to be performed for the above hours: sampling, sample preparation, lab reports, site

Sr. Environmental Manager : 18 hours x \$110.00 per hour = \$1,980.00

Task to be performed for the above hours: Report review, CAP; CA planning/investigation oversight, offsite

Reimbursement Manager : 14 hours x \$55.00 per hour = \$770.00

Task to be performed for the above hours: Reimbursement preparation

Admin/Clerical : 24 hours x \$42.00 per hour = \$1,008.00

Task to be performed for the above hours: Report preparation (copies, binding): CAP, Reimbursement.

Professional Engineer (PE) : 15 hours x \$125.00 per hour = \$1,875.00

Task to be performed for the above hours: Report review: CAP, Reimbursement

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours: \_\_\_\_\_

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours: \_\_\_\_\_

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours: \_\_\_\_\_

**TOTAL PERSONNEL COSTS: \$16,013.00**



**Other Costs** - A listing and description of all other costs which will be/were incurred and are not specifically listed on this form should be attached. The listing should include a cost breakdown in a time and materials format.

Color copies:	\$1.00 each X	33 copies =	\$33.00
encore samplers (3/sample):	\$10.00 each X	42 samplers =	\$420.00

<b>Total Other Costs =</b>	<u>\$453.00</u>
<b>Subtotal I-1 =</b>	<u>\$0.00</u>
<b>Total pages I-1 and I-2:</b>	<u>\$453.00</u>





**L. HIGH PRIORITY CORRECTIVE ACTION**

Corrective Action at High Priority Sites may involve both and soil and groundwater remediation. Below provide a summary of costs for the remediation type(s) chosen and attach the appropriate sections of the budget/billing forms to support the summary of costs.

**A. Preparation of the Corrective Action Plan**

1. Investigation Costs:	<u>\$6,999.51</u>
2. Analysis Costs:	<u>\$2,712.50</u>
3. Personnel Costs:	<u>\$16,013.00</u>
4. Equipment Costs:	<u>\$276.00</u>
5. Field Purchases and Other Costs:	<u>\$453.00</u>
6. Handling Charges:	<u>\$1,071.20</u>

**B. Groundwater Remediation**

1. Analysis Costs	<u>                    </u>
2. Personnel Costs:	<u>                    </u>
3. Equipment Costs:	<u>                    </u>
4. Field Purchases and Other Costs:	<u>                    </u>
5. Handling Charges:	<u>                    </u>

Of the above costs, please provide a break down of costs associated with operation and maintenance (O&M), if applicable, as requested below:

                     Months of O&M x                      per month =                      \$0.00

**C. Excavation and Disposal**

1. Analysis Costs:	<u>                    </u>
2. Personnel Costs:	<u>                    </u>
3. Equipment Costs:	<u>                    </u>
4. Field Purchases and Other Costs:	<u>                    </u>
5. Handling Charges:	<u>                    </u>

Of the above costs, please provide a break down of the costs associated with excavation, transportation, and disposal as requested below:

Excavation:	<u>                    </u> yards x	<u>                    </u> per yard =	<u>                    </u> \$0.00
Transportation:	<u>                    </u> yards x	<u>                    </u> per yard =	<u>                    </u> \$0.00
Disposal:	<u>                    </u> yards x	<u>                    </u> per yard =	<u>                    </u> \$0.00

**D. Alternative Technology, Type: ORC Application (In-Situ soil and groundwater treatment)**

- 1. Investigation costs: \_\_\_\_\_
- 2. Analysis Costs: \_\_\_\_\_
- 3. Personnel Costs: \_\_\_\_\_
- 4. Equipment Costs: \_\_\_\_\_
- 5. Field Purchases and Other Costs: \_\_\_\_\_
- 6. Handling Charges: \_\_\_\_\_

Of the above costs, please provide a break down of the following costs as requested below if applicable:

Excavation: \_\_\_\_\_ yards x \_\_\_\_\_ per yard = \_\_\_\_\_ \$0.00

Transportation: \_\_\_\_\_ yards x \_\_\_\_\_ per yard = \_\_\_\_\_ \$0.00

Treatment: \_\_\_\_\_ yards x \_\_\_\_\_ per yard = \_\_\_\_\_ \$0.00

Operation and Maintenance (O&M):

\_\_\_\_\_ Months of O&M x \_\_\_\_\_ per month = \_\_\_\_\_ 0

**E. Backfill Costs**

- 1. Personnel Costs: \_\_\_\_\_
- 2. Equipment Costs: \_\_\_\_\_
- 3. Field Purchases and Other Costs: \_\_\_\_\_
- 4. Handling Charges: \_\_\_\_\_

Of the above costs, please provide a break down of the following costs as requested below if applicable:

Type of backfill: \_\_\_\_\_  
 \_\_\_\_\_ yards x \_\_\_\_\_ per yard = \_\_\_\_\_ \$0.00

Type of backfill: \_\_\_\_\_  
 \_\_\_\_\_ yards x \_\_\_\_\_ per yard = \_\_\_\_\_ \$0.00

Illinois Environmental Protection Agency

Owner/Operator and Professional Engineer Budget Certification Form for Leaking Underground Storage Tanks Sites

In accordance with 415 ILCS 5/57, if an owner or operator intends to seek payment from the UST Fund, an owner or operator must submit to the Agency, for the Agency's approval or modification, a budget which includes an accounting of all costs associated with the implementation of the investigative, monitoring and/or corrective action plans.

I hereby certify that I intend to seek payment from the UST Fund for performing High Priority Corrective Action activities at Warsaw, Howard

LUST site. I further certify that the costs set forth in this budget are necessary activities and are reasonable and accurate to the best of my knowledge and belief. I also certify that the costs included in this budget are not for corrective action in excess of the minimum requirements of 415 ILCS 5/57 and no costs are included in this budget which are not described in the corrective action plan. I further certify that costs ineligible for payment from the Fund pursuant to 35 Illinois Administrative Code Section 732.606 are not included in the budget proposal or amendment. Such ineligible costs include but are not limited to:

- Costs associated with ineligible tanks.
- Costs associated with site restoration (e.g., pump islands, canopies).
- Costs associated with utility replacement (e.g., sewers, electrical, telephone, etc.).
- Costs incurred prior to IEMA notification.
- Costs associated with planned tank pulls.
- Legal defense costs.
- Costs incurred prior to July 28, 1989.
- Costs associated with installation of new USTs or the repair of existing USTs.

RECEIVED  
DEC 08 2000  
IEPA/BOL

Owner/Operator: Howard Warsaw Title: Owner

Signature: Howard Warsaw Date: 12-3-00

Subscribed and sworn to before me the 3rd day of December, 2000.  
*(Budget Proposals and Budget Amendments must be notarized when the certification is signed.)*

Gaye Lynn Green  
(Notary Public)

Seal:

"OFFICIAL SEAL"  
Gaye Lynn Green  
Notary Public, State of Illinois  
My Commission Expires March 14, 2001

P.E.: DALE BENNINGTON

Seal:

DALE L. BENNINGTON  
062-035579  
REGISTERED  
PROFESSIONAL  
ENGINEER  
OF Date: Nov 16, 2000  
ILLINOIS

P.E. Signature: Dale Bennington

Subscribed and sworn to before me the 11th day of November, 2000.  
*(Budget Proposals and Budget Amendments must be notarized when the certification is signed.)*

Gaye Lynn Green  
(Notary Public)

Seal:

"OFFICIAL SEAL"  
Gaye Lynn Green  
Notary Public, State of Illinois  
My Commission Expires March 14, 2001

The Agency is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder. This form has been approved by the Forms Management Center.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

217/782-6762

**CERTIFIED MAIL**

0016 0132 5479

MAR 30 2001

Howard Warsaw  
Route 122  
Minier, Illinois 61759

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 991610  
LUST Technical File

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the High Priority Site Investigation Corrective Action Plan (plan) submitted for the above-referenced incident. This information, dated November 30, 2000, was received by the Illinois EPA on December 8, 2000. Citations in this letter are from the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 IAC).

Pursuant to 35 IAC Section 732.405(c) and Section 57.7(c)(4) of the Act, the plan is approved. The site investigation activities proposed in the plan are appropriate to develop a High Priority Corrective Action Plan which demonstrates compliance with 35 IAC Part 732 and Title XVI of the Act. Please note that the activities proposed in the plan are for investigative purposes only. Final approval for corrective action activities is contingent upon the submittal of a High Priority Corrective Action Plan which documents the results of the proposed investigation and satisfies the requirements set forth in 35 IAC Section 732.404 and Section 57.7(c)(1) of the Act.

In addition, the total proposed budget for the High Priority Site Investigation Corrective Action Plan has been approved for the amounts listed in Section 1 of Attachment A. Please note that the costs must be incurred in accordance with the approved plan. Be aware that the amount of reimbursement may be limited by 35 IAC Sections 732.604, 732.606(s), and 732.611 as well as Sections 57.8(e), 57.8(g) and 57.8(d) of the Act.

Pursuant to 35 IAC Section 732.401, the site investigation results and a High Priority Corrective Action Plan, demonstrating compliance with the requirements set forth in 35 IAC Section 732.404 and Section 57.7(c)(1) of the Act, must be submitted within 120 days of the date of this letter to:

RELEASABLE

GEORGE H. RYAN, GOVERNOR

APR 09 2001

Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Please submit all correspondence in duplicate and include the "Re:" block shown at the beginning of this letter.

Within 35 days after the date of mailing of this final decision, the owner or operator may petition for a hearing before the Illinois Pollution Control Board (Board) to contest the decision of the Illinois EPA. (For information regarding the filing of an appeal, please contact the Board at 312/814-3620.) However, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed 90 days by written notice provided to the Board from the owner or operator and the Illinois EPA within the 35-day initial appeal period. (For information regarding the filing of an extension, please contact the Illinois EPA's Division of Legal Counsel at 217/782-5544.)

If you have any questions or need further assistance, please contact Jim Ransdell at 217/557-6938.

Sincerely,



Thomas A. Henninger  
Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

TAH:JSR:jk\012791.doc

Attachment

cc: Midwest Environmental Consulting & Remediation Services, Inc.  
Division File

Attachment A

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 991610  
LUST Technical File

NOTE: Citations in this attachment are from 35 Illinois Administrative Code (35 IAC) and the Environmental Protection Act.

**SECTION 1**

The following amounts have been approved:

\$6,999.51	Investigation Costs
\$2,712.50	Analysis Costs
\$16,013.00	Personnel Costs
\$276.00	Equipment Costs
\$453.00	Field Purchases and Other Costs
\$1,071.20	Handling Charges

TAH:JSR:jk\012791.doc

LUST TECHNICAL REVIEW NOTES

File Heading:

LPC# 1790455007 Tazewell  
Municipal Warsaw Howard  
Warsaw (CTG6) Rt 122  
Municipal  
#s 981987-991610

Reviewed By: J. Shandell

Date Reviewed: 5/02

Documents Reviewed:

HPCAP/BUD

Method II

LUST Information in Division File: ET-all to HPCAP/BUD

Review Notes: Are proposing a trench that is 400 linear feet, 3 feet wide and 10 feet deep  $\approx$  450 cy. Budget is allowing 1000 cy will adjust once amended budget is received. There are other oversight personnel costs such as the reimbursement package, excavation and disposal will have to be adjusted. (Multiplied)

There are G/W and soil exceedances BTEX off-site to the North across Route 122 and to the East in what appears to be residential. MW-3 to the South & MW-2 to the West are OK

The largest budget item for this Plan is the FPO cost for the pump & treat system and the O&M for it  $\approx$  \$100,000 (2 years service)

R-26 Parameters  
are using SSL & RBCA EQ'S which will be further looked at  
May introduce  $MgH_2O_2$  for Bio-remediation

Comments/Additional Work Needed: Plan in general is OK  
Budget denied; are initiating a Pump & Treat system  
Agency has requested a further Red/dn of the system cost  
Total Budget Proposed \$ 229,828.<sup>40</sup>

Action Taken by Agency: app Plan / Agency Budget

RELEASABLE

MAY 22 2002

Response Due: N/A

REVIEWER MD

Consultant MEERS, Inc

R0120

# 1790455007-Tatewell  
Warsaw, Howard - West  
-ack

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC.  
22200 ILLINOIS ROUTE 9, POST OFFICE BOX 614  
TREMONT, ILLINOIS 61568-0614  
PHONE NO. (309) 925-5551 FAX NO. (309) 925-5606

LETTER OF TRANSMITTAL

TO: Illinois Environmental Protection Agency  
1021 North Grand Avenue East, Box 19276  
Springfield, Illinois 62794-9276

DATE: February 7, 2002  
JOB NO.: 9890  
RE: Amended CAP & Budget  
Howard Warsaw - Minier, IL

ATTENTION: Mr. Jim Ransdell

WE ARE SENDING YOU:

- REPORT             LETTER             CONTRACT & RATE SHEET
- MAPS/DRAWINGS             DOCUMENTS REQUIRING SIGNATURE
- REIMBURSEMENT DOCUMENTATION             OTHER

COPIES	DESCRIPTION
2	Amended Corrective Action Plan & Budget for the Howard Warsaw site located on Route 122 in Minier, Illinois

THESE ARE TRANSMITTED AS CHECKED BELOW:

- REIMBURSEMENT SUBMITTAL     FOR APPROVAL     AS NEEDED FOR REPORT
- COPY FOR YOUR RECORDS             SIGNATURE REQUIRED     AS REQUESTED

REMARKS:

Mr. Ransdell,

Please find enclosed the above mentioned documentation for your review. As always, please feel free to contact our office with any questions or comments.

RECEIVED

FEB 08 2002

IEPA/BOL

FROM: Gaye Lynn Green; Office Manager  
Midwest Environmental Consulting & Remediation Services, Inc.

RELEASABLE

MAY 22 2002

REVIEWER MD

R0121

# Midwest Environmental Consulting & Remediation Services Inc.

22200 Illinois Route 9 • P.O. Box 614

Tremont, IL 61568-0614

Phone: (309) 925-5551 • Fax: (309) 925-5606

January 28, 2002

Mr. Jim Ransdell  
Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Re: LPC #1790455007 – Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 981987  
LUST Technical File

**RELEASABLE**

MAY 22 2002

REVIEWER MD

RECEIVED

FEB 08 2002

IEPA/BOL

Dear Mr. Ransdell:

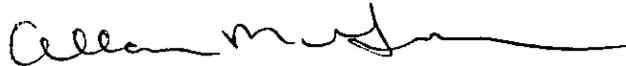
Attached please find the High Priority Corrective Action Plan (CAP) and Budget (amended) for the subject site. Midwest Environmental Consulting & Remediation Services, Inc. (MECRS) has completed the high priority site investigation to determine the contamination extent in soil and groundwater. Data collected during the investigation indicates that the best method of remediation for the site is to install a groundwater treatment system at the site. MECRS has had success using groundwater treatment systems in this area and recommends that the same remedial approach be implemented at this site.

The attached report summarizes the investigation completed to date and proposes remediation required to meet IEPA cleanup objectives (CUOs). A budget covering the costs incurred beyond the investigation phase and the anticipated costs for installation of a groundwater treatment system with appropriate monitoring and reporting is attached for your review. Installation of the groundwater treatment system will begin following receipt of an IEPA approval letter, approving the corrective action plan and budget. A report will be submitted immediately following the treatment system installation. The report will provide details regarding groundwater treatment system installation activities. Following the initial report, LUST status reports will be submitted on an annual basis, detailing the status of remedial efforts and monitoring progress.

If you have any questions or comments, please contact our office.

Sincerely,

Midwest Environmental Consulting and Remediation Services, Inc.



Allan M. Green  
President

TKB/glg  
cc: Mr. Howard Warsaw  
Attachments  
Job No. 9890

Leaking Underground Storage Tank Program  
**High Priority Site Investigation Corrective Action Plan**

**Incident Location:** Warsaw - ITCO  
Route 122  
Minier, Illinois – Tazewell Co.

**Prepared for:** Howard Warsaw  
Route 122  
Minier, Illinois 61759

**Prepared by:** Midwest Environmental Consulting  
and Remediation Services, Inc.  
22200 Illinois Route 9  
Post Office Box 614  
Tremont, Illinois 61568-0614  
Contact: Allan Green – President

**For Review by:** Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
Contact: Mr. Jim Ransdell

# High Priority Site Investigation Corrective Action Plan

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### FORMS

IEPA UST Owner/Operator Form  
IEPA Corrective Action Plan Form

### SECTIONS

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Appendix G TACO Calculations and Results  
Appendix H High Priority CAP Budget

**IEPA UST OWNER/OPERATOR FORM**

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Form Management Center.

**Underground Storage Tank Owner/Operator:**

*Please indicate below the type of plan/report that is being submitted to the Agency at this time. This form must be attached to all plans and reports submitted to the Agency pursuant to 35 Ill. Adm. Code 732 and 415 ILCS 5/57-57.17. Please check all that apply.*

20 Day Certification \_\_\_\_\_  
 45 Day Report \_\_\_\_\_  
 Free Product Removal Report \_\_\_\_\_

	Initial Submittal	Amended Submittal
Site Classification Plan	_____	_____
Site Classification Plan Budget	_____	_____
Site Classification Completion Report	_____	_____
Groundwater Monitoring Plan (Low Priority)	_____	_____
Groundwater Monitoring Plan Budget (Low Priority)	_____	_____
Groundwater Monitoring Results (Low Priority)	_____	_____
Professional Engineer Certification (Low Priority)	_____	_____
Corrective Action Plan (High Priority)	_____	_____
Corrective Action Plan Budget (High Priority)	_____	_____
Corrective Action Completion Report (High Priority)	_____	_____
Professional Engineer Certification (High Priority)	_____	_____
Corrective Action Completion Report (35 IAC Section 732.300(b), 732.400(b) or (c))	_____	_____
Professional Engineer Certification (35 IAC Section 732.300(b), 732.400(b) or (c))	_____	_____

**X RECEIVED**

**X FEB 11 8 2002**

**EPA/BOL**

I certify under penalty of law that this document was prepared by me or under my direction or supervision. This information is to the best of my belief and knowledge, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine for knowing violations.

**Owner** Warsaw-ITCO  
 Name: Howard Warsaw  
 Title: Owner  
 Signature: *Howard Warsaw*  
 Date: *Feb 9 2002*

**Operator**  
 Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_

**IEPA CORRECTIVE ACTION PLAN FORM**

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

## Illinois Environmental Protection Agency Leaking Underground Storage Tank Program Corrective Action Plan

### A. Site Identification

IEMA Incident # (6 digit): 981987 IEPA Generator # (10 digit): 1790455007

Site Name: Warsaw-ITCO

Site Address (Not a P.O. Box): Route 122

City: Minier County: Tazewell

### B. Site Information

1. Will the owner/operator seek reimbursement from the Underground Storage Tank Fund? Yes  No

2. If yes, is the budget attached? Yes  No

3. Is this an amended plan? Yes  No

4. Identify the material released: gasoline

5. This Corrective Action Plan is being submitted pursuant to:

a. 35 Ill. Adm. Code Section 731.166:

i. A release of petroleum from a UST was reported to IEMA prior to September 13, 1993 and the owner/operator has **NOT** elected to proceed under Title XVI of the Environmental Protection Act No

ii. The material released was not petroleum. No

b. 35 Ill. Adm. Code Section 732.404:

i. A groundwater quality standard or objective for any applicable indicator contaminant has been exceeded at the property boundary line or 200 feet from the leaking UST. YES

ii. The leaking UST system is within the setback zone or regulated recharge area of a potable water supply well. NO

iii. There is evidence that migration of petroleum or petroleum vapors may threaten human health or human safety. NO

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FEB 08 2002  
IEPA/BOL

iv. Class III Special Resource Groundwater exists within 200 feet of the site. NO

v. A surface body of water has been adversely affected by the presence of a visible sheen or free product layer. NO

c. 35 Illinois Administrative Code Section 732.312 NO

### C. Proposed Methods of Remediation

1. Soil Groundwater treatment system - possible enhanced bioremediation/soil washing w/ effluent

2. Groundwater Groundwater treatment system

### D. Soil and Groundwater Investigation Results

Provide the following:

1. Description of investigation activities performed to define the extent of soil and/or groundwater contamination;
2. Analytical results and cleanup objectives in tabular format;
3. Laboratory reports;
4. Boring logs;
5. Monitoring well logs;
6. Site maps to scale and oriented north showing:
  - a. Soil sample locations;
  - b. Monitoring well locations;
  - c. The plume of soil and groundwater contamination based on analytical results.

### E. Technical Information - Corrective Action Plan

Provide the following:

1. A discussion of how the corrective action plan shall remediate each of the criteria which caused the site to be classified as High Priority;
2. Engineering design specifications, diagrams, calculations, manufacturers's specifications, systems analyses, site maps, etc.;
3. A list of sampling parameters and corresponding cleanup objectives;
4. The basis for determining sampling parameters and cleanup objectives;
5. Media sampling plan to verify completion of remediation;
6. A discussion of the proposed system(s) effectiveness in remediating the contaminated soil and/or groundwater;
7. A description and results of bench/pilot studies;
8. Itemized cost estimates of alternative versus conventional technologies;
9. For alternative technologies the following must be provided:
  - a. A demonstration that the proposed technology has a substantial likelihood of achieving compliance with all applicable regulations and all corrective action

remediation objectives necessary to comply with the Environmental Protection Act and the regulations and to protect human health and the environment;

- b. A demonstration that the proposed technology will not adversely affect human health or the environment;
- c. Copies of all Agency permits necessary to authorize the use of the alternative technology;
- d. Results of the monitoring program implemented to determine whether the proposed technology will achieve compliance with the applicable regulations and remediation objectives.

**F. Signatures**

I certify under penalty of law that this plan, supporting documents and all attachments were prepared under my direction or supervision. To the best of my knowledge and belief, this plan, supporting documents and all attachments are true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<b>Owner</b>	<u>Warsaw-ITCO</u>	<b>Operator</b>	
Name:	<u>Howard Warsaw</u>	Name:	_____
Title:	<u>Owner</u>	Title:	_____
Address:	<u>Route 122</u>	Address:	_____
	<u>Minier, IL 61759</u>		_____
Phone:	<u>(309) 392-2626</u>	Phone:	_____
Signature:	<u><i>Howard Warsaw</i></u>	Signature:	_____
Date:	<u>5-Feb-02</u>	Date:	_____

**Consultant**

Firm: M.E.C.R.S., Inc.  
Contact: Allan Green  
Title: President  
Address: 22200 Illinois Route 9, PO Box 614  
Tremont, Illinois 61568  
Phone: (309) 925-5551  
Signature: *Allan Green*  
Date: 01-28-02

**SECTION D**

**BACKGROUND/INVESTIGATION RESULTS**

This portion of the report follows the IEPA Corrective Action Plan Form (IL 532 2287; LPC 513) dated December 1996.

#### **Section D. Background/Investigation Results**

The subject site is currently a gasoline service station and farm implement parts dealer located on Route 122 in Minier, Illinois. The area is developed for commercial, residential and agricultural use. An area map and 200' radius map are provided in Figures 1 and 5, respectively.

Three underground storage tanks (USTs) were removed from the site on July 6, 1999. The three tanks (1-2,000 gallon, 2-500 gallon) were used for gasoline. Details of the UST removal/free product removal activities can be found in the Report of Early Action/ Amended 45-Day Report dated August 31, 1999 and the Free Product Removal Report dated August 26, 1999, previously submitted to IEPA.

A Physical Soil Classification, pursuant to IEPA Method Two, was performed by Midwest Environmental Consulting and Remediation Services, Inc. (MECRS) on May 4, 2000. One (1) Physical Soil Classification boring, doubling as a migration pathway boring (B-1), one (1) boring placed within 5 feet of boring B-1 for the collection of shelly tubes for physical soil testing (B-1a), and six (6) additional migratory pathway borings (MW-1 through MW-4, B-2, and B-3) were completed by Whitney & Associates of Peoria, Illinois under the supervision of MECRS. The Site Classification Completion Report dated July 10, 2000 was submitted to IEPA and details the findings from the investigation. In a letter dated October 20, 2000, the IEPA approved the report and the classification of "High Priority".

The High Priority Site Investigation activities took place on August 23, 2001. As proposed in the approved Investigation Corrective Action Plan, four borings were performed and three monitoring wells were installed to determine the extent of soil and groundwater contamination. Laboratory analysis of samples obtained from borings B-4, B-5, B-7, and MW-5 indicate that contamination has migrated offsite. Groundwater samples collected on August 23, 2001 from monitoring wells MW-1, MW-4, and MW-5 indicate that groundwater contamination exists offsite. Soil and groundwater analytical results are presented in Tables 1 and 2, respectively. Laboratory reports are presented in Appendix B. Boring logs and monitoring well diagrams are presented in Appendix A. Boring and monitoring well locations are shown in Figure 2 and the horizontal extent of soil and groundwater contamination can be found on Figure 8.

The purpose of this High Priority CAP is to propose the remedial activities necessary to bring the contaminant concentrations below the calculated Tier 2 CUOs. The budget for the activities proposed in this CAP, and those costs previously incurred for the preparation of the CAP is attached for IEPA approval.

**SECTION E**

**TECHNICAL INFORMATION – CORRECTIVE ACTION PLAN**

## **Section E. Technical Information – Corrective Action Plan**

### **Provide the following:**

- 1. A discussion of how the corrective action plan shall remediate each of the criteria which caused the site to be classified as High Priority;**

Groundwater pump and treat systems have been known to be effective in reducing hydrocarbon mass in the subsurface. By pumping groundwater from the surface and treating the water before discharging into the sewer, the hydrocarbon mass is steadily decreased. Pulling groundwater through the source area continually draws the contamination towards the system trench, and therefore reduces the contaminant plume. The site was classified as High Priority due to contamination above groundwater cleanup standards at the property boundary. With treatment, the size of the source plume can be reduced, and the contamination levels can be significantly lowered.

- 2. Engineering design specifications, diagrams, calculations, manufacturer's specifications, systems analyses, site maps, etc.;**

A trench, three feet wide and ten feet deep, will be constructed on the property boundaries known to have groundwater exceedances. The trench will have three sumps, 12 feet deep as indicated on the site sketch. One sump will contain the pumps for the unit. The trench will contain a perforated plastic pipe to draw water to the pump and will be backfilled with pea-gravel. The pipe will be sloped downward toward the recovery sump containing the pumps. Two pumps will be used in the recovery sump, each placed at different levels. The second pump will operate during periods of high water recharge and serve as a safety factor if the main pump malfunctions.

Groundwater will be pumped from the sump to the groundwater treatment building. The water will be treated utilizing a four tray aeration system. The effluent air will be discharged untreated under the appropriate air emissions permits. The treated water will be discharged into the sanitary sewer, under the appropriate permits. Engineering design specifications and system literature can be found in Appendix F.

- 3. A list of sampling parameters and corresponding cleanup objectives;**

The material released at the site was gasoline. The indicator contaminants for gasoline are benzene, toluene, ethylbenzene and xylenes (BTEX). Cleanup objectives are based on a Tier 2 evaluation of the site and are presented in the TACO Calculations and Results in Appendix G. MECRS proposed to use the Class I CUO for groundwater.

Groundwater samples will be collected quarterly for a period of two years from monitoring wells MW-1 through MW-7, and from the system influent and effluent monthly as required for the sanitary sewer permits. Samples will be submitted to TriMatrix Laboratories, Inc. located in Grand Rapids, Michigan for analyses of BTEX constituents by EPA Method 8021.

The groundwater sampling parameters and corresponding CUOs are:

Analyte	Method	MDL	Units	CUO (Tier 2)
BTEX				
Benzene	EPA 8021/W	2	ug/L	91.4 ug/L
Toluene	EPA 8021/W	2	ug/L	526,000 ug/L
Ethylbenzene	EPA 8021/W	2	ug/L	169,000 ug/L
Xylenes	EPA 8021/W	5	ug/L	186,000 ug/L

Equations, variables, and calculations for these site specific CUOs can be found in Appendix G – TACO Calculations and Results.

#### **4. The basis for determining sampling parameters and cleanup objectives;**

The sampling parameters are the indicator contaminants for gasoline. Cleanup objectives were based on a Tier 2 TACO evaluation of the site and used site specific parameters to calculate those objectives.

#### **5. Media sampling plan to verify completion of remediation;**

Groundwater samples will be collected from wells MW-1 through MW-7 on a quarterly basis to monitor the groundwater treatment systems progress in remediating the contamination in groundwater. Once the groundwater CUOs have been met, soil samples will be collected from borings placed at the site. The soil sampling plan will be based on known concentrations collected from borings placed onsite during the previous investigations. The soil sampling plan will be submitted with a corresponding budget once the groundwater objectives have been met.

#### **6. A discussion of the proposed system(s) effectiveness in remediating the contaminated soil and/or groundwater;**

Influent results versus effluent results taken from systems at sites with similar hydrogeologic properties and similar geology indicates that the proposed system lowers the contamination in groundwater to below detection limits for BTEX. MECRS has brought similar projects to closure with the installation and use of the same groundwater treatment systems.

#### **7. A description and results of bench/pilot studies;**

Similar projects have been completed by MECRS in this region of Illinois with similar geology and hydrogeologic properties. Groundwater treatment systems of this type are known to be effective in treating the volatile organic compounds found in gasoline.

**8. Itemized cost estimates of alternative versus conventional technologies;**

This is not applicable. The proposed method of remediation is considered to be conventional technology.

**9. For alternative technologies the following must be provided:**

- a. A demonstration that the proposed technology has a substantial likelihood of achieving compliance with all applicable regulations and all corrective action remediation objectives necessary to comply with the Environmental Protection Act and the regulations and to protect human health and the environment;**
- b. A demonstration that the proposed technology will not adversely affect human health or the environment;**
- c. Copies of all agency permits necessary to authorize the use of the alternative technology.**
- d. Results of the monitoring program implemented to determine whether the proposed technology will achieve compliance with the applicable regulations and remediation objectives.**

This is not applicable. The proposed method of remediation is considered to be conventional technology.

**TABLE 1**  
**SOIL ANALYTICAL DATA**

**TABLE 1.**  
**Soil Analytical Results**  
**Warsaw-ITCO**  
**Minier, IL**

Sample ID:	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/00	<2.0	<2.0	<2.0	<5.0	<11.0
B-2, 4-6'	5/3/00	<b>810</b>	1,300	1,700	6,500	10,310
B-2, 6-8'	5/3/00	<b>600</b>	220	420	1,900	3,140
B-2, 8-10'	5/3/00	<b>21,000</b>	<b>41,000</b>	<b>47,000</b>	<b>190,000</b>	<b>299,000</b>
B-3, 6-8'	5/3/00	<b>400</b>	120	210	460	1,190
B-3, 8-10'	5/3/00	<b>2,300</b>	2,100	<b>31,000</b>	110,000	145,400
MW-1, 6-8'	5/4/00	<2.0	<2.0	<2.0	<5.0	<11.0
MW-2, 8-10'	5/3/00	<2.0	<2.0	<2.0	<5.0	<11.0
MW-3, 8-10'	5/3/00	<2.0	<2.0	6	<5.0	<14.7
MW-4, 4-6'	5/4/00	<b>230</b>	220	870	2,500	3,820
MW-4, 6-8'	5/4/00	<b>300</b>	1,200	5,400	20,000	26,900
B-4, 0.5-2.5'	8/23/01	<b>8.1 M</b>	19.0 M	44.7 M	77.2 M	149 M
B-4, 4-6'	8/23/01	<b>11,600 ME</b>	42,700 ME	9,720 ME	38,000 ME	102,020 ME
B-5, 6-8'	8/23/01	<b>49</b>	186 E	38	130	403
B-6, 4-6'	8/23/01	19.5	53.4	31.3	89.8	194.0
B-6, 8-10'	8/23/01	7.1	12.3	<2.4	10.9	<32.3
B-7, 8-10'	8/23/01	16.7 M	61.5 M	13.9 M	39.5 M	131.6 M
B-7, 12-14'	8/23/01	<b>754.0</b>	<61.3	<61.3	<153	<1,029.6
MW-5, 8-10'	8/23/01	<b>494 M</b>	4,750 M	5,890 M	7,570 M	18,704 M
MW-6, 6-8'	8/23/01	6.5	12.4	6.3	11.3	36.5
MW-7, 4-6'	8/23/01	11.7	25.1	10.8	20.0	67.6
MW-7, 8-10	8/23/01	15.5 M	20.2 M	6.8	11.8	54.3

Notes:

1. All results in parts per billion (ppb).
2. IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
30	12,000	13,000	150,000

3. All bolded values are above Tier 1 Residential Cleanup Objectives
4. M = Matrix interferences identified
5. E = Estimated

**TABLE 2**  
**GROUNDWATER ANALYTICAL DATA**

**Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois**

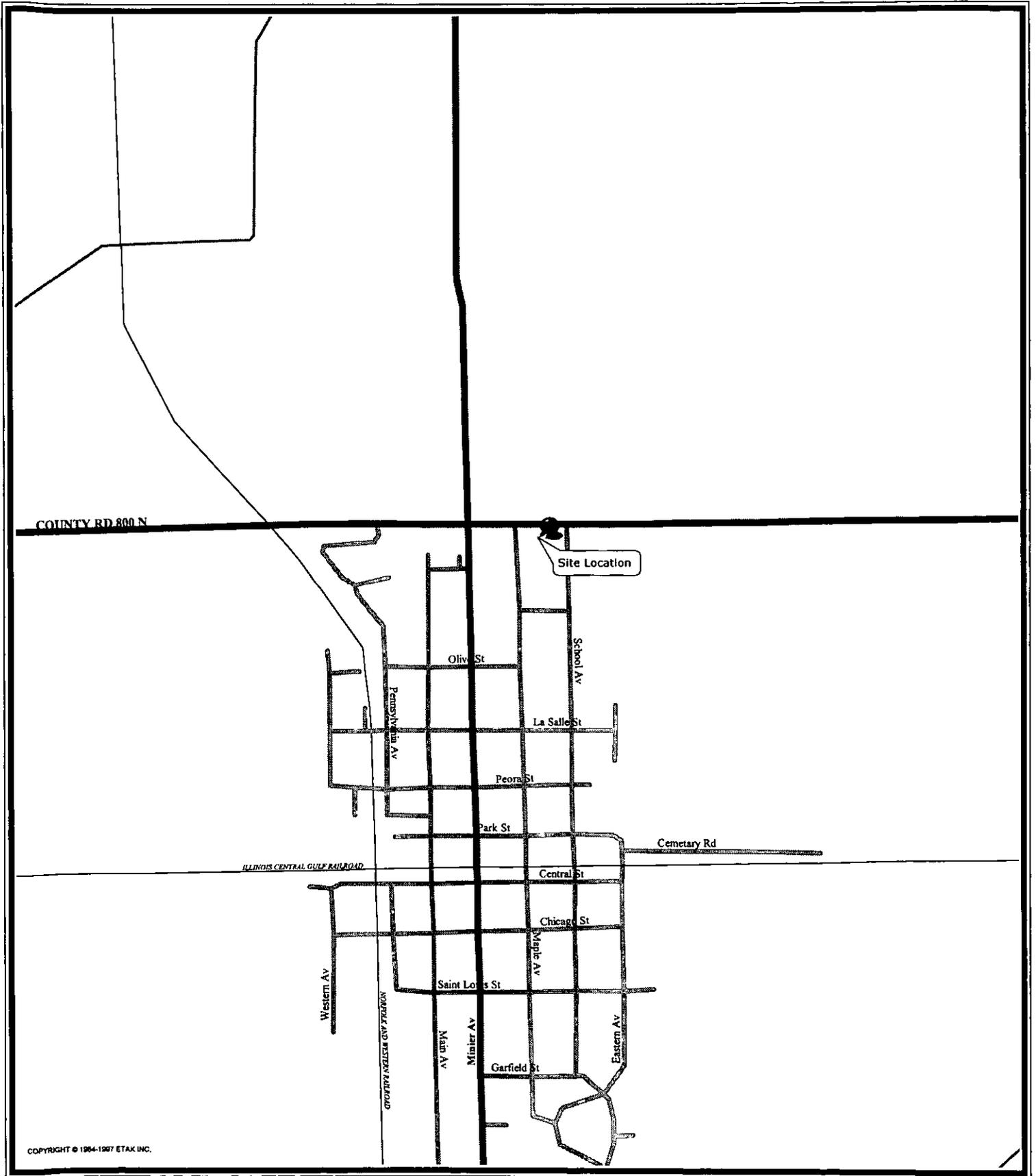
Sample #	Date	DTW	GWE	Benzene	Toluene	E-benzene	Xylenes	Total BTEX	
<b>MW-1</b>		<b>Elevation Top of Casing =</b>			<b>99.62</b>				
SC	5/12/00	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3	
1	10/24/00	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4	
2	8/23/01	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E	
3	11/13/01	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0	
<b>MW-2</b>		<b>Elevation Top of Casing =</b>			<b>99.28</b>				
SC	5/9/00	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/00	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/01	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7	
3	11/13/01	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0	
<b>MW-3</b>		<b>Elevation Top of Casing =</b>			<b>100</b>				
SC	5/9/00	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/00	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/01	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
3	11/13/01	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0	
<b>MW-4</b>		<b>Elevation Top of Casing =</b>			<b>99.84</b>				
SC	5/9/00	5.90	93.94	2,600.00	12,000.00	4,500.00	18,000.00	37,100.00	
1	10/24/00	7.80	92.04	2,300.00	5,200.00	4,000.00	13,000.00	24,500.00	
2	8/23/01	6.67	93.17	2,290 M	2,380 M	8,150.00	23,600 E	36,420 E	
3	11/13/01	6.11	93.73	1,910.00	3,960.00	3,360.00	10,000.00	19,230.00	
<b>MW-5</b>		<b>Elevation Top of Casing =</b>			<b>99.57</b>				
SC	5/9/00	--	--	--	--	--	--	--	
1	10/24/00	--	--	--	--	--	--	--	
2	8/23/01	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9	
3	11/13/01	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0	
<b>MW-6</b>		<b>Elevation Top of Casing =</b>			<b>99.37</b>				
SC	5/9/00	--	--	--	--	--	--	--	
1	10/24/00	--	--	--	--	--	--	--	
2	8/23/01	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5	
3	11/13/01	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
<b>MW-7</b>		<b>Elevation Top of Casing =</b>			<b>100.07</b>				
SC	5/9/00	--	--	--	--	--	--	--	
1	10/24/00	--	--	--	--	--	--	--	
2	8/23/01	7.28	92.09	<2.0	<2.0	<2.0	5.9	<11.9	
3	11/13/01	6.23	93.14	117 E	<2.0	<2.0	<5.0	<126 E	

- All results reported in ug/kg (i.e. parts per billion, ppb)
- IEPA Tier 1 Cleanup Objectives (ug/kg):
- = No data available
- MDL = Method Detection Limit
- DTW = Depth to Water
- GWE = Groundwater Elevation referenced to datum point
- NA/NS = Not analyzed/not sampled this event
- E = Estimated - value outside linear range
- M = Matrix interferences identified.

Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

**FIGURE 1**  
**AREA MAP**

# Area Map



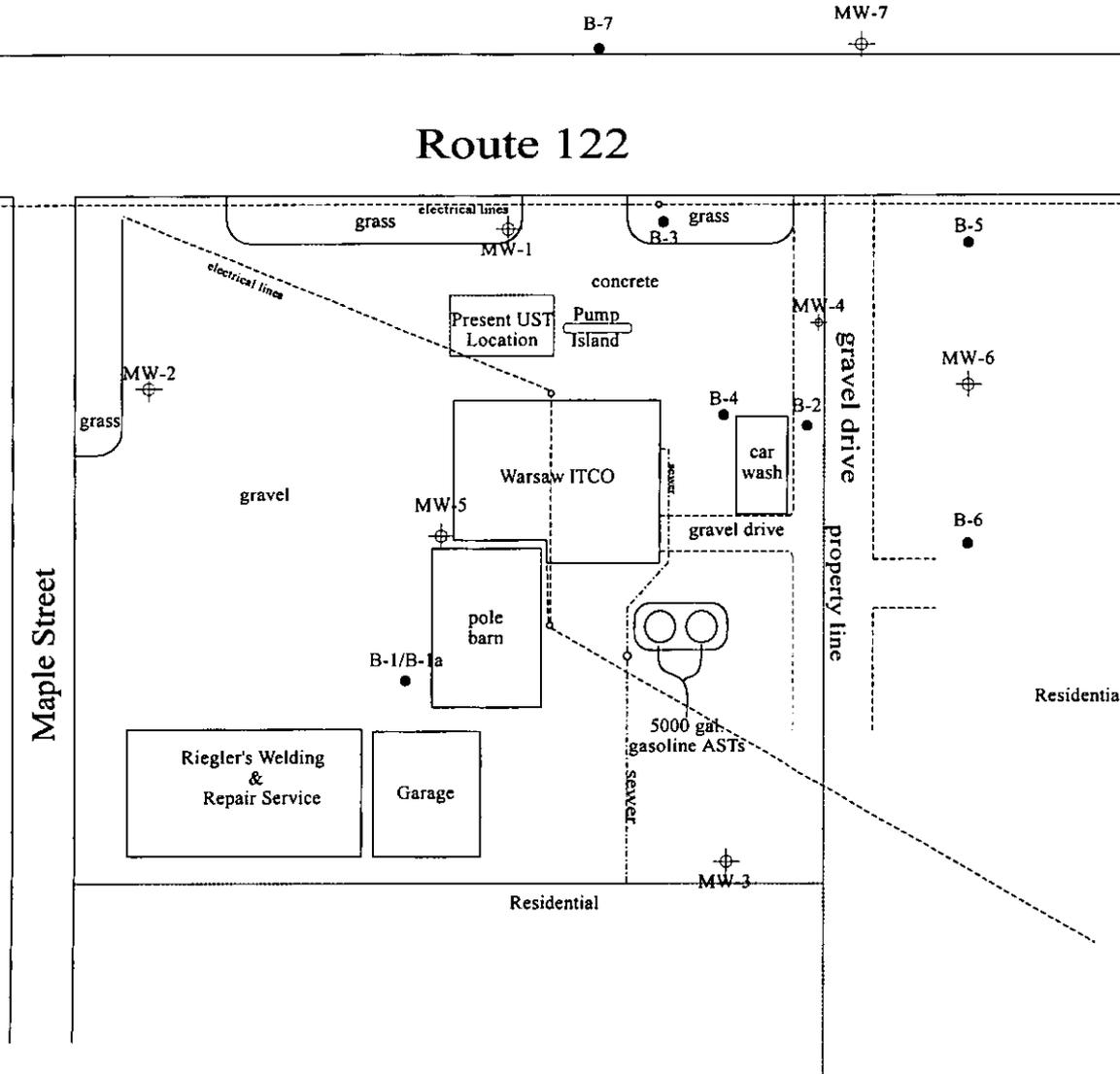
COPYRIGHT © 1984-1987 ETAK INC.

**FIGURE 2**

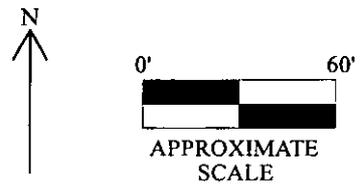
**MONITORING WELL AND SOIL BORING LOCATION MAP**

# Agricultural

## Route 122



MW-3  
 ⊕ = Existing Monitoring Well Location  
 ● = Existing Boring Location



**FIGURE 2**  
 Boring & Monitoring Well Location Map  
 Warsaw ITCO  
 Minier, IL

Date: 12/11/01

Drawn by: GLH

Job No.: 9890

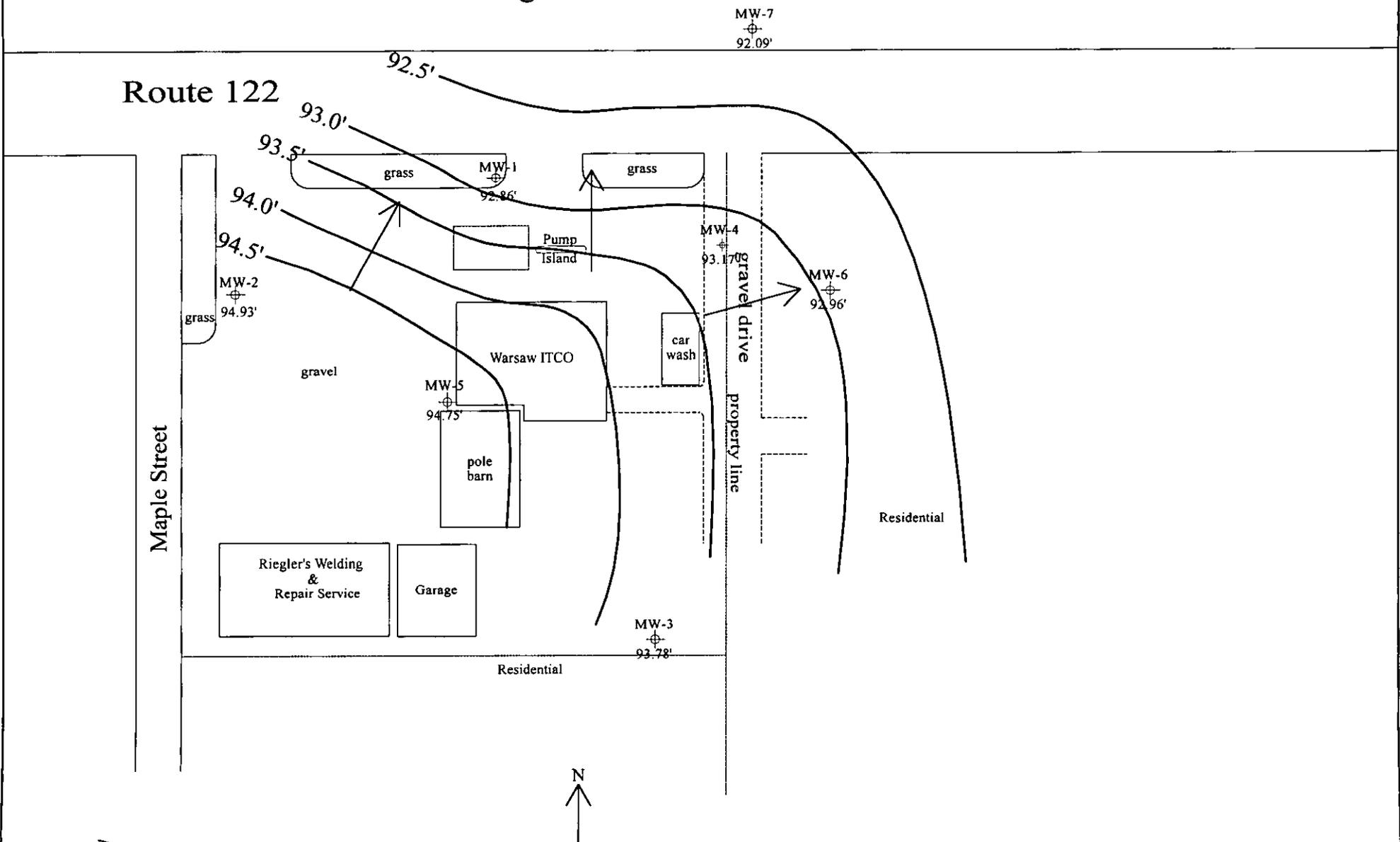
Approved by: AMG

**M.E.C.R.S., Inc.**  
 R0145

**FIGURE 3**

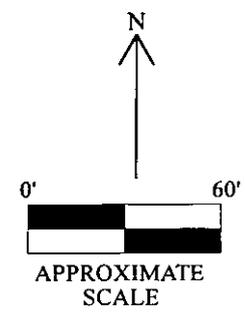
**PIEZOMETRIC SURFACE MAP 8/23/01**

# Agricultural



→ = groundwater flow direction

- MW-3  
⊕ = Existing Monitoring Well Location
- B-2  
● = Existing Boring Location



**FIGURE 3**  
Piezometric Surface  
Map - 8/23/01  
Warsaw - ITCO  
Minier, IL

Date: 8/23/01	Drawn by: TKB
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**  
R0147

**FIGURE 4**

**PIEZOMETRIC SURFACE MAP – 11/14/01**

# Agricultural

Route 122

Maple Street

MW-7  
93.14'

93.25'

grass

MW-1  
93.36'

grass

93.50'

MW-2  
93.27'

Pump  
Island

MW-4  
93.730'

93.75'

MW-6  
93.78'

gravel

Warsaw ITCO

car  
wash

gravel drive

property line

MW-5  
93.90'

pole  
barn

Residential

Riegler's Welding  
&  
Repair Service

Garage

MW-3  
93.80'

Residential



APPROXIMATE  
SCALE

MW-3  
⊕ = Existing Monitoring Well Location

B-2  
● = Existing Boring Location

**FIGURE 4**  
Piezometric Surface  
Map - 11/14/01  
Warsaw - ITCO  
Minier, IL

Date: 11/14/01

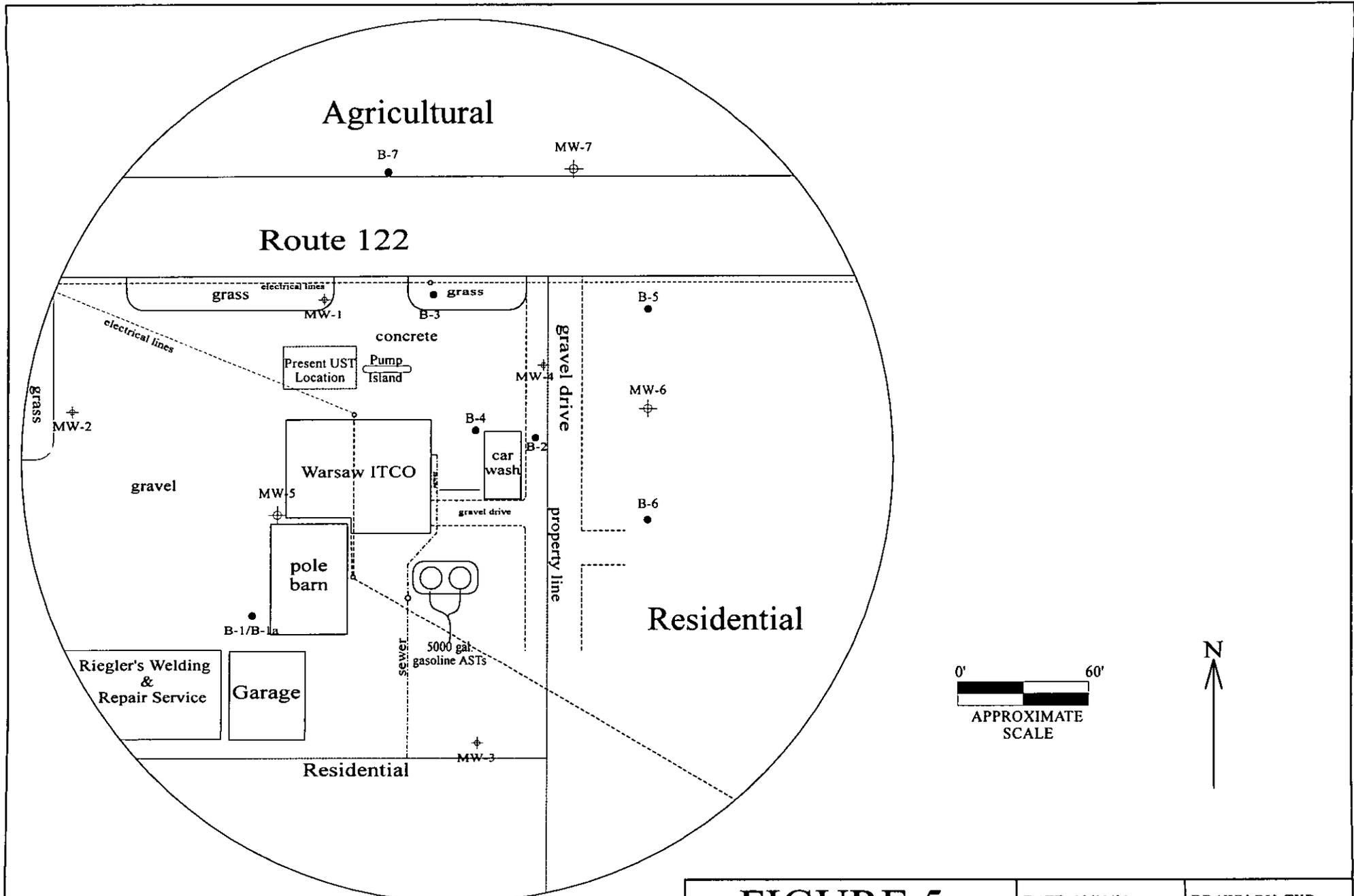
Drawn by: TKB

Job No.: 9890

Approved by: AMG

**M.E.C.R.S., Inc.**  
R0149

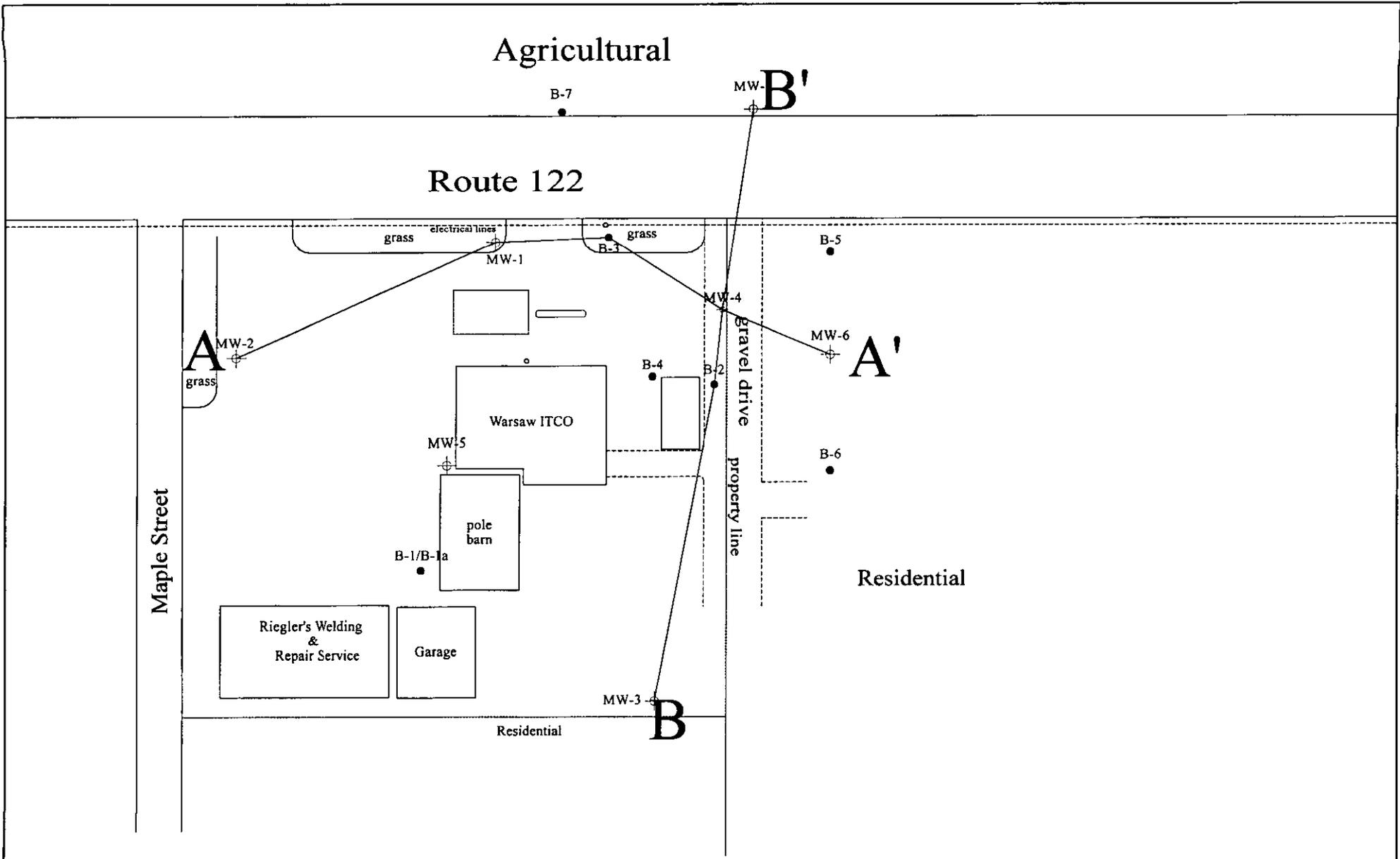
**FIGURE 5**  
**200 FEET RADIUS MAP**



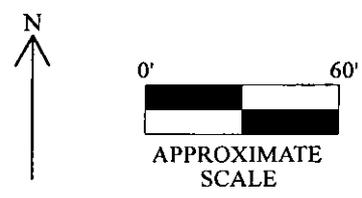
<b>FIGURE 5</b> 200' Radius Map Warsaw ITCO Minier, IL	DATE: 12/11/01	DRAWN BY: TKB
	JOB NO.: 9890	APPROVED BY: AMG
<b>M.E.C.R.S., Inc.</b> R0151		

**FIGURE 6**

**CROSS SECTION LOCATION MAP**



MW-3  
 ⊕ = Existing Monitoring Well Location  
 ● = Existing Boring Location



**FIGURE 6**  
 Cross Section  
 Location Map  
 Warsaw ITCO  
 Minier, Illinois

Date: 12/11/01	Drawn by: GLH
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**  
 R0153

**FIGURE 7**  
**GEOLOGIC CROSS SECTION AND VERTICAL EXTENT OF SOIL  
CONTAMINATION**



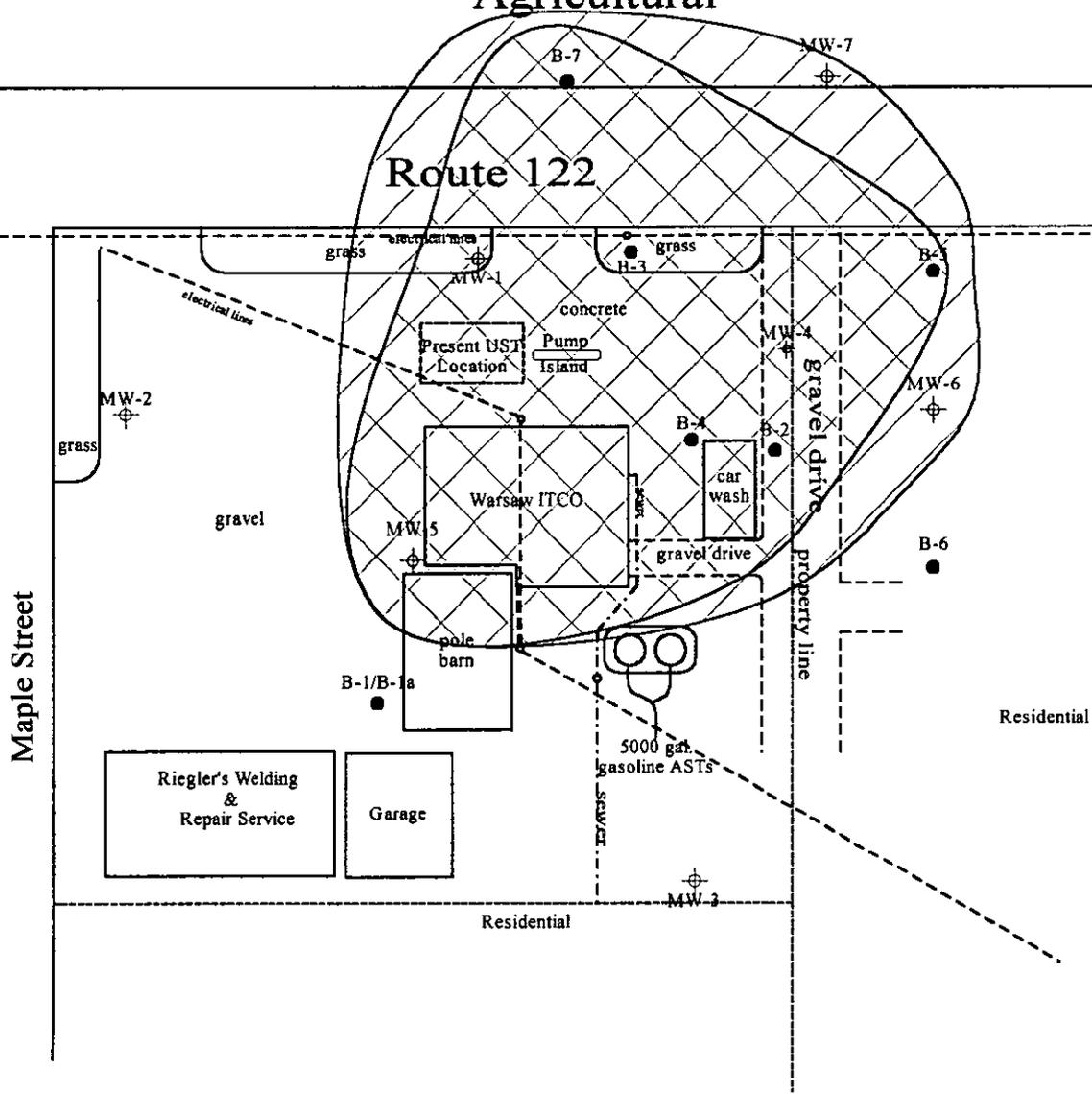
**FIGURE 8**

**HORIZONTAL EXTENT OF SOIL AND GROUNDWATER CONTAMINATION**

# Agricultural

## Route 122

Maple Street



Residential

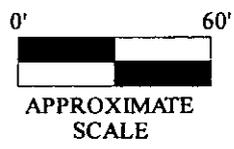
Residential

= Soil Contamination > Tier 1 CUOs

= Groundwater Contamination > Tier 1 CUOs

MW-3 = Existing Monitoring Well Location

B-2 = Existing Boring Location



**FIGURE 8**  
 Horizontal Extent of Soil  
 & Groundwater Contamination  
 WARSAW - ITCO  
 Minier, IL

Date: 9/10/01	Drawn by: TKB
Job No.: 9890	Approved by: AMG

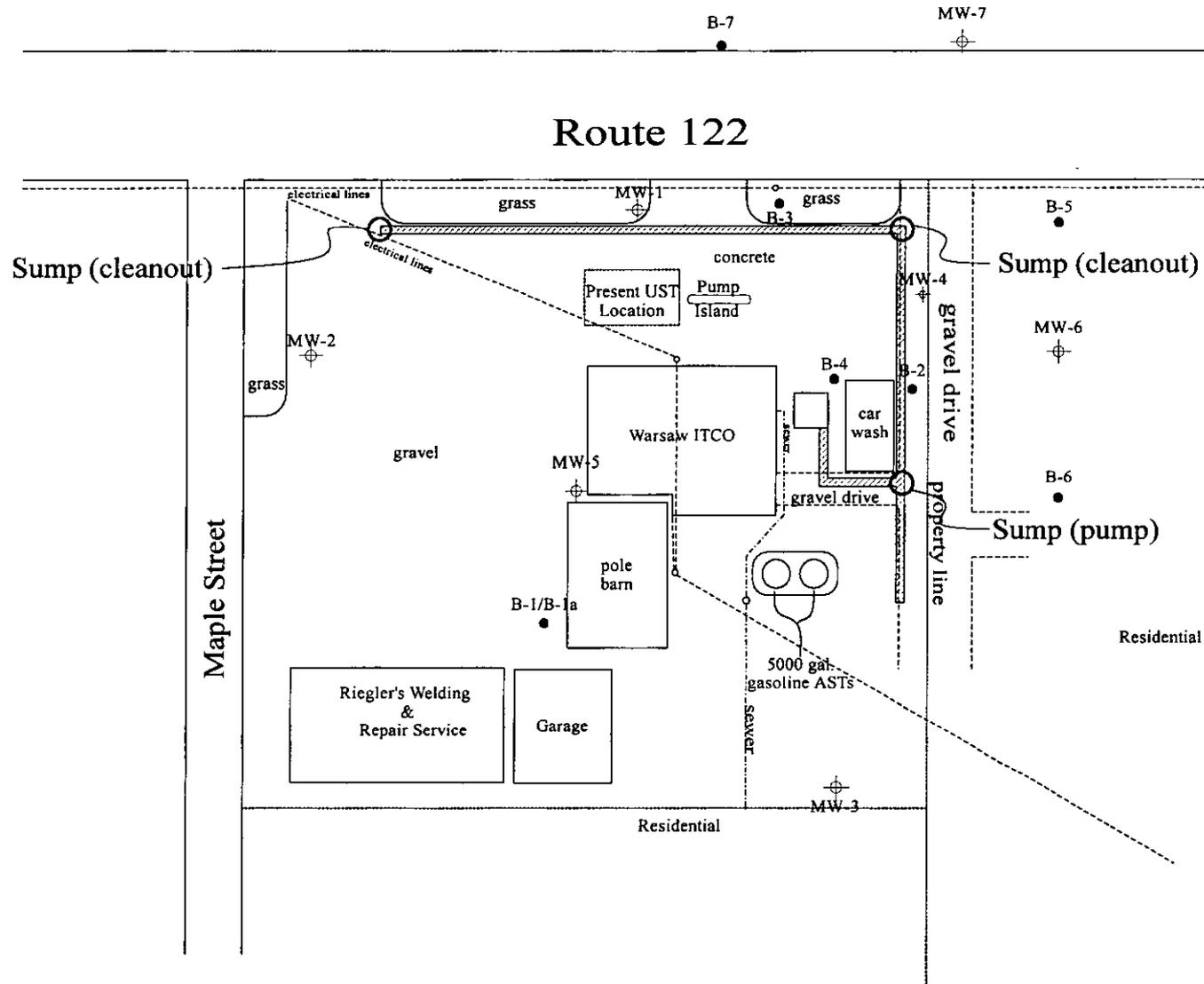
**M.E.C.R.S., Inc.**  
 R0157

**FIGURE 9**

**PROPOSED GROUNDWATER TREATMENT TRENCH & SITE LAYOUT**

# Agricultural

## Route 122



MW-3  
 + = Existing Monitoring Well Location  
 B-2  
 • = Existing Boring Location



**FIGURE 9**  
 Proposed Trench &  
 Site Layout  
 Warsaw ITCO  
 Minier, Illinois

Date: 12/10/01

Drawn by: GLH

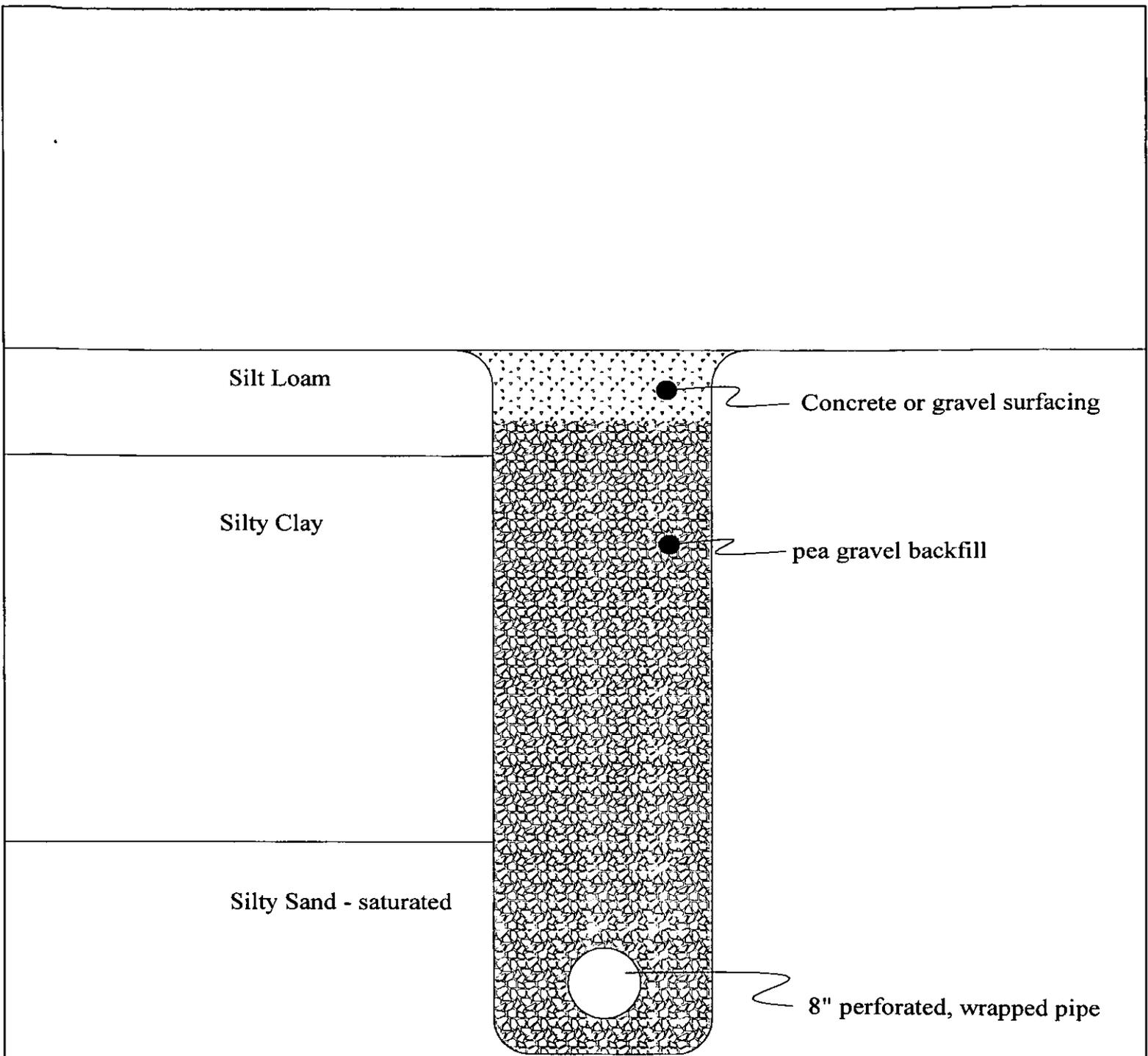
Job No.: 9890

Approved by: AMG

**M.E.C.R.S., Inc.**  
 R0159

**FIGURE 10**

**PROPOSED GROUNDWATER COLLECTION TRENCH CROSS SECTION**



<b>FIGURE 10</b> Proposed GW Collection Trench Cross Section Warsaw ITCO Minier, Illinois	Date: 1/15/02	Drawn by: TKB
	Job No.: 9890	Approved by: AMG
<b>M.E.C.R.S., Inc.</b> R0161		

**APPENDIX A**

**BORING LOGS AND MONITORING WELL DIAGRAMS**

GEOLOGIC DRILL LOG				PROJECT Warsaw/ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER MW-1	
SITE Route 122; Minier, IL			COORDINATES		LOGGED BY TB		CHECKED BY TB		
BEGUN 5/4/00	COMPLETED 5/4/00	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 8"	TOTAL DEPTH 16	
CORE RECOVERY (FT./%) 14 / 100		CORE BOXES 0	SAMPLES 7	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 7	DEPTH/ELEV. TOP OF ROCK		
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES				
SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	HNU (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	SAMPLE	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
MW-1, 7					1.0			GRAVEL drive	MW-1, 6-8' = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0			4.0			SILTY CLAY (CL); Reddish brown with gray mottling, moist, firm, no odor.	
	SS	2.0/2.0			5.0			grades CLAYEY SILT (ML); Gray with reddish brown mottling, moist, firm, no odor.	
	SS	2.0/2.0			7.0			SAND (SW); Saturated, medium grained, with fines and gravel	
	SS	2.0/2.0			10.0			grain size coarsens with depth, grades to gravel.	
	SS	2.0/2.0			15.0				
	SS	2.0/2.0			16.0			Bottom of boring at 16 feet.	

# WELL CONSTRUCTION LOG

PROJECT  
Warsaw/ITCO

PROJECT NUMBER  
9890

WELL NUMBER  
**MW-1**

SITE  
Route 122; Minier, IL

COORDINATES

GROUND SURFACE ELEVATION

CASING STICKUP

Soil Boring Cross-Reference **NW-1**  
Town and City Minier  
County and State Tazewell, IL

Installation Date (s) 5/4/00

Drilling Method Hollow Stem Auger  
Drilling Contractor Whitney & Associates  
Drilling Fluid none

Development Technique (s) / Dates

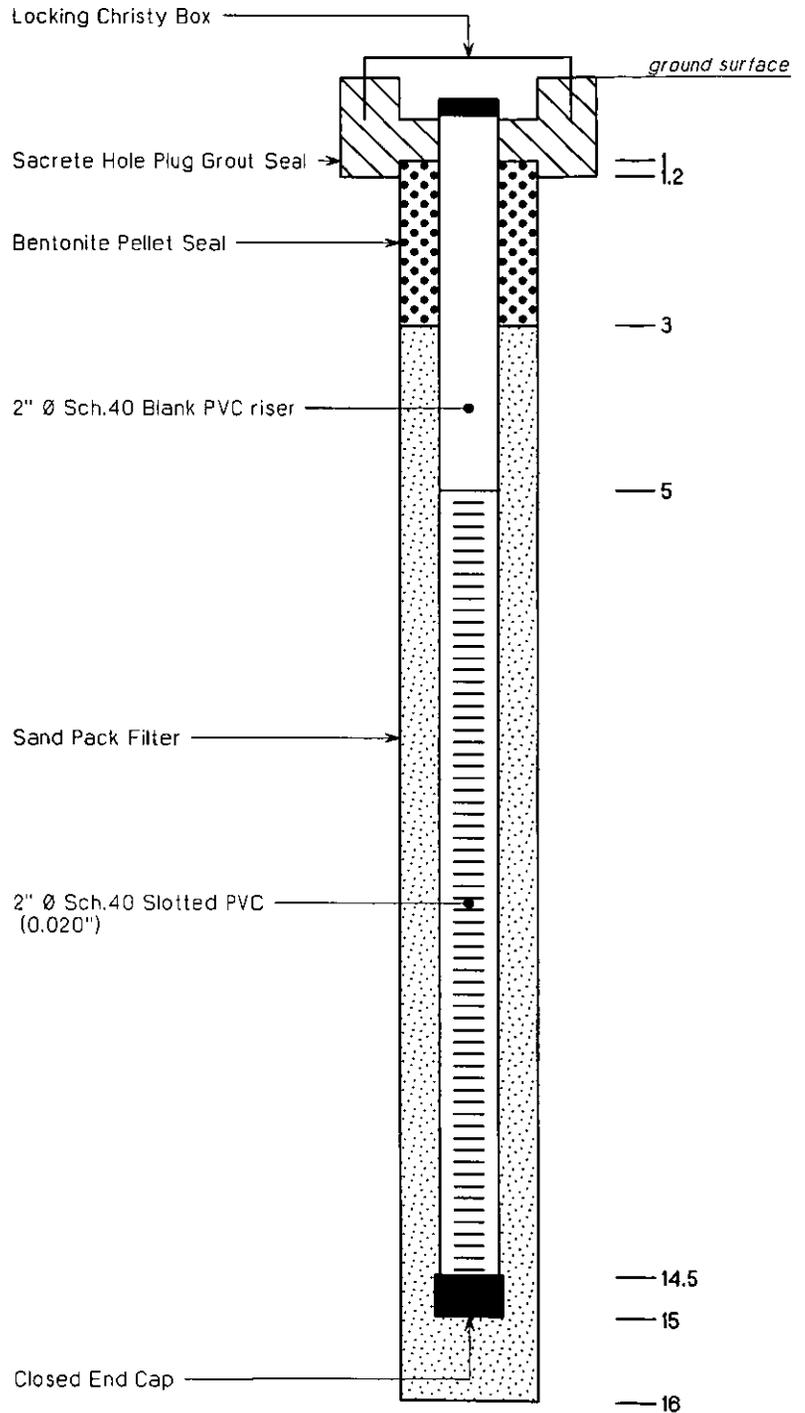
Fluid Loss During Drilling (gals) \_\_\_\_\_  
Water Removed During Development (gals) \_\_\_\_\_

Static Depth to Water Date \_\_\_\_\_  
Static Depth to Water (feet) \_\_\_\_\_

Well Purpose Monitor groundwater quality.

Remarks \_\_\_\_\_

Prepared By T BIRKY  
Date Prepared 5/8/00



GEOLOGIC DRILL LOG				PROJECT Warsaw/ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER MW-2
SITE Route 122; Minier, IL			COORDINATES			LOGGED BY TB		CHECKED BY TB
BEGUN 5/3/00	COMPLETED 5/3/00	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 8"	TOTAL DEPTH 16
CORE RECOVERY (FT./%) 14 / 100		CORE BOXES 0	SAMPLES 7	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 7.5	DEPTH/ELEV. TOP OF ROCK	
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES			
SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	H <sub>2</sub> O (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
MW-2, 9					1.5		SILT loam (OL); Black, moist, firm, with gravel.	MW-2, 8-10' = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0			5		SILTY CLAY (CL); Brown with gray mottling, moist, firm, no odor.	
	SS	2.0/2.0			7.5		grades with more silt	
	SS	2.0/2.0			10		SAND (SW); Brown, saturated, no odor, with significant fines.	
	SS	2.0/2.0			12.5		grades with gravel, few fines.	
	SS	2.0/2.0			15		SANDY SILT (ML); Gray, wet to saturated, trace gravel.	
	SS	2.0/2.0			16.0		Bottom of boring at 16 feet.	
					20			
					25			
					30			
					35			

# WELL CONSTRUCTION LOG

PROJECT  
Warsaw/ITCO

PROJECT NUMBER  
9890

WELL NUMBER  
**MW-2**

SITE  
Route 122; Minier, IL

COORDINATES

GROUND SURFACE ELEVATION

CASING STICKUP

Soil Boring Cross-Reference MN-2  
Town and City Minier  
County and State Tazewell, IL

Installation Date (s) 5/3/00

Drilling Method Hollow Stem Auger  
Drilling Contractor Whitney & Associates  
Drilling Fluid none

Development Technique (s) / Dates

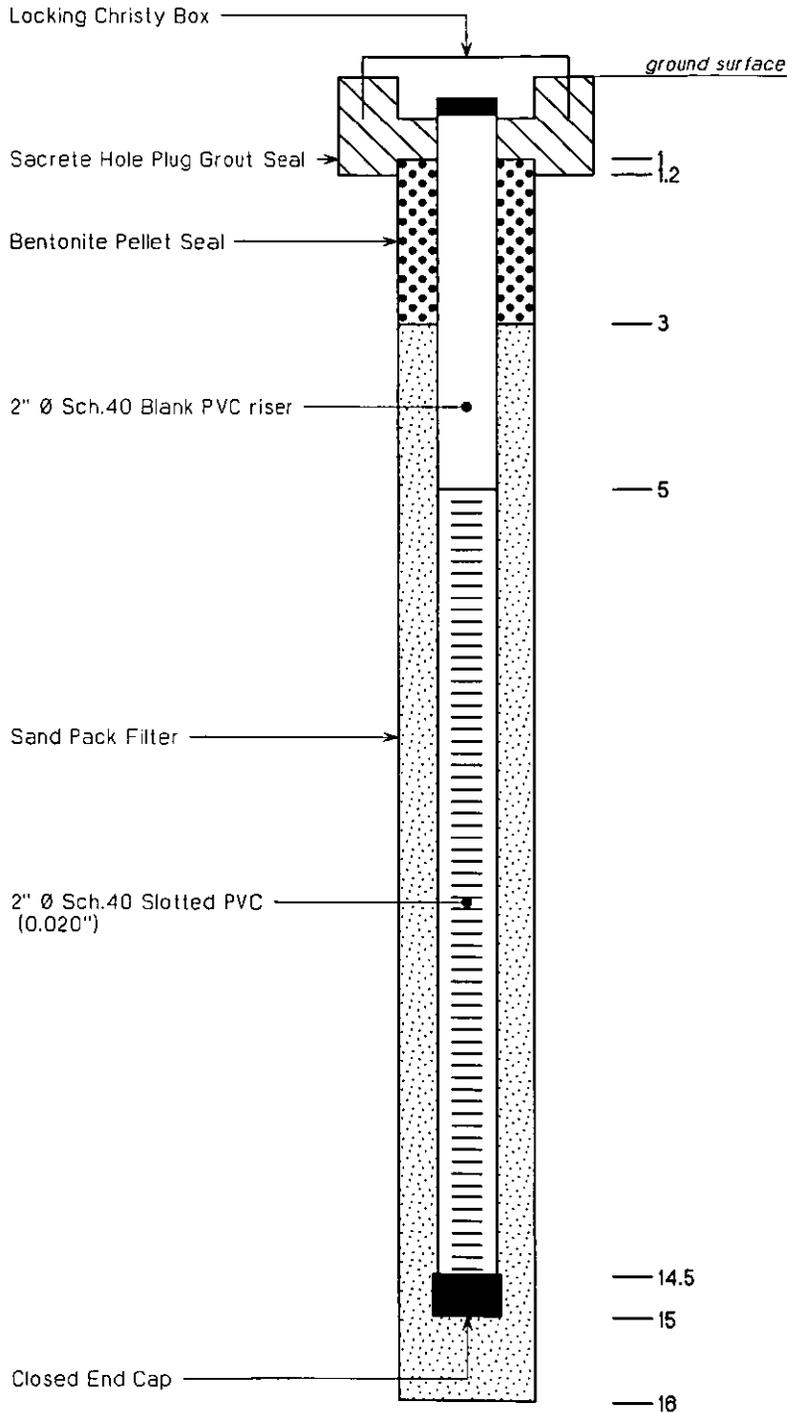
Fluid Loss During Drilling (gals) \_\_\_\_\_  
Water Removed During Development (gals)  
\_\_\_\_\_

Static Depth to Water Date \_\_\_\_\_  
Static Depth to Water (feet) \_\_\_\_\_

Well Purpose Monitor groundwater quality.

Remarks \_\_\_\_\_

Prepared By T BIRKY  
Date Prepared 5/8/00



GEOLOGIC DRILL LOG				PROJECT Warsaw/ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER MW-3
SITE Route 122; Minier, IL			COORDINATES		LOGGED BY TB		CHECKED BY TB	
BEGUN 5/3/00	COMPLETED 5/3/00	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 8"	TOTAL DEPTH 16
CORE RECOVERY (FT./%) 14 / 100		CORE BOXES 0	SAMPLES 7	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 9	DEPTH/ELEV. TOP OF ROCK	
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES			
SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	H2O (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
MW-3, 9					1.0		SILT loam (OL); Black, moist, firm.	MW-3, 8-10' = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0					SILTY CLAY (CL); Gray with brown mottling, moist, firm, no odor.	
	SS	2.0/2.0			5			
	SS	2.0/2.0			9.0			
	SS	2.0/2.0			10		SAND (SW); Saturated, no odor, medium grain size.	
	SS	2.0/2.0			15			
					16.0		Bottom of boring at 16 feet.	
					20			
					25			
					30			
					35			

# WELL CONSTRUCTION LOG

PROJECT  
Warsaw/ITCO

PROJECT NUMBER  
9890

WELL NUMBER  
**MW-3**

SITE  
Route 122; Minier, IL

COORDINATES

GROUND SURFACE ELEVATION

CASING STICKUP

Soil Boring Cross-Reference **MN-3**  
Town and City Minier  
County and State Tazewell, IL

Installation Date (s) 5/3/00

Drilling Method Hollow Stem Auger  
Drilling Contractor Whitney & Associates  
Drilling Fluid none

Development Technique (s) / Dates

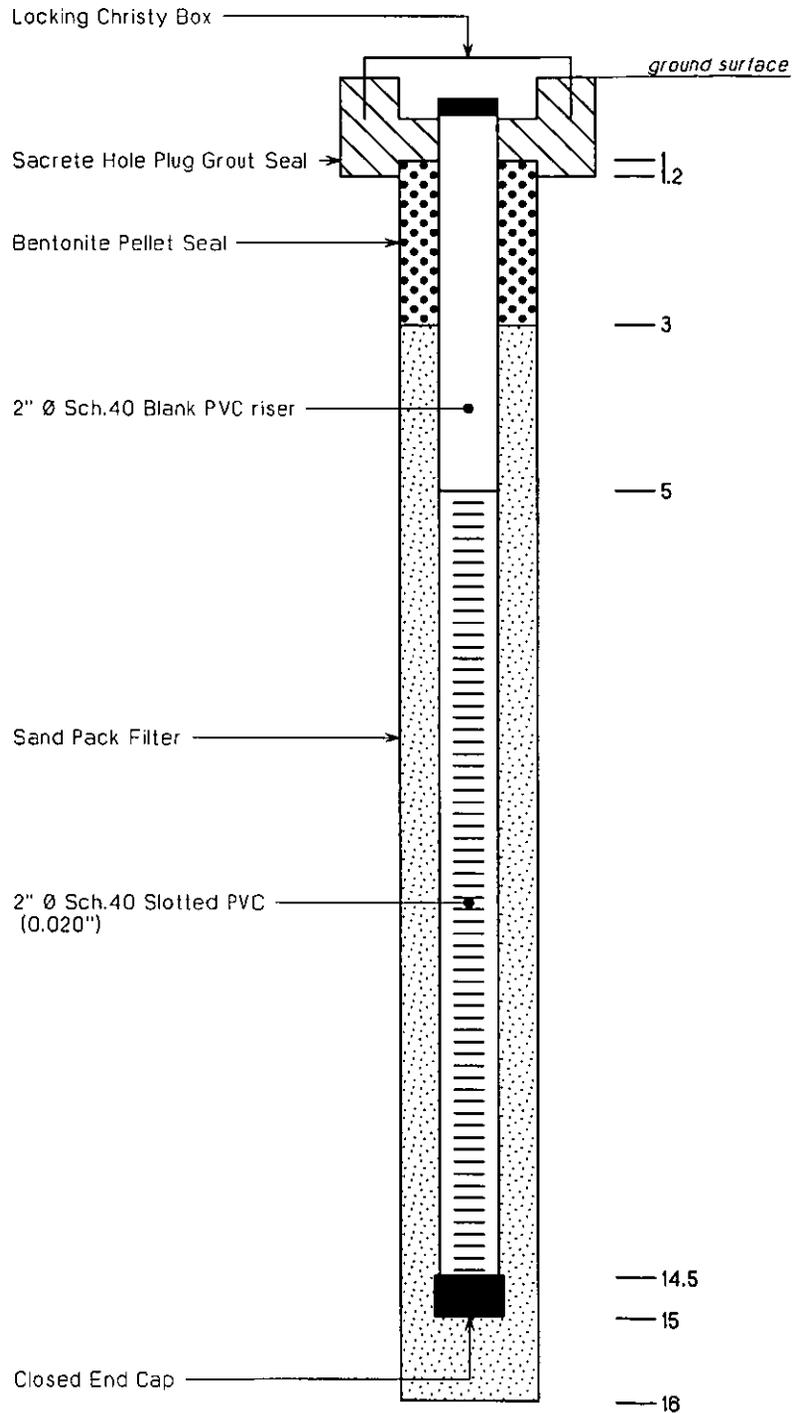
Fluid Loss During Drilling (gals) \_\_\_\_\_  
Water Removed During Development (gals)  
\_\_\_\_\_

Static Depth to Water Date \_\_\_\_\_  
Static Depth to Water (feet) \_\_\_\_\_

Well Purpose Monitor groundwater quality.

Remarks \_\_\_\_\_

Prepared By T BIRKY  
Date Prepared 5/8/00



GEOLOGIC DRILL LOG				PROJECT Warsaw/ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER MW-4
SITE Route 122; Minier, IL			COORDINATES			LOGGED BY TB		CHECKED BY TB
BEGUN 5/4/00	COMPLETED 5/4/00	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 8"	TOTAL DEPTH 16
CORE RECOVERY (FT./%) 14 / 100		CORE BOXES 0	SAMPLES 7	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 7		DEPTH/ELEV. TOP OF ROCK
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES			
SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	H <sub>2</sub> O (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
					1.5		GRAVEL drive	
MW-4, 5	SS	2.0/2.0			4.0		SILTY CLAY (CL); Green with brown mottling, moist, firm, slight to moderate petroleum odor.	MW-4, 'depth' = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0			5		grades CLAYEY SILT (ML); Gray with brown mottling, moist, firm, slight to moderate petroleum odor.	
MW-4, 7	SS	2.0/2.0			8.0		SAND (SW); Saturated, medium grained, few fines, petroleum odor.	
	SS	2.0/2.0			10		grain size coarsens with depth, grades to gravel.	
	SS	2.0/2.0			15			
	SS	2.0/2.0			16.0		Bottom of boring at 16 feet.	
					20			
					25			
					30			
					35			

# WELL CONSTRUCTION LOG

PROJECT  
Warsaw/ITCO

PROJECT NUMBER  
9890

WELL NUMBER  
**MW-4**  
CASING STICKUP

SITE  
Route 122; Minier, IL

COORDINATES

GROUND SURFACE ELEVATION

Soil Boring Cross-Reference MN-4  
Town and City Minier  
County and State Tazewell, IL

Installation Date (s) 5/4/00

Drilling Method Hollow Stem Auger  
Drilling Contractor Whitney & Associates  
Drilling Fluid none

Development Technique (s) / Dates

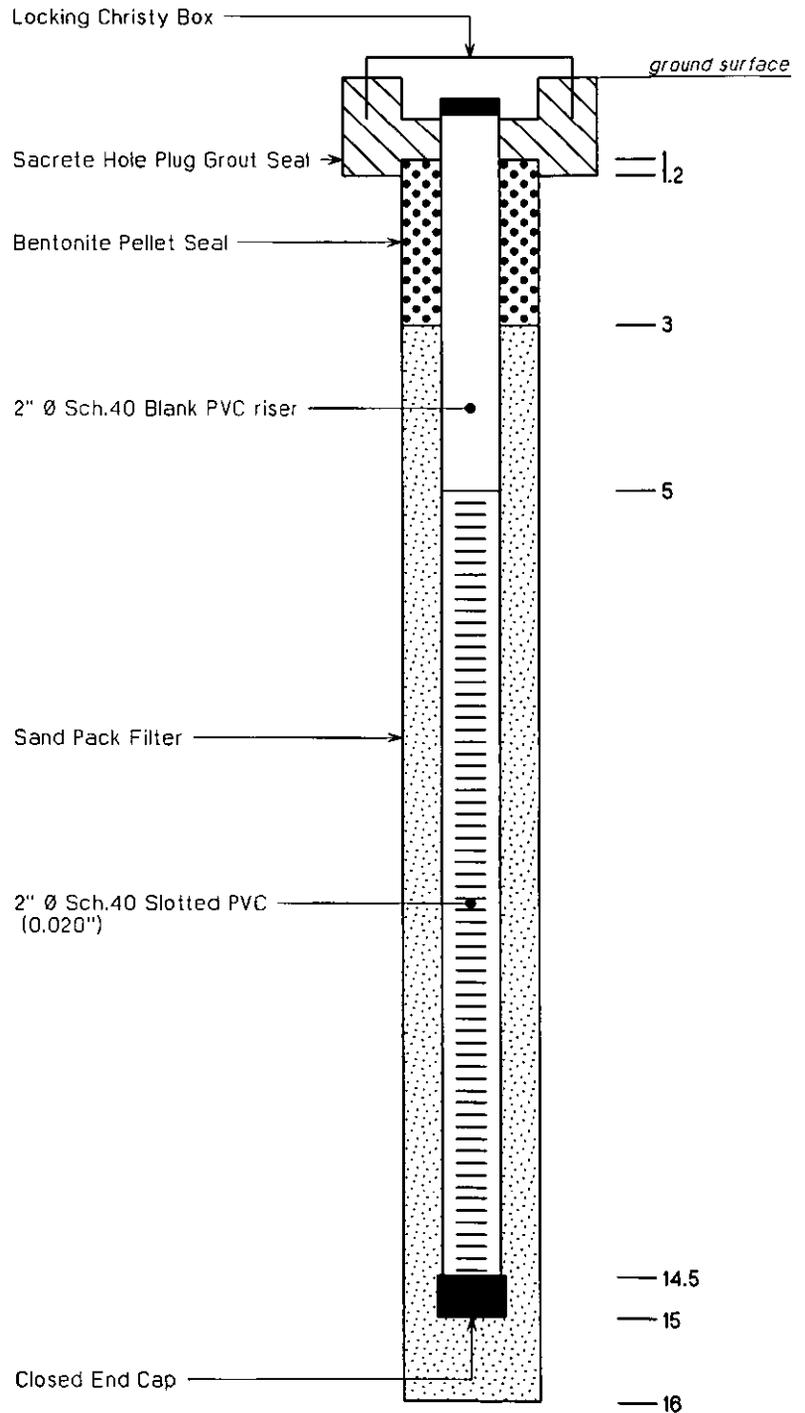
Fluid Loss During Drilling (gals) \_\_\_\_\_  
Water Removed During Development (gals)  
\_\_\_\_\_

Static Depth to Water Date \_\_\_\_\_  
Static Depth to Water (feet) \_\_\_\_\_

Well Purpose Monitor groundwater quality.

Remarks \_\_\_\_\_

Prepared By T BIRKY  
Date Prepared 5/8/00



GEOLOGIC DRILL LOG				PROJECT Warsaw - ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER MW-5	
SITE Route 122; Minier, IL			COORDINATES		LOGGED BY TB		CHECKED BY TB		
BEGUN 8/23/01	COMPLETED 8/23/01	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 8"	TOTAL DEPTH 14	
CORE RECOVERY (FT./%) 12 / 100		CORE BOXES 0	SAMPLES 6	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 7 4.82	DEPTH/ELEV. TOP OF ROCK		
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES				
SAMPLE NUMBER	SAMPLE TYPE	RECOV./LENGTH (feet)	H <sub>2</sub> O (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	SAMPLE	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
MW-5,10					1.5			SILT Loam (OL); Black, moist, firm, organic odor.	MW-5,10 = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0			5		SILTY CLAY (CL); Brown with gray mottling, moist, firm, no odor.		
	SS	2.0/2.0			7.0		SILTY SAND (SM); Saturated, Dark brown and gray, fine to medium grained sand.		
	SS	2.0/2.0			10				
	SS	2.0/2.0			11.5		SILTY CLAY Till (CL); Gray, moist, hard, trace gravel, no odor, unweathered till.		
	SS	2.0/2.0			14.0		Bottom of boring at 14 feet.		
					15				
					20				
					25				
					30				
					35				

# WELL CONSTRUCTION LOG

PROJECT  
Warsaw - ITCO

PROJECT NUMBER  
9890

WELL NUMBER  
**MW-5**

SITE  
Route 122; Minier, IL

COORDINATES

GROUND SURFACE ELEVATION

CASING STICKUP

Soil Boring Cross-Reference **MW-5**  
Town and City Minier  
County and State Tazewell, Illinois

Installation Date (s) 8/23/01

Drilling Method Hollow Stem Auger  
Drilling Contractor Whitney & Associates  
Drilling Fluid NONE

Development Technique (s) / Dates  
Developed using surge block and purge pump.  
Removed minimum 5 gallons during development.

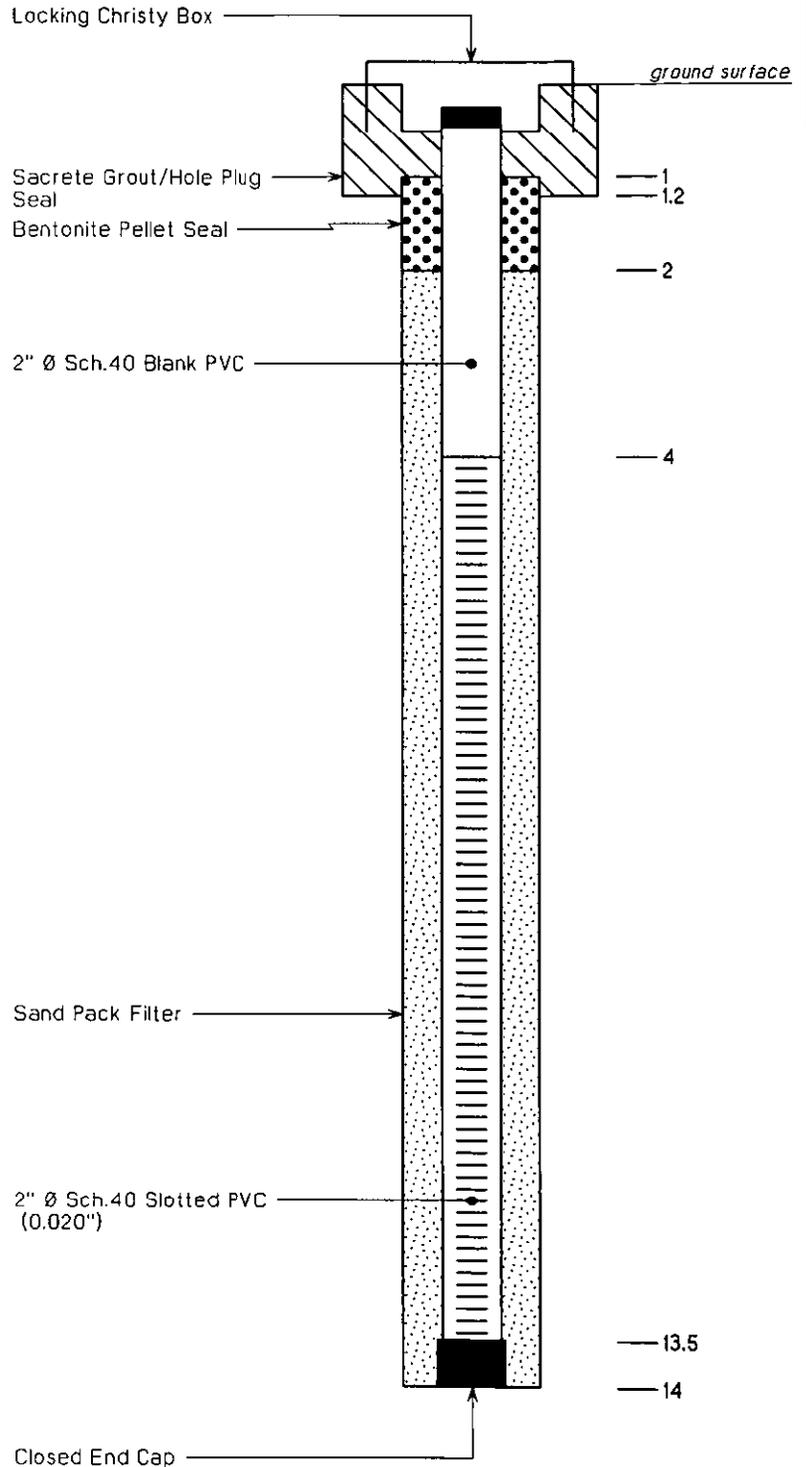
Fluid Loss During Drilling (gals) \_\_\_\_\_  
Water Removed During Development (gals)  
10 - 8/23/01

Static Depth to Water Date 8/23/01  
Static Depth to Water (feet) 4.82

Well Purpose Monitor groundwater quality.

Remarks \_\_\_\_\_

Prepared By TB  
Date Prepared 8/27/01



GEOLOGIC DRILL LOG				PROJECT Warsaw - ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER MW-6
SITE Route 122; Minier, IL			COORDINATES		LOGGED BY TB		CHECKED BY TB	
BEGUN 8/23/01	COMPLETED 8/23/01	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 8"	TOTAL DEPTH 14
CORE RECOVERY (FT./%) 12 / 100		CORE BOXES 0	SAMPLES 6	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 7 6.55		DEPTH/ELEV. TOP OF ROCK
SAMPLE TYPE Split Spoon			CASING DIA./LENGTH		NOTES			
SAMPLE NUMBER	SAMPLE TYPE	RECOV./LENGTH (feet)	H <sub>2</sub> O (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
MW-6,8					1.0		SILT Loam (OL); Black, moist, firm, organic odor.	MW-6,8' = Soil sample collected from split spoon for chemical analysis of BTEX.
		SS	2.0/2.0		5		SILTY CLAY (CL); Brown with gray mottling, moist, firm, no odor.	
		SS	2.0/2.0		7.0		SILTY SAND (SM); Saturated, reddish brown and gray, fine to medium grained sand.	
		SS	2.0/2.0		10			
		SS	2.0/2.0		11.0		SILTY CLAY Till (CL); Gray, moist, hard, trace gravel, no odor, unweathered till.	
		SS	2.0/2.0		14.0		Bottom of boring at 14 feet.	
					15			
					20			
					25			
					30			
					35			

# WELL CONSTRUCTION LOG

PROJECT  
Warsaw - ITCO

PROJECT NUMBER  
9890

WELL NUMBER  
**MW-6**  
CASING STICKUP

SITE  
Route 122; Minier, IL

COORDINATES

GROUND SURFACE ELEVATION

Soil Boring Cross-Reference **MW-6**  
Town and City Minier  
County and State Tazewell, Illinois

Installation Date (s) 8/23/01

Drilling Method Hollow Stem Auger  
Drilling Contractor Whitney & Associates  
Drilling Fluid NONE

Development Technique (s) / Dates  
Developed using surge block and purge pump.  
Removed minimum 5 gallons during development.

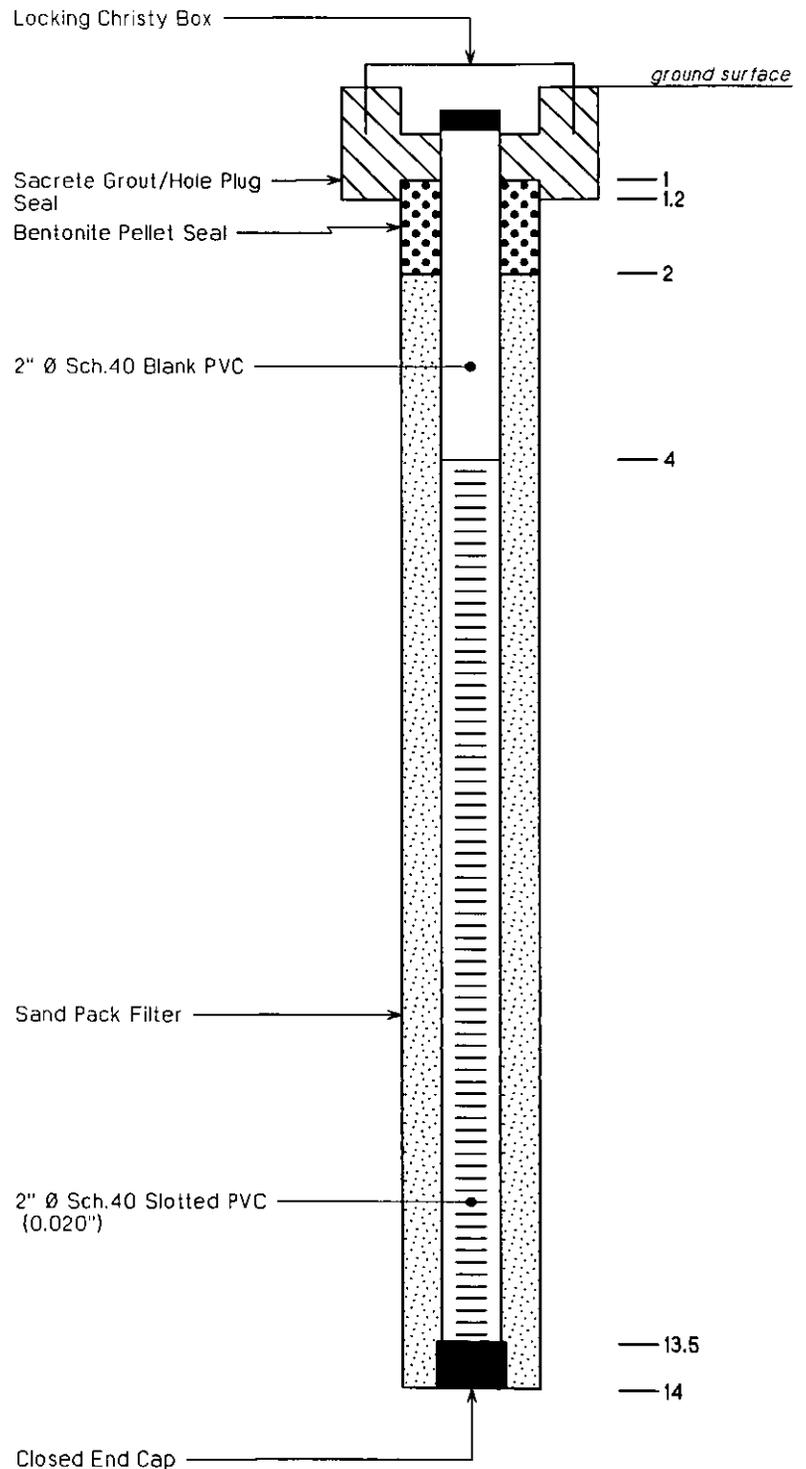
Fluid Loss During Drilling (gals) \_\_\_\_\_  
Water Removed During Development (gals)  
6 - 8/23/01

Static Depth to Water Date 8/23/01  
Static Depth to Water (feet) 6.55

Well Purpose Monitor groundwater quality.

Remarks \_\_\_\_\_

Prepared By TB  
Date Prepared 8/27/01



GEOLOGIC DRILL LOG				PROJECT Warsaw - ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER MW-7	
SITE Route 122; Minier, IL			COORDINATES		LOGGED BY TB		CHECKED BY TB		
BEGUN 8/23/01	COMPLETED 8/23/01	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 8"	TOTAL DEPTH 14	
CORE RECOVERY (FT./%) 12 / 100		CORE BOXES 0	SAMPLES 6	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 7 7.28	DEPTH/ELEV. TOP OF ROCK		
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES				
SAMPLE NUMBER	SAMPLE TYPE	RECOV./LENGTH (feet)	H2O (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	SAMPLE	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
MW-7,6	SS	2.0/2.0			1.0			SILT Loam (OL); Black, moist, firm, organic odor.	MW-7,6' = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0			5			SILTY CLAY (CL); Brown with gray mottling, moist, firm, no odor.	
	SS	2.0/2.0			7.0			SILTY SAND (SM); Saturated, reddish brown and gray, fine to medium grained sand.	
MW-7,10	SS	2.0/2.0			10				MW-7, 10' = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0			14.0				
	SS	2.0/2.0			15			Bottom of boring at 14 feet.	
					20				
					25				
					30				
					35				

# WELL CONSTRUCTION LOG

PROJECT  
Warsaw - ITCO

PROJECT NUMBER  
9890

WELL NUMBER  
**MW-7**  
CASING STICKUP

SITE  
Route 122; Minier, IL

COORDINATES

GROUND SURFACE ELEVATION

Soil Boring Cross-Reference **NW-7**  
Town and City Minier  
County and State Tazewell, Illinois

Installation Date (s) 8/23/01

Drilling Method Hollow Stem Auger  
Drilling Contractor Whitney & Associates  
Drilling Fluid NONE

Development Technique (s) / Dates  
Developed using surge block and purge pump.  
Removed minimum 5 gallons during development.

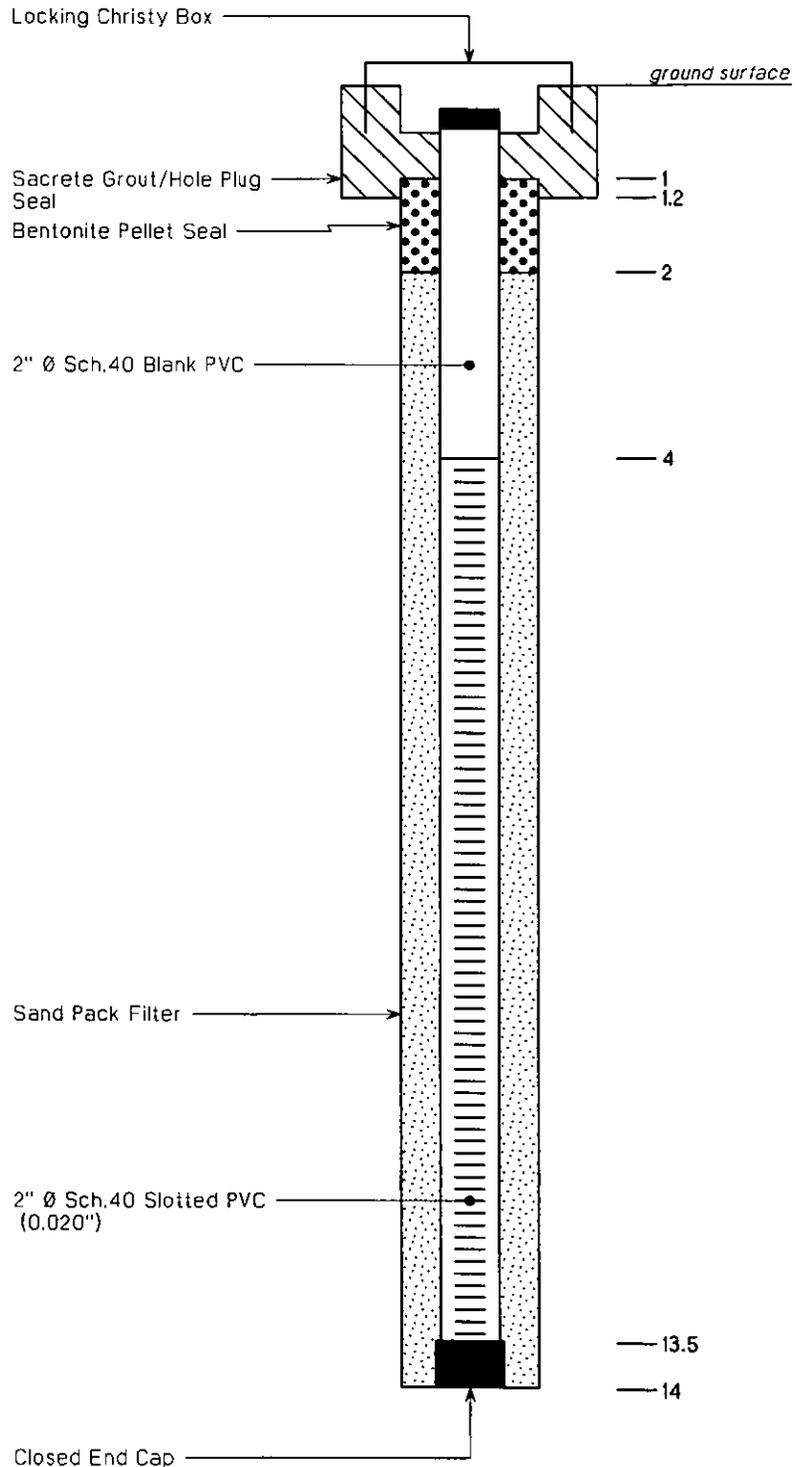
Fluid Loss During Drilling (gals) \_\_\_\_\_  
Water Removed During Development (gals)  
5 - 8/23/01

Static Depth to Water Date 8/23/01  
Static Depth to Water (feet) 7.25

Well Purpose Monitor groundwater quality.

Remarks \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Prepared By TB  
Date Prepared 8/27/01



GEOLOGIC DRILL LOG				PROJECT Warsaw/ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER B-1	
SITE Route 122; Minier, IL			COORDINATES			LOGGED BY TB		CHECKED BY TB	
BEGUN 5/3/00	COMPLETED 5/3/00	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 6"	TOTAL DEPTH 26	
CORE RECOVERY (FT./%) 24 / 100		CORE BOXES 0	SAMPLES 12	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER ↓ 9		DEPTH/ELEV. TOP OF ROCK	
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES				
SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	H <sub>2</sub> O (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	SAMPLE	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
B-1, 9					1.5			SILTY CLAY loam (OL); Black, moist, firm, no odor.	B-1, 8-10' = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0			5		SILTY CLAY (CL-ML); Brown w/ gray mottling, moist, firm, no odor.		
	SS	2.0/2.0			7.0			SILTY SAND (SM); Reddish brown, wet, soft, no odor. fines.	
	SS	2.0/2.0			10.0		↓	saturated, coarsening downward	
	SS	2.0/2.0			10.0			grades to SANDY GRAVEL (GP); Saturated, coarse grained, no odor.	
	SS	2.0/2.0			13.0			CLAYEY SILT (ML); Gray, moist, firm, no odor, trace fine sand.	
	SS	2.0/2.0			15				
	SS	2.0/2.0			16.0			SILTY CLAY till (CL-ML); Gray, slightly moist, hard, trace gravel, unweathered till.	
	SS	2.0/2.0			20				
	SS	2.0/2.0			25				
	SS	2.0/2.0			26.0			Bottom of boring at 26 feet.	
							30		
					35				

GEOLOGIC DRILL LOG				PROJECT Warsaw/ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER B-1a
SITE Route 122; Minier, IL			COORDINATES		LOGGED BY TB		CHECKED BY TB	
BEGUN 5/3/00	COMPLETED 5/3/00	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 6"	TOTAL DEPTH 16
CORE RECOVERY (FT./%) 4 / 100		CORE BOXES 0	SAMPLES 2	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 9	DEPTH/ELEV. TOP OF ROCK	
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES			
SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	HNu (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
P1,9-11	ST	2.0/2.0			1.5		SILTY CLAY loam (OL); Black, moist, firm, no odor.	P1,'depth' = Shelby tubes collected at depth for physical soil testing and classification.
					5		SILTY CLAY (CL-ML); Brown w/ gray mottling, moist, firm, no odor.	
7.0		SILTY SAND (SM); Reddish brown, wet, soft, no odor. fines.						
10		saturated, coarsening downward						
10.0		grades to SANDY GRAVEL (GP); Saturated, coarse grained, no odor.						
13.0		CLAYEY SILT (ML); Gray, moist, firm, no odor, trace fine sand.						
P2,14-16	ST	2.0/2.0			15			
					16.0		Bottom of boring at 16 feet.	
					20			
					25			
					30			
					35			

# GEOLOGIC DRILL LOG

PROJECT: Warsaw/ITCO  
 PROJECT NUMBER: 9890  
 SHEET NO.: 1 of 1  
 HOLE NUMBER: B-2

SITE: Route 122; Miner, IL  
 COORDINATES: \_\_\_\_\_  
 LOGGED BY: TB  
 CHECKED BY: TB

BEGUN: 5/3/00  
 COMPLETED: 5/3/00  
 DRILLER: Whitney & Associates  
 DRILL EQUIPMENT: Hollow Stem Auger  
 BORING DIA.: 6"  
 TOTAL DEPTH: 10

CORE RECOVERY (FT./%): 8 / 100  
 CORE BOXES: 0  
 SAMPLES: 4  
 CASING STICKUP: \_\_\_\_\_  
 GROUND ELEV.: \_\_\_\_\_  
 DEPTH/ELEV. GROUND WATER: 8.5  
 DEPTH/ELEV. TOP OF ROCK: \_\_\_\_\_

SAMPLE TYPE: Split Spoon  
 CASING DIA/LENGTH: \_\_\_\_\_  
 NOTES: \_\_\_\_\_

SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	H <sub>2</sub> Nu (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
					1.5		GRAVEL driveway	
B-2, 5	SS	2.0/2.0			5		CLAYEY SILT (ML): Gray-green, moist, soft, petroleum odor.	B-2, 'depth' = Soil sample collected from split spoon for chemical analysis of BTEX.
B-2, 7	SS	2.0/2.0			8.5		SAND (SW); Saturated, strong petroleum odor, medium grained, few fines.	
B-2, 9	SS	2.0/2.0			10.0		Bottom of boring at 10 feet.	
					35			

GEOLOGIC DRILL LOG				PROJECT Warsaw/ITCO		PROJECT NUMBER 9890		SHEET NO. 1 of 1		HOLE NUMBER B-3	
SITE Route 122; Minier, IL			COORDINATES			LOGGED BY TB			CHECKED BY TB		
BEGUN 5/3/00		COMPLETED 5/3/00		DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger				BORING DIA. 6"	TOTAL DEPTH 10
CORE RECOVERY (FT./%) 8 / 100		CORE BOXES 0	SAMPLES 4	CASING STICKUP		GROUND ELEV.	DEPTH/ELEV. GROUND WATER 9		DEPTH/ELEV. TOP OF ROCK		
SAMPLE TYPE Split Spoon				CASING DIA/LENGTH		NOTES					
SAMPLE NUMBER	SAMPLE TYPE	LENGTH/RECOV. (feet)	H <sub>2</sub> O (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	SAMPLE	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor			DRILLING NOTES water levels, water return, character of drilling, etc.
					1.0			SILT loam (OL); Black, moist, firm.			B-3, 'depth' = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0						SILTY CLAY (CL); Gray with brown mottling, moist, firm, no petroleum odor.			
	SS	2.0/2.0			5			grades reddish brown with gray mottling, moist to wet.			
B-3, 7	SS	2.0/2.0						strong petroleum odor			
B-3, 9	SS	2.0/2.0			9.0						
					10.0			SAND (SW); Saturated, strong petroleum odor, medium grained, few fines.			
								<i>Bottom of boring at 10 feet.</i>			
					15						
					20						
					25						
					30						
					35						

GEOLOGIC DRILL LOG				PROJECT Warsaw - ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER B-4	
SITE Route 122; Minier, IL			COORDINATES			LOGGED BY TB		CHECKED BY TB	
BEGUN 8/23/01	COMPLETED 8/23/01	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 6"	TOTAL DEPTH 10	
CORE RECOVERY (FT./%) 8 / 100		CORE BOXES 0	SAMPLES 4	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 7		DEPTH/ELEV. TOP OF ROCK	
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES boring not completed as a monitoring well				
SAMPLE NUMBER	SAMPLE TYPE	RECOV./LENGTH (feet)	H <sub>2</sub> O (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	SAMPLE	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
	SS	2.0/2.0		.5				GRAVEL Drive	B-4, 0.5-1.5' = Soil sample collected from split spoon for chemical analysis of FOC and BTEX, and physical determination of Soil Bulk Density. B-4, 4-6' = Soil sample collected from split spoon for chemical analysis of FOC and BTEX, and physical determination of Soil Bulk Density. B-4, 8-10' = Soil sample collected in a shelly tube for ex-situ hydraulic conductivity testing performed on silty sand unit.
	SS	2.0/2.0		5				SILTY CLAY (CL); Brown with gray mottling, moist, firm.	
	ST	2.0/2.0		7.0				SILTY SAND (SM); Saturated, Dark brown and gray, fine to medium grained sand.	
				10.0	10			Bottom of boring at 10 feet.	
					15				
					20				
					25				
					30				
					35				

GEOLOGIC DRILL LOG				PROJECT Warsaw - ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER B-5	
SITE Route 122; Minier, IL			COORDINATES			LOGGED BY TB		CHECKED BY TB	
BEGUN 8/23/01	COMPLETED 8/23/01	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 6"	TOTAL DEPTH 12	
CORE RECOVERY (FT./%) 10 / 100		CORE BOXES 0	SAMPLES 5	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 7		DEPTH/ELEV. TOP OF ROCK	
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES boring not completed as a monitoring well				
SAMPLE NUMBER	SAMPLE TYPE	RECOV./LENGTH (feet)	H2O (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	SAMPLE	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
B-5, 8'	SS	2.0/2.0			1.0			SILT Loam (OL); Black, moist, soft, organic.	B-5, 8' = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0			5		SILTY CLAY (CL); Brown with gray mottling, moist, firm, no odor.		
	SS	2.0/2.0			7.0		SILTY SAND (SM); Saturated, Dark brown and gray, fine to medium grained sand.		
	SS	2.0/2.0			10				
	SS	2.0/2.0			12.0				
					12.0			Bottom of boring at 12 feet.	
					15				
					20				
					25				
					30				
					35				

GEOLOGIC DRILL LOG				PROJECT Warsaw - ITCO		PROJECT NUMBER 9890	SHEET NO. 1 of 1	HOLE NUMBER B-6
SITE Route 122; Minier, IL			COORDINATES		LOGGED BY TB		CHECKED BY TB	
BEGUN 8/23/01	COMPLETED 8/23/01	DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger			BORING DIA. 6"	TOTAL DEPTH 12
CORE RECOVERY (FT./%) 10 / 100		CORE BOXES 0	SAMPLES 5	CASING STICKUP	GROUND ELEV.	DEPTH/ELEV. GROUND WATER 7	DEPTH/ELEV. TOP OF ROCK	
SAMPLE TYPE Split Spoon			CASING DIA/LENGTH		NOTES boring not completed as a monitoring well			
SAMPLE NUMBER	SAMPLE TYPE	RECOV./LENGTH (feet)	HNu (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.
					1.0		SILT Loam (OL); Black, moist, firm, organic.	
B-6,6	SS	2.0/2.0			5		SILTY CLAY (CL); Brown with gray mottling, moist, firm, no odor.	B-6, 6' = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0			7.0		SILTY SAND (SM); Saturated, Dark brown and gray, fine to medium grained sand.	
B-6,10	SS	2.0/2.0			10			B-6, 10' = Soil sample collected from split spoon for chemical analysis of BTEX.
	SS	2.0/2.0			11.0			
					12.0		SILTY CLAY Till (CL); Gray, moist, firm, no odor, trace gravel, unweathered till. <i>Bottom of boring at 12 feet.</i>	
					15			
					20			
					25			
					30			
					35			

GEOLOGIC DRILL LOG				PROJECT Warsaw - ITCO		PROJECT NUMBER 9890		SHEET NO. 1 of 1		HOLE NUMBER B-7	
SITE Route 122; Miner, IL			COORDINATES			LOGGED BY TB			CHECKED BY TB		
BEGUN 8/23/01		COMPLETED 8/23/01		DRILLER Whitney & Associates		DRILL EQUIPMENT Hollow Stem Auger				BORING DIA. 6"	TOTAL DEPTH 14
CORE RECOVERY (FT./%) 12 / 100		CORE BOXES 0	SAMPLES 6	CASING STICKUP		GROUND ELEV.	DEPTH/ELEV. GROUND WATER 7		DEPTH/ELEV. TOP OF ROCK		
SAMPLE TYPE Split Spoon				CASING DIA/LENGTH		NOTES boring not completed as a monitoring well					
SAMPLE NUMBER	SAMPLE TYPE	RECOV./LENGTH (feet)	H <sub>2</sub> O (ppm)	LAYER Elev. Depth	DEPTH	GRAPHIC LOG	SAMPLE	DESCRIPTION AND CLASSIFICATION density, grain size/shape, color, structure composition, sorting, texture, moisture facies, odor	DRILLING NOTES water levels, water return, character of drilling, etc.		
					1.0			SILT Loam (OL); Black, moist, firm, organic.	B-7,10' = Soil sample collected from split spoon for chemical analysis of BTEX.  B-7, 14' = Soil sample collected from split spoon for chemical analysis of BTEX.		
	SS	2.0/2.0						SILTY CLAY (CL); Brown with gray mottling, moist, firm, no odor.			
B-7,10	SS	2.0/2.0			5						
	SS	2.0/2.0			7.0			SILTY SAND (SM); Saturated, Dark brown and gray, fine to medium grained sand.			
	SS	2.0/2.0			10			SILTY CLAY Till (CL); Gray, moist, firm, no odor, trace gravel, unweathered till.			
B-7,14	SS	2.0/2.0			12.0						
					14.0			Bottom of boring at 14 feet.			
					15						
					20						
					25						
					30						
					35						

**APPENDIX B**  
**LABORATORY DATA SHEETS**

**TELEPHONE**

309-673-2131

TESTS \* INVESTIGATIONS  
ANALYSIS \* DESIGN \* EVALUATIONS  
CONSULTATION \* REPORTS \* INSPECTIONS  
ARBITRATION \* EXPERT WITNESS TESTIMONY

SOILS \* PORTLAND CEMENT CONCRETE  
BITUMINOUS CONCRETE \* STEEL  
ASPHALT \* AGGREGATES \* EMULSIONS  
POZZOLANIC MATERIALS \* LIME

**CLIENT:**

Mr. Todd Birky  
Midwest Environmental Consulting  
And Remediation Services, Inc.  
P. O. Box 614  
Tremont, Illinois 61568-0614



**WHITNEY & ASSOCIATES**

INCORPORATED

2406 West Nebraska Avenue  
PEORIA, ILLINOIS 61604-3193

**TELEFAX**

309-673-3050

GEOTECHNICAL ENGINEERING  
CONSTRUCTION QUALITY CONTROL  
SUBSURFACE EXPLORATIONS  
ENVIRONMENTAL INVESTIGATIONS  
\*\*\*\*\*  
MONITORING WELL INSTALLATIONS  
BUILT-UP ROOF INVESTIGATIONS  
WELDER CERTIFICATIONS  
INSURANCE INVESTIGATIONS

**W&A FILE NO. 1897001**

**DATE: 09-04-01**

**PROJECT:**

Warsaw ITCO Site Investigation  
Minier, Illinois

**SUMMARY OF SOIL INVESTIGATION**

BORING NUMBER	SAMPLE DEPTH FEET	NATURAL MOIST DENSITY-PCF	NATURAL DRY DENSITY-PCF	NATURAL MOISTURE CONTENT - %	MATERIAL CLASSIFICATION
B-4	0.5 - 2.5	125.3 2.01 g/cm <sup>3</sup>	112.1	11.8	Brown, SILTY CLAYEY SAND - SC-SM; Medium- To Coarse-Grained Sand And Fine-Grained Gravel (REMOLDED)
B-4	4.0 - 6.0	129.2 2.07 g/cm <sup>3</sup>	110.2	17.1	Gray-Brown, Olive-Green And Orange-Brown SANDY LEAN CLAY - CL (Clay Loam)

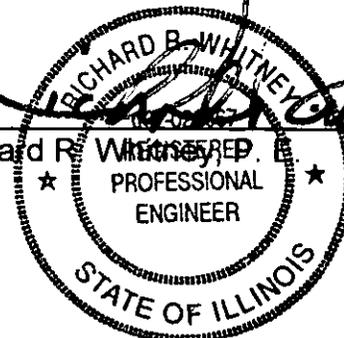
Should you have any questions or comments whatsoever in regard to these test results, or any additional information is desired, please do not hesitate to contact me personally at your convenience.

Respectfully submitted,

WHITNEY & ASSOCIATES

(By)

Richard R. Whitney, P.E.



RRW:rma

WHITNEY & ASSOCIATES  
PEORIA, ILLINOIS

R0186

**TMI Analytical Services, LLC**  
**3430 Constitution Drive, Suite 116**  
**Springfield, Illinois 62707**  
**217-698-0642**

**Delivery Group ID: 2001:0000549**  
 Customer: Midwest Environmental Services  
 Contact Name: Birky, Todd  
 P.O. Box 614  
 Tremont, IL 61568-0614

Date Received: 8/24/01  
 Date Sampled: 8/23/01

Project Name: 9890 Warsaw-ITCO 18 Sample(s) are included in this Delivery

<b>Sample ID:</b> 2001:0000549-1	<b>Client's Sample ID:</b> MW-1
<b>Program:</b> ENVIRO	<b>Matrix:</b> Liquid

Test Name	Method	MDL	Units	Result
8020 BTEX MECRS Liq.	Method: 8020		Units: ug/L	
<u>Analyte</u>		<u>MDL</u>		<u>Result</u>
Benzene		2		524 E
Ethylbenzene		2		<MDL
Toluene		2		<MDL
Xylenes		5		<MDL

<b>Sample ID:</b> 2001:0000549-2	<b>Client's Sample ID:</b> MW-2
<b>Program:</b> ENVIRO	<b>Matrix:</b> Liquid

Test Name	Method	MDL	Units	Result
8020 BTEX MECRS Liq.	Method: 8020		Units: ug/L	
<u>Analyte</u>		<u>MDL</u>		<u>Result</u>
Benzene		2		2.6 M
Ethylbenzene		2		<MDL
Toluene		2		<MDL M
Xylenes		5		7.1

<b>Sample ID:</b> 2001:0000549-3	<b>Client's Sample ID:</b> MW-3
<b>Program:</b> ENVIRO	<b>Matrix:</b> Liquid

Test Name	Method	MDL	Units	Result
8020 BTEX MECRS Liq.	Method: 8020		Units: ug/L	
<u>Analyte</u>		<u>MDL</u>		<u>Result</u>
Benzene		2		<MDL
Ethylbenzene		2		<MDL
Toluene		2		<MDL
Xylenes		5		<MDL

<b>Sample ID:</b> 2001:0000549-4	<b>Client's Sample ID:</b> MW-4
<b>Program:</b> ENVIRO	<b>Matrix:</b> Liquid

Test Name	Method	MDL	Units	Result
8020 BTEX MECRS Liq.	Method: 8020		Units: ug/L	

**TMI Analytical Services, LLC**  
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**Springfield, Illinois 62707**  
**217-698-0642**

**Delivery Group ID:** 2001:0000549  
 Customer: Midwest Environmental Services  
 Contact Name: Birky, Todd  
 P.O. Box 614  
 Tremont, IL 61568-0614

Date Received: 8/24/01  
 Date Sampled: 8/23/01

Project Name: 9890 Warsaw-ITCO 18 Sample(s) are included in this Delivery

Analyte	MDL	Result
Benzene	200	2290 M
Ethylbenzene	200	8150
Toluene	200	2380 M
Xylenes	500	23600 E

**Sample ID:** 2001:0000549-5 **Client's Sample ID:** MW-5  
**Program:** ENVIRO **Matrix:** Liquid

Test Name	Method	MDL	Units	Result
8020 BTEX MECRS Liq.	Method: 8020		Units: ug/L	

Analyte	MDL	Result
Benzene	2	78.3 M
Ethylbenzene	2	23.9
Toluene	2	2.4 M
Xylenes	5	26.3

**Sample ID:** 2001:0000549-6 **Client's Sample ID:** MW-6  
**Program:** ENVIRO **Matrix:** Liquid

Test Name	Method	MDL	Units	Result
8020 BTEX MECRS Liq.	Method: 8020		Units: ug/L	

Analyte	MDL	Result
Benzene	2	4.1
Ethylbenzene	2	<MDL
Toluene	2	<MDL
Xylenes	5	10.4

**Sample ID:** 2001:0000549-7 **Client's Sample ID:** MW-7  
**Program:** ENVIRO **Matrix:** Liquid

Test Name	Method	MDL	Units	Result
8020 BTEX MECRS Liq.	Method: 8020		Units: ug/L	

Analyte	MDL	Result
Benzene	2	<MDL
Ethylbenzene	2	<MDL
Toluene	2	<MDL
Xylenes	5	5.9

**TMI Analytical Services, LLC**  
**3430 Constitution Drive, Suite 116**  
**Springfield, Illinois 62707**  
**217-698-0642**

**Delivery Group ID:** 2001:0000549  
 Customer: Midwest Environmental Services  
 Contact Name: Birky, Todd  
 P.O. Box 614  
 Tremont, IL 61568-0614

Date Received: 8/24/01  
 Date Sampled: 8/23/01

Project Name: 9890 Warsaw-ITCO

18 Sample(s) are included in this Delivery

<b>Sample ID:</b> 2001:0000549-8	<b>Client's Sample ID:</b> B-4 0.5-2.5
----------------------------------	--

Program: ENVIRO Matrix: Solid

Test Name	Method	MDL	Units	Result
% Moisture	160.3		%	13.3
Fraction of Organic Carbon	SM 209 D		%	2.45
Solids, %	160.3		%	86.7

**BTEX, 5035 lo level** Method: 8020/5035 Units: µg/kg

Analyte	MDL	Result
Benzene	2.3	8.1 M
Ethylbenzene	2.3	44.7 M
Toluene	2.3	19.0 M
Xylenes	5.8	77.2 M

<b>Sample ID:</b> 2001:0000549-9	<b>Client's Sample ID:</b> B-4 4-6
----------------------------------	------------------------------------

Program: ENVIRO Matrix: Soil

Test Name	Method	MDL	Units	Result
% Moisture			%	18.3
Fraction of Organic Carbon	SM 209 D		%	2.55
Solids, %	160.3		%	81.7

**BTEX, 5035 lo level** Method: 8020/5035 Units: µg/kg

Analyte	MDL	Result
Benzene	122	11600 ME
Ethylbenzene	122	9720 ME
Toluene	122	42700 ME
Xylenes	306	38000 ME

<b>Sample ID:</b> 2001:0000549-10	<b>Client's Sample ID:</b> B-5 6-8
-----------------------------------	------------------------------------

Program: ENVIRO Matrix: Soil

Test Name	Method	MDL	Units	Result
Solids, %	160.3		%	88.9

**BTEX, 5035 lo level** Method: 8020/5035 Units: µg/kg

Analyte	MDL	Result
Benzene	2.2	49.0
Ethylbenzene	2.2	38.0
Toluene	2.2	186 E

**TMI Analytical Services, LLC**  
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**Springfield, Illinois 62707**  
**217-698-0642**

**Delivery Group ID: 2001:0000549**  
 Customer Midwest Environmental Services  
 Contact Name: Birky, Todd  
 P.O. Box 614  
 Tremont, IL 61568-0614

Date Received: 8/24/01  
 Date Sampled: 8/23/01

Project Name: 9890 Warsaw-ITCO 18 Sample(s) are included in this Delivery  
 Xylenes 5.6 130

<b>Sample ID:</b> 2001:0000549-11	<b>Client's Sample ID:</b> B-6 4-6
<b>Program:</b> ENVIRO	<b>Matrix:</b> Soil

Test Name	Method	MDL	Units	Result
Solids, %	160.3		%	79.8
<b>BTEX, 5035 lo level</b>	Method: 8020/5035		Units: µg/kg	
<u>Analyte</u>		<u>MDL</u>		<u>Result</u>
Benzene		2.5		19.5
Ethylbenzene		2.5		31.3
Toluene		2.5		53.4
Xylenes		6.3		89.8

<b>Sample ID:</b> 2001:0000549-12	<b>Client's Sample ID:</b> B-6 8-10
<b>Program:</b> ENVIRO	<b>Matrix:</b> Soil

Test Name	Method	MDL	Units	Result
Solids, %	160.3		%	82.9
<b>BTEX, 5035 lo level</b>	Method: 8020/5035		Units: µg/kg	
<u>Analyte</u>		<u>MDL</u>		<u>Result</u>
Benzene		2.4		7.1
Ethylbenzene		2.4		<MDL
Toluene		2.4		12.3
Xylenes		6.1		10.9

<b>Sample ID:</b> 2001:0000549-13	<b>Client's Sample ID:</b> B-7 8-10
<b>Program:</b> ENVIRO	<b>Matrix:</b> Soil

Test Name	Method	MDL	Units	Result
Solids, %	160.3		%	81.2
<b>BTEX, 5035 lo level</b>	Method: 8020/5035		Units: µg/kg	
<u>Analyte</u>		<u>MDL</u>		<u>Result</u>
Benzene		2.5		16.7 M
Ethylbenzene		2.5		13.9 M
Toluene		2.5		61.5 M
Xylenes		6.2		39.5 M

**TMI Analytical Services, LLC**  
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**Springfield, Illinois 62707**  
**217-698-0642**

**Delivery Group ID:** 2001:0000549  
**Customer:** Midwest Environmental Services  
**Contact Name:** Birky, Todd  
 P.O. Box 614  
 Tremont, IL 61568-0614

**Date Received:** 8/24/01  
**Date Sampled:** 8/23/01

**Project Name:** 9890 Warsaw-ITCO

18 Sample(s) are included in this Delivery

<b>Sample ID:</b> 2001:0000549-14	<b>Client's Sample ID:</b> B-7 12-14
<b>Program:</b> ENVIRO	<b>Matrix:</b> Soil

Test Name	Method	MDL	Units	Result
Solids, %	160.3		%	81.5
<b>BTEX, 5035 lo level</b>	Method: 8020/5035		Units: µg/kg	
<u>Analyte</u>		<u>MDL</u>		<u>Result</u>
Benzene		61.3		754
Ethylbenzene		61.3		*<MDL
Toluene		61.3		*<MDL
Xylenes		153		*<MDL

<b>Sample ID:</b> 2001:0000549-15	<b>Client's Sample ID:</b> MW-5 8-10
<b>Program:</b> ENVIRO	<b>Matrix:</b> Soil

Test Name	Method	MDL	Units	Result
Solids, %	160.3		%	84.7
<b>BTEX, 5035 lo level</b>	Method: 8020/5035		Units: µg/kg	
<u>Analyte</u>		<u>MDL</u>		<u>Result</u>
Benzene		295		494 M
Ethylbenzene		295		5890 M
Toluene		295		4750 M
Xylenes		738		7570 M

<b>Sample ID:</b> 2001:0000549-16	<b>Client's Sample ID:</b> MW-6 6-8
<b>Program:</b> ENVIRO	<b>Matrix:</b> Soil

Test Name	Method	MDL	Units	Result
Solids, %	160.3		%	83.0
<b>BTEX, 5035 lo level</b>	Method: 8020/5035		Units: µg/kg	
<u>Analyte</u>		<u>MDL</u>		<u>Result</u>
Benzene		2.4		6.5
Ethylbenzene		2.4		6.3
Toluene		2.4		12.4
Xylenes		6.0		11.3

<b>Sample ID:</b> 2001:0000549-17	<b>Client's Sample ID:</b> MW-7 4-6
<b>Program:</b> ENVIRO	<b>Matrix:</b> Soil

**TMI Analytical Services, LLC**  
**3430 Constitution Drive, Suite 116**  
**Springfield, Illinois 62707**  
**217-698-0642**

**Delivery Group ID:** 2001:0000549  
**Customer:** Midwest Environmental Services  
**Contact Name:** Birky, Todd  
 P.O. Box 614  
 Tremont, IL 61568-0614

**Date Received:** 8/24/01  
**Date Sampled:** 8/23/01

**Project Name:** 9890 Warsaw-ITCO 18 Sample(s) are included in this Delivery

Test Name	Method	MDL	Units	Result
Solids, %	160.3		%	80.6
<b>BTEX, 5035 lo level</b>	Method: 8020/5035		Units: µg/kg	
<u>Analyte</u>		<u>MDL</u>		<u>Result</u>
Benzene		2.5		11.7
Ethylbenzene		2.5		10.8
Toluene		2.5		25.1
Xylenes		6.2		20.0

<b>Sample ID:</b> 2001:0000549-18	<b>Client's Sample ID:</b> MW-7 8-10
<b>Program:</b> ENVIRO	<b>Matrix:</b> Soil

Test Name	Method	MDL	Units	Result
Solids, %	160.3		%	79.5
<b>BTEX, 5035 lo level</b>	Method: 8020/5035		Units: µg/kg	
<u>Analyte</u>		<u>MDL</u>		<u>Result</u>
Benzene		2.5		15.5 M
Ethylbenzene		2.5		6.8
Toluene		2.5		20.2 M
Xylenes		6.3		11.8

Signed:   
 Authorized Signature

Date: 9-10-01

9/4

Page 1 of 2

**TMI Analytical Services, LLC**  
 3430 Constitution Drive, Suite 116  
 Springfield, Illinois 62707  
 (217) 698-0642  
 (217) 698-0656 Fax

PROJECT #: 9890  
 PROJECT LOCATION: WARSAW - ITCU  
 Rt. 122  
 Minier, IL

REPORT TO: Todd Birky  
 INVOICE TO: MECLRS  
 PHONE: 309 925-5557  
 FAX: 309 925-5606

DESCRIPTION	METALS	ORGANICS	GENERAL CHEMISTRY
PRIORITY	As Ba Cd Cr Pb Hg Se Ag Cu Zn Ni	EPA 601 8010 PURGEABLE HALOCARBONS P&T, (CIRCLE) EPA 602 8020 PURGEABLE HALOCARBONS P&T, MTBE (CIRCLE) EPA 608/8080 PESTICIDES / PCBs (CIRCLE) EPA 624 / 8260 VOLATILE ORGANICS EPA 625 / 8270 SEMI - VOLATILE ORGANICS EPA 625 / 8270 PNAS TCLP: (CIRCLE) ORGANICS, VOLATILE, SEMI - VOLATILE, PEST&HERB OTHER: FOG TPH / OIL & GREASE (CIRCLE) FLASH POINT / IGNITABILITY CYANIDE: TOTAL, REACTIVE (CIRCLE) SULFIDES: TOTAL, REACTIVE TMI WASTE CHARACTERIZATION / PAINT FILTER (CIRCLE) PH / CORROSIVITY (CIRCLE) NITROGEN - TYPES SOLIDS - TYPES: PHENOLS PHOSPHOROUS, CHLORIDES (CIRCLE) BULK DENSITY	RESULTS Needed by: Actual Date Check X 1 2 5 7 10 X 15 20 Working Days

SAMPLE NO.	LAB NO.	DATE	SOIL (SOLID)	WATER (LIQUID)	AIR	PRESERVATIVE	COMPOSITE (X)	EXT. TOTAL	DISSOLVED	TCLP	RCRA: As Ba Cd Cr Pb Hg Se Ag Cu Zn Ni	OTHER	EPA 601 8010 PURGEABLE HALOCARBONS P&T, (CIRCLE)	EPA 602 8020 PURGEABLE HALOCARBONS P&T, MTBE (CIRCLE)	EPA 608/8080 PESTICIDES / PCBs (CIRCLE)	EPA 624 / 8260 VOLATILE ORGANICS	EPA 625 / 8270 SEMI - VOLATILE ORGANICS	EPA 625 / 8270 PNAS	TCLP: (CIRCLE) ORGANICS, VOLATILE, SEMI - VOLATILE, PEST&HERB	OTHER: FOG	TPH / OIL & GREASE (CIRCLE)	FLASH POINT / IGNITABILITY	CYANIDE: TOTAL, REACTIVE (CIRCLE)	SULFIDES: TOTAL, REACTIVE	TMI WASTE CHARACTERIZATION / PAINT FILTER (CIRCLE)	PH / CORROSIVITY (CIRCLE)	NITROGEN - TYPES	SOLIDS - TYPES:	PHENOLS	PHOSPHOROUS, CHLORIDES (CIRCLE)	BULK DENSITY	TOTAL NUMBER OF SAMPLE CONTAINERS	REMARKS		
MW-1	519-1	8/23		X																														2	
MW-2	-2	8/23		X																														2	
MW-3	-3	8/23		X																														2	
MW-4	-4	8/23		X																														2	
MW-5	-5	8/23		X																														2	
MW-6	-6	8/23		X																														2	
MW-7	-7	8/23		X																														2	
B-4, 0.5-2.5'	-8	8/23	X																															5	
B-4, 4-6'	-9	8/23	X																															5	
B-5, 6-8'	-10	8/23	X																															4	
B-6, 4-6'	-11	8/23	X																															4	
B-6, 8-10'	-12	8/23	X																															4	
B-7, 8-10'	-13	8/23	X																															4	
B-7, 12-14'	-14	8/23	X																															4	
MW-5, 8-10'	-15	8/23	X																															4	

ADDITIONAL INFORMATION OR INSTRUCTIONS

*Key Way Basin*

CHAIN OF CUSTODY: Standard turn around time: 7 working days

\* CODES: A-1 AMBER P-PLASTIC V-VOA AC-AIR CANNISTER  
 \*\* CODES: C- HYDROCHLORIC ACID S- SULPHURIC ACID H- SODIUM HYDROXIDE N- NITRIC ACID O- OTHER

SAMPLED BY: <i>Todd Birky</i>	DATE: 8/24/01	TIME: 11/15	RECEIVED BY: <i>Tracy T. Brown</i>	DATE: 8/24/01	TIME: 11/15
RELINQUISHED BY: <i>Todd Birky</i>	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED IN LABORATORY BY:	DATE:	TIME:

**TMI Analytical Services, LLC**

3430 Constitution Drive, Suite 116  
 Springfield, Illinois 62707  
 (217) 698-0642  
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PROJECT #: 9890

PROJECT LOCATION:  
*Milwaukee*

REPORT TO:

INVOICE TO:

PHONE:

FAX:

**DESCRIPTION**

**METALS**

**ORGANICS**

**GENERAL CHEMISTRY**

**DUE DATE**

PRIORITY	
SOIL (SOLID)	
WATER (LIQUID)	
AIR	
PRESERVATIVE	
COMPOSITE (X)	
EXT. TOTAL _____ DISSOLVED _____ TCLP _____	
RCRA: As Ba Cd Cr Pb Hg Se Ag Cu Zn Ni	
OTHER	
EPA 601 8010 PURGEABLE HALOCARBONS P&T, (CIRCLE)	
EPA 602 8020 PURGEABLE HALOCARBONS P&T, MTBE (CIRCLE)	
BTEX: 8020 8260 (CIRCLE) P&T, MTBE (CIRCLE) <i>ENCLOSURE</i>	
EPA 608/8080 PESTICIDES / PCBs (CIRCLE)	
EPA 624 / 8260 VOLATILE ORGANICS	
EPA 625 / 8270 SEMI - VOLATILE ORGANICS	
EPA 625 / 8270 PNAs	
TCLP: (CIRCLE) ORGANICS, VOLATILE, SEMI - VOLATILE, PEST&HERB	
OTHER	
TPH / OIL & GREASE (CIRCLE)	
FLASH POINT / IGNITABILITY	
CYANIDE: TOTAL, REACTIVE (CIRCLE)	
SULFIDES: TOTAL, REACTIVE	
TMI WASTE CHARACTERIZATION / PAINT FILTER (CIRCLE)	
ph / CORROSMITY (CIRCLE)	
NITROGEN - TYPES	
SOLIDS - TYPES:	
PHENOLS	
PHOSPHOROUS, CHLORIDES (CIRCLE)	
BULK DENSITY	
TOTAL NUMBER OF SAMPLE CONTAINERS	

SAMPLE NO.	LAB NO	DATE
MW-6, 6-8'	579-10	8/23
MW-7, 4-6'	-19	8/23
MW-7, 8-10'	-18	8/23

**ADDITIONAL INFORMATION OR INSTRUCTIONS**

CHAIN OF CUSTODY: Standard turn around time: 7 working days

\* CODES: A-1 AMBER P-PLASTIC V-VOA AC-AIR CANNISTER  
 \*\* CODES: C- HYDROCHLORIC ACID S- SULPHURIC ACID H- SODIUM HYDROXIDE N- NITRIC ACID O- OTHER

SAMPLED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
<i>[Signature]</i>			<i>[Signature]</i>	8-24-04	11:15
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
RELINQUISHED BY:	DATE	TIME	RECEIVED IN LABORATORY BY:	DATE	TIME

PAGE 2 of 2

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/7 - 5/17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forum Management Center.

**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Laboratory Certification for Chemical Analysis**

**A. Site Identification**

IEMA Incident # (6 digit): 981987 IEPA Generator # (10 digit): 1790455007  
Site Name: Warsaw, Howard  
Site Address (Not a P.O. Box): Rt. 122  
City: Minier County: Tazewell

**B. Sample Collector**

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
2. Chain of custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

ADF  
(initial)

ADF  
(initial)

ADF  
(initial)

ADF  
(initial)

**C. Laboratory Representative**

I certify that:

1. Proper chain of custody procedures were followed as documented on the chain of custody forms.
2. Sample integrity was maintained by proper preservation.
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

SAL  
(initial)

SAL  
(initial)

SAL  
(initial)

SAL  
(initial)

5. Sample holding times were not exceeded.

SAR  
(initial)

6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses.

SAR  
(initial)

#### D. Signatures

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

#### Sample Collector

#### Laboratory Representative

Name: Andrew Fetterolf  
Title: Environmental Technician  
Company: MECRS  
Address: 22200 IL Rt. 9 Box 614  
Tremont, IL 61568  
Phone: (309) 925-5551  
Signature: Andrew Fetterolf  
Date: 8/29/01

Name: Scott A. Reeves  
Title: Laboratory Manager  
Company: TMI Analytical Services  
Address: 3430 Constitution Dr.  
Springfield, IL 62707  
Phone: 217-~~426~~ 698-0642  
Signature: Scott A. Reeves  
Date: 9-10-01

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Laboratory Certification for Chemical Analysis**

**A. Site Identification**

IEMA Incident # (6 digit): 981987 IEPA Generator # (10 digit): 1790455007  
Site Name: Warsaw, Howard  
Site Address (Not a P.O. Box): Rt. 122  
City: Minier County: Tazewell

**B. Sample Collector**

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
2. Chain of custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

TB  
(initial)  
TB  
(initial)  
TB  
(initial)  
TB  
(initial)

**C. Laboratory Representative**

I certify that:

1. Proper chain of custody procedures were followed as documented on the chain of custody forms.
2. Sample integrity was maintained by proper preservation.
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

SAL  
(initial)  
SAL  
(initial)  
SAL  
(initial)  
SAL  
(initial)

5. Sample holding times were not exceeded.

SAR  
(initial)

6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses.

SAR  
(initial)

#### D. Signatures

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

#### Sample Collector

#### Laboratory Representative

Name: Todd Birky

Name: Scott A. Reeves

Title: Environmental Geologist

Title: Laboratory Manager

Company: MECRS

Company: TME Analytical Services

Address: 22200 IL Rt. 9 Box 604  
Tremont, IL 61568

Address: 3430 Constitution Dr.  
Springfield, IL 62707

Phone: (309) 975-5551

Phone: 217-698-0642

Signature: Todd Birky

Signature: Scott A. Reeves

Date: 8-23-01

Date: 9-10-01

**List of acceptable report abbreviations for comment section.**

# = Data from Method 5035 not reportable, sample ran 8020 method.

E = Estimated value outside the linear range of the calibration curve.

B = Identified in blank at an equivalent concentration of \_\_\_\_\_ ppb.

\* = Increased MDL due to required dilution.

P = Preliminary results.

M = Matrix interferences identified.

S = Scan only.

W = Sample exceeds weight criteria of method.

TNTC = Too Numerous To Count

**TMI Analytical Services, LLC**  
**3430 Constitution Drive, Suite 116**  
**Springfield, Illinois 62707**  
**217-698-0642**

**Delivery Group ID: 2001:0000849**  
 Customer: Midwest Environmental Services  
 Contact Name: Green, Allan  
 P.O. Box 614  
 Tremont, IL 61568-0614

Date Received: 11/16/01  
 Date Sampled: 11/13/01

Project Name: 9890 Warsaw-ITCO

7 Sample(s) are included in this Delivery

**Sample ID: 2001:0000849-1**                      **Client's Sample ID: MW-1**  
**Program: ENVIRO**                      **Matrix: Liquid**

Test Name	Method	MDL	Units	Result
Ammonia-nitrogen, total	SM4500-NH3F	0.04	mg/L	0.179
Phosphate, Ortho Total	365.2	0.05	mg/L	0.256
Selective Plate Count		100	CFU/mL	800
Total Plate Count		100	CFU/mL	8600
<b>BTEX, 8020</b>	Method: 8020		Units: µg/L	

Analyte	MDL	Result
Benzene	2	<MDL
Ethylbenzene	2	<MDL
Toluene	2	<MDL
Total BTEX		<MDL
Total Xylenes	5	<MDL

**Sample ID: 2001:0000849-2**                      **Client's Sample ID: MW-2**  
**Program: ENVIRO**                      **Matrix: Liquid**

Test Name	Method	MDL	Units	Result
Ammonia-nitrogen, total	SM4500-NH3F	0.04	mg/L	<MDL
Phosphate, Ortho Total	365.2	0.05	mg/L	0.050
Selective Plate Count		100	CFU/mL	<MDL
Total Plate Count		100	CFU/mL	1400
<b>BTEX, 8020</b>	Method: 8020		Units: µg/L	

Analyte	MDL	Result
Benzene	2	<MDL
Ethylbenzene	2	<MDL
Toluene	2	<MDL
Total BTEX		<MDL
Total Xylenes	5	<MDL

**Sample ID: 2001:0000849-3**                      **Client's Sample ID: MW-3**  
**Program: ENVIRO**                      **Matrix: Liquid**

Test Name	Method	MDL	Units	Result
Ammonia-nitrogen, total	SM4500-NH3F	0.04	mg/L	<MDL

**TMI Analytical Services, LLC**  
**3430 Constitution Drive, Suite 116**  
**Springfield, Illinois 62707**  
**217-698-0642**

**Delivery Group ID: 2001:0000849**  
 Customer Midwest Environmental Services  
 Contact Name: Green, Allan  
 P.O. Box 614  
 Tremont, IL 61568-0614

Date Received: 11/16/01  
 Date Sampled: 11/13/01

Project Name: 9890 Warsaw-ITCO

7 Sample(s) are included in this Delivery

Phosphate, Ortho Total	365.2	0.05	mg/L	<MDL
Selective Plate Count		100	CFU/mL	<MDL
Total Plate Count		100	CFU/mL	1900

**BTEX, 8020** Method: 8020 Units: µg/L

Analyte	MDL	Result
Benzene	2	<MDL
Ethylbenzene	2	<MDL
Toluene	2	<MDL
Total BTEX		<MDL
Total Xylenes	5	<MDL

**Sample ID: 2001:0000849-4** Client's Sample ID: MW-4  
 Program: ENVIRO Matrix: Liquid

Test Name	Method	MDL	Units	Result
Ammonia-nitrogen, total	SM4500-NH3F	0.04	mg/L	0.045
Phosphate, Ortho Total	365.2	0.05	mg/L	0.081
Selective Plate Count		100	CFU/mL	<MDL
Total Plate Count		100	CFU/mL	900

**BTEX, 8020** Method: 8020 Units: µg/L

Analyte	MDL	Result
Benzene	200	1910
Ethylbenzene	200	3360
Toluene	200	3960
Total BTEX		19,230
Total Xylenes	500	10,000

**Sample ID: 2001:0000849-5** Client's Sample ID: MW-5  
 Program: ENVIRO Matrix: Liquid

Test Name	Method	MDL	Units	Result
Ammonia-nitrogen, total	SM4500-NH3F	0.04	mg/L	<MDL
Phosphate, Ortho Total	365.2	0.05	mg/L	0.176
Selective Plate Count		100	CFU/mL	17300
Total Plate Count		100	CFU/mL	31100

**BTEX, 8020** Method: 8020 Units: µg/L

**TMI Analytical Services, LLC**  
**3430 Constitution Drive, Suite 116**  
**Springfield, Illinois 62707**  
**217-698-0642**

**Delivery Group ID: 2001:0000849**  
 Customer: Midwest Environmental Services  
 Contact Name: Green, Allan  
 P.O. Box 614  
 Tremont, IL 61568-0614

Date Received: 11/16/01  
 Date Sampled: 11/13/01

Project Name: 9890 Warsaw-ITCO

7 Sample(s) are included in this Delivery

Analyte	MDL	Result
Benzene	2	<MDL
Ethylbenzene	2	<MDL
Toluene	2	<MDL
Total BTEX		<MDL
Total Xylenes	5	<MDL

**Sample ID: 2001:0000849-6**      **Client's Sample ID: MW-6**

Program: ENVIRO      Matrix: Liquid

Test Name	Method	MDL	Units	Result
Ammonia-nitrogen, total	SM4500-NH3F	0.04	mg/L	0.049
Phosphate, Ortho Total	365.2	0.05	mg/L	0.107
Selective Plate Count		100	CFU/mL	25400
Total Plate Count		100	CFU/mL	40000

**BTEX, 8020**      Method: 8020      Units: µg/L

Analyte	MDL	Result
Benzene	2	<MDL
Ethylbenzene	2	<MDL
Toluene	2	<MDL
Total BTEX		<MDL
Total Xylenes	5	<MDL

**Sample ID: 2001:0000849-7**      **Client's Sample ID: MW-7**

Program: ENVIRO      Matrix: Liquid

Test Name	Method	MDL	Units	Result
Ammonia-nitrogen, total	SM4500-NH3F	0.04	mg/L	<MDL
Phosphate, Ortho Total	365.2	0.05	mg/L	<MDL
Selective Plate Count		100	CFU/mL	7300
Total Plate Count		100	CFU/mL	36600

**BTEX, 8020**      Method: 8020      Units: µg/L

Analyte	MDL	Result
Benzene	2	117 E
Ethylbenzene	2	<MDL
Toluene	2	<MDL
Total BTEX		<126 E
Total Xylenes	5	<MDL

**TMI Analytical Services, LLC**  
3430 Constitution Drive, Suite 116  
Springfield, Illinois 62707  
217-698-0642

**Delivery Group ID:** 2001:0000849  
Customer: Midwest Environmental Services  
**Contact Name:** Green, Allan  
P.O. Box 614  
Tremont, IL 61568-0614

Date Received: 11/16/01  
Date Sampled: 11/13/01

Project Name: 9890 Warsaw-ITCO

7 Sample(s) are included in this Delivery

---

Signed:

*K. McClain*  
Authorized Signature

Date: 11.30.01

R0203

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**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Laboratory Certification for Chemical Analysis**

**A. Site Identification**

IEMA Incident # (6 digit): 981987 IEPA Generator # (10 digit): 1790455007  
Site Name: Warsaw - ITCO  
Site Address (Not a P.O. Box): Route 122  
City: Minier County: Tazewell

**B. Sample Collector**

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
2. Chain of custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

AF  
(initial)

AF  
(initial)

AF  
(initial)

AF  
(initial)

**C. Laboratory Representative**

I certify that:

1. Proper chain of custody procedures were followed as documented on the chain of custody forms.
2. Sample integrity was maintained by proper preservation.
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

kw  
(initial)

kw  
(initial)

kw  
(initial)

kw  
(initial)

5. Sample holding times were not exceeded.

  
(initial)

6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the ~~analysis~~ BTEX ANALYSIS.

  
(initial)

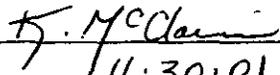
**D. Signatures**

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Sample Collector**

**Laboratory Representative**

Name: Andrew Fetterolf  
Title: Environmental Technician  
Company: MECRS  
Address: 22200 ILRT, 9 P.O. Box 614  
Tremont, IL 61568  
Phone: (309) 925-5551  
Signature:   
Date: 11/14/01

Name: KATHLEEN McCLAIN  
Title: LABORATORY MANAGER  
Company: TMI ANALYTICAL  
Address: 3430 CONSTITUTION Dr. #116  
SPRINGFIELD, IL 62707  
Phone: (217) 698-0642  
Signature:   
Date: 11.30.01



**List of acceptable report abbreviations for comment section.**

# = Data from Method 5035 not reportable, sample ran 8020 method.

E = Estimated value outside the linear range of the calibration curve.

B = Identified in blank at an equivalent concentration of \_\_\_\_\_ ppb.

\* = Increased MDL due to required dilution.

P = Preliminary results.

M = Matrix interferences identified.

S = Scan only.

W = Sample exceeds weight criteria of method.

TNTC = Too Numerous To Count

**APPENDIX C**

**MONITORING WELL SAMPLING INFORMATION SHEETS**

# MONITORING WELL SAMPLING INFORMATION

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-1

Sample Date  
8/23/01

Sample Time  
11:30 AM

### Field Measurements

- |  |                  |
|--|------------------|
| 1. Stick-up (ground surface to top of well casing) | <u>0</u> ft.     |
| 2. Elevation top of well casing                    | <u>99.62</u> ft. |
| 3. Depth to water from top of well casing          | <u>6.76</u> ft.  |
| 4. Elevation Groundwater Surface (#2 #3)           | <u>92.86</u> ft. |
| 5. Total Well depth from top of well casing        | <u>15.88</u> ft. |

### Well Purging Measurements

- |  |                  |
|--|------------------|
| 6. Elevation bottom of well                                | <u>83.74</u> ft. |
| 7. Total vertical ft of water in well (#3-#5) or (#4-#6)   | <u>9.12</u> ft.  |
| 8. Volume of water in well (0.163 gal/ft for a 2" ID well) | <u>1.49</u> gal. |
| 9. Number of well volumes purged                           | <u>3.36</u> #    |
| 10. Number of gallons purged (#8 x#9)                      | <u>5.00</u> gal. |

Temp. of sample (F) Field: \_\_\_\_\_

Spec. Cond. (uohms) - Field: \_\_\_\_\_

pH (units) - Field: \_\_\_\_\_

Sample Field Filtered - Inorganics (Y/N): \_\_\_\_\_

Total Dissolved Solids - Field: \_\_\_\_\_

PID Reading (well opening): \_\_\_\_\_

### FIELD COMMENTS

Weather Conditions: sunny, 85°F

Specific Location of Sample: see map

Type of Sampling Point: monitoring well

Sampling Method: stainless steel bailer

Sample Appearance: turbid

Additional Comments: slight petroleum odor

Sampling Team: A. Fetterolf, T. Birky

# MONITORING WELL SAMPLING INFORMATION

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-2

Sample Date  
8/23/01

Sample Time  
10:40 AM

### Field Measurements

- |  |                  |
|--|------------------|
| 1. Stick-up (ground surface to top of well casing) | <u>0</u> ft.     |
| 2. Elevation top of well casing                    | <u>99.28</u> ft. |
| 3. Depth to water from top of well casing          | <u>4.35</u> ft.  |
| 4. Elevation Groundwater Surface (#2 #3)           | <u>94.93</u> ft. |
| 5. Total Well depth from top of well casing        | <u>14.31</u> ft. |

### Well Purging Measurements

- |  |                  |
|--|------------------|
| 6. Elevation bottom of well                                | <u>84.97</u> ft. |
| 7. Total vertical ft of water in well (#3-#5) or (#4-#6)   | <u>9.96</u> ft.  |
| 8. Volume of water in well (0.163 gal/ft for a 2" ID well) | <u>1.62</u> gal. |
| 9. Number of well volumes purged                           | <u>3.08</u> #    |
| 10. Number of gallons purged (#8 x#9)                      | <u>5.00</u> gal. |

Temp. of sample (F) Field: \_\_\_\_\_

Spec. Cond. (uohms) - Field: \_\_\_\_\_

pH (units) - Field: \_\_\_\_\_

Sample Field Filtered - Inorganics (Y/N): \_\_\_\_\_

Total Dissolved Solids - Field: \_\_\_\_\_

PID Reading (well opening): \_\_\_\_\_

### FIELD COMMENTS

Weather Conditions: sunny, 85 °F

Specific Location of Sample: see map

Type of Sampling Point: monitoring well

Sampling Method: stainless steel bailer

Sample Appearance: turbid

Additional Comments: no odor

Sampling Team: A. Fetterolf, T. Birky

# MONITORING WELL SAMPLING INFORMATION

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-3

Sample Date  
8/23/01

Sample Time  
12:00 PM

### Field Measurements

- |  |                   |
|--|-------------------|
| 1. Stick-up (ground surface to top of well casing) | <u>0</u> ft.      |
| 2. Elevation top of well casing                    | <u>100.00</u> ft. |
| 3. Depth to water from top of well casing          | <u>6.22</u> ft.   |
| 4. Elevation Groundwater Surface (#2 #3)           | <u>93.78</u> ft.  |
| 5. Total Well depth from top of well casing        | <u>14.85</u> ft.  |

- ### Well Purging Measurements
- |  |                  |
|--|------------------|
| 6. Elevation bottom of well                                | <u>85.15</u> ft. |
| 7. Total vertical ft of water in well (#3-#5) or (#4-#6)   | <u>8.63</u> ft.  |
| 8. Volume of water in well (0.163 gal/ft for a 2" ID well) | <u>1.41</u> gal. |
| 9. Number of well volumes purged                           | <u>3.55</u> #    |
| 10. Number of gallons purged (#8 x#9)                      | <u>5.00</u> gal. |

Temp. of sample (F) Field: \_\_\_\_\_

Spec. Cond. (uohms) - Field: \_\_\_\_\_

pH (units) - Field: \_\_\_\_\_

Sample Field Filtered - Inorganics (Y/N): \_\_\_\_\_

Total Dissolved Solids - Field: \_\_\_\_\_

PID Reading (well opening): \_\_\_\_\_

### FIELD COMMENTS

Weather Conditions: sunny, 85 °F

Specific Location of Sample: see map

Type of Sampling Point: monitoring well

Sampling Method: stainless steel bailer

Sample Appearance: turbid

Additional Comments: no odor

Sampling Team: A. Fetterolf, T. Birky

# MONITORING WELL SAMPLING INFORMATION

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-4

Sample Date  
8/23/01

Sample Time  
1:35 PM

### Field Measurements

1. Stick-up (ground surface to top of well casing) 0 ft.
2. Elevation top of well casing 99.84 ft.
3. Depth to water from top of well casing 6.67 ft.
4. Elevation Groundwater Surface (#2 #3) 93.17 ft.
5. Total Well depth from top of well casing 14.31 ft.

### Well Purging Measurements

6. Elevation bottom of well 85.53 ft.
7. Total vertical ft of water in well (#3-#5) or (#4-#6) 7.64 ft.
8. Volume of water in well (0.163 gal/ft for a 2" ID well) 1.25 gal.
9. Number of well volumes purged 3.00 #
10. Number of gallons purged (#8 x#9) 3.73 gal.

Temp. of sample (F) Field: \_\_\_\_\_

Spec. Cond. (uohms) - Field: \_\_\_\_\_

pH (units) - Field: \_\_\_\_\_

Sample Field Filtered - Inorganics (Y/N): \_\_\_\_\_

Total Dissolved Solids - Field: \_\_\_\_\_

PID Reading (well opening): \_\_\_\_\_

### FIELD COMMENTS

Weather Conditions: sunny, 90 °F

Specific Location of Sample: see map

Type of Sampling Point: monitoring well

Sampling Method: stainless steel bailer

Sample Appearance: clear

Additional Comments: faint odor

Sampling Team: A. Fetterolf, T. Birky

**MONITORING WELL SAMPLING INFORMATION**

Site Name: Warsaw/ITCO \_\_\_\_\_

Generator I.D. #: 1790455007 \_\_\_\_\_

Site Address: Route 122 \_\_\_\_\_

I.E.M.A. #: 981987 \_\_\_\_\_

Minier, IL 61759 \_\_\_\_\_

Project Manager: T BIRKY \_\_\_\_\_

County: Tazewell \_\_\_\_\_

Company Name: MECRS \_\_\_\_\_

Sample I.D.  
MW-5

Sample Date  
8/23/01

Sample Time  
3:30 PM

Field Measurements

- |  |                  |
|--|------------------|
| 1. Stick-up (ground surface to top of well casing) | <u>0</u> ft.     |
| 2. Elevation top of well casing                    | <u>99.57</u> ft. |
| 3. Depth to water from top of well casing          | <u>4.82</u> ft.  |
| 4. Elevation Groundwater Surface (#2 #3)           | <u>94.75</u> ft. |
| 5. Total Well depth from top of well casing        | <u>14.00</u> ft. |

- Well Purging Measurements
- |  |                   |
|--|-------------------|
| 6. Elevation bottom of well                                | <u>85.57</u> ft.  |
| 7. Total vertical ft of water in well (#3-#5) or (#4-#6)   | <u>9.18</u> ft.   |
| 8. Volume of water in well (0.163 gal/ft for a 2" ID well) | <u>1.50</u> gal.  |
| 9. Number of well volumes purged                           | <u>6.68</u> #     |
| 10. Number of gallons purged (#8 x#9)                      | <u>10.00</u> gal. |

Temp. of sample (F) Field: \_\_\_\_\_

Spec. Cond. (uohms) - Field: \_\_\_\_\_

pH (units) - Field: \_\_\_\_\_

Sample Field Filtered - Inorganics (Y/N): \_\_\_\_\_

Total Dissolved Solids - Field: \_\_\_\_\_

PID Reading (well opening): \_\_\_\_\_

FIELD COMMENTS

Weather Conditions: sunny, 90 °F

Specific Location of Sample: see map

Type of Sampling Point: monitoring well

Sampling Method: stainless steel bailer

Sample Appearance: turbid

Additional Comments: none

Sampling Team: A. Fetterolf, T. Birky

# MONITORING WELL SAMPLING INFORMATION

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-6

Sample Date  
8/23/01

Sample Time  
4:00 PM

### Field Measurements

1. Stick-up (ground surface to top of well casing) 0 ft.
2. Elevation top of well casing 99.37 ft.
3. Depth to water from top of well casing 6.55 ft.
4. Elevation Groundwater Surface (#2 #3) 92.82 ft.
5. Total Well depth from top of well casing 13.60 ft.

### Well Purging Measurements

6. Elevation bottom of well 85.77 ft.
7. Total vertical ft of water in well (#3-#5) or (#4-#6) 7.05 ft.
8. Volume of water in well (0.163 gal/ft for a 2" ID well) 1.15 gal.
9. Number of well volumes purged 5.22 #
10. Number of gallons purged (#8 x#9) 6.00 gal.

Temp. of sample (F) Field: \_\_\_\_\_

Spec. Cond. (uohms) - Field: \_\_\_\_\_

pH (units) - Field: \_\_\_\_\_

Sample Field Filtered - Inorganics (Y/N): \_\_\_\_\_

Total Dissolved Solids - Field: \_\_\_\_\_

PID Reading (well opening): \_\_\_\_\_

### FIELD COMMENTS

Weather Conditions: sunny, 90 °F

Specific Location of Sample: see map

Type of Sampling Point: monitoring well

Sampling Method: stainless steel bailer

Sample Appearance: turbid

Additional Comments: \_\_\_\_\_

Sampling Team: A. Fetterolf, T. Birky

# MONITORING WELL SAMPLING INFORMATION

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-7

Sample Date  
8/23/01

Sample Time  
4:20 PM

### Field Measurements

- |  |                   |
|--|-------------------|
| 1. Stick-up (ground surface to top of well casing) | <u>0</u> ft.      |
| 2. Elevation top of well casing                    | <u>100.07</u> ft. |
| 3. Depth to water from top of well casing          | <u>7.28</u> ft.   |
| 4. Elevation Groundwater Surface (#2 #3)           | <u>92.79</u> ft.  |
| 5. Total Well depth from top of well casing        | <u>13.43</u> ft.  |

- ### Well Purging Measurements
- |  |                  |
|--|------------------|
| 6. Elevation bottom of well                                | <u>86.64</u> ft. |
| 7. Total vertical ft of water in well (#3-#5) or (#4-#6)   | <u>6.15</u> ft.  |
| 8. Volume of water in well (0.163 gal/ft for a 2" ID well) | <u>1.00</u> gal. |
| 9. Number of well volumes purged                           | <u>4.99</u> #    |
| 10. Number of gallons purged (#8 x#9)                      | <u>5.00</u> gal. |

Temp. of sample (F) Field: \_\_\_\_\_

Spec. Cond. (uohms) - Field: \_\_\_\_\_

pH (units) - Field: \_\_\_\_\_

Sample Field Filtered - Inorganics (Y/N): \_\_\_\_\_

Total Dissolved Solids - Field: \_\_\_\_\_

PID Reading (well opening): \_\_\_\_\_

### FIELD COMMENTS

Weather Conditions: sunny, 90 °F

Specific Location of Sample: see map

Type of Sampling Point: monitoring well

Sampling Method: stainless steel bailer

Sample Appearance: turbid

Additional Comments:

Sampling Team: A. Fetterolf, T. Birky

**MONITORING WELL SAMPLING INFORMATION**

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-1

Sample Date  
11/13/01

Sample Time  
3:15 P.M.

Field Measurements

Well Purging Measurements

- 1. Stick-up (ground surface to top of well casing) 0 ft.
- 2. Elevation top of well casing 99.62 ft.
- 3. Depth to water from top of well casing 6.26 ft.
- 4. Elevation Groundwater Surface (#2-#3) 93.36 ft.
- 5. Total Well depth from top of well casing 15.84 ft.

- 6. Elevation bottom of well 83.78 ft.
- 7. Total vertical ft of water in well (#3-#5) or (#4-#6) 9.58 ft.
- 8. Volume of water in well (0.163 gal/ft for a 2" ID well) 1.56 gal.
- 9. Number of well volumes purged 3.20 #
- 10. Number of gallons purged (#8 x#9) 5.00 gal.

Temp. of sample (F) Field:           

Spec. Cond. (uohms) - Field:           

pH (units) - Field:           

Sample Field Filtered - Inorganics (Y/N):           

Total Dissolved Solids - Field:           

PID Reading (well opening):           

FIELD COMMENTS

Weather Conditions: sunny, cool, 55°F

Specific Location of Sample: see map

Type of Sampling Point: monitoring well

Sampling Method: stainless steel bailer

Sample Appearance: turbid

Additional Comments: slight petroleum odor

Sampling Team: Andrew Fetterolf

## MONITORING WELL SAMPLING INFORMATION

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-2

Sample Date  
11/13/01

Sample Time  
1:05 P.M.

### Field Measurements

### Well Purging Measurements

1. Stick-up (ground surface to top of well casing) 0 ft.
2. Elevation top of well casing 99.28 ft.
3. Depth to water from top of well casing 6.01 ft.
4. Elevation Groundwater Surface (#2-#3) 93.27 ft.
5. Total Well depth from top of well casing 14.29 ft.

6. Elevation bottom of well 84.99 ft.
7. Total vertical ft of water in well (#3-#5) or (#4-#6) 8.28 ft.
8. Volume of water in well (0.163 gal/ft for a 2" ID well) 1.35 gal.
9. Number of well volumes purged 3.70 #
10. Number of gallons purged (#8 x#9) 5.00 gal.

Temp. of sample (F) Field: \_\_\_\_\_

Spec. Cond. (uohms) - Field: \_\_\_\_\_

pH (units) - Field: \_\_\_\_\_

Sample Field Filtered - Inorganics (Y/N): \_\_\_\_\_

Total Dissolved Solids - Field: \_\_\_\_\_

PID Reading (well opening): \_\_\_\_\_

### FIELD COMMENTS

Weather Conditions: windy, cool, 55°F

Specific Location of Sample: see map

Type of Sampling Point: monitoring well

Sampling Method: stainless steel bailer

Sample Appearance: turbid

Additional Comments: no odor

Sampling Team: Andrew Fetterolf

## MONITORING WELL SAMPLING INFORMATION

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-3

Sample Date  
11/13/01

Sample Time  
12:05 P.M.

### Field Measurements

### Well Purging Measurements

1. Stick-up (ground surface to top of well casing) 0 ft.
2. Elevation top of well casing 100.00 ft.
3. Depth to water from top of well casing 6.20 ft.
4. Elevation Groundwater Surface (#2-#3) 93.80 ft.
5. Total Well depth from top of well casing 14.84 ft.

6. Elevation bottom of well 85.16 ft.
7. Total vertical ft of water in well (#3-#5) or (#4-#6) 8.64 ft.
8. Volume of water in well (0.163 gal/ft for a 2" ID well) 1.41 gal.
9. Number of well volumes purged 3.55 #
10. Number of gallons purged (#8 x#9) 5.00 gal.

Temp. of sample (F) Field: \_\_\_\_\_

Spec. Cond. (uohms) - Field: \_\_\_\_\_

pH (units) - Field: \_\_\_\_\_

Sample Field Filtered - Inorganics (Y/N): \_\_\_\_\_

Total Dissolved Solids - Field: \_\_\_\_\_

PID Reading (well opening): \_\_\_\_\_

### FIELD COMMENTS

Weather Conditions: sunny, cool, 60°F

Specific Location of Sample: see map

Type of Sampling Point: monitoring well

Sampling Method: stainless steel bailer

Sample Appearance: turbid

Additional Comments: no odor

Sampling Team: Andrew Fetterolf

**MONITORING WELL SAMPLING INFORMATION**

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-4

Sample Date  
11/13/01

Sample Time  
2:45 P.M.

Field Measurements

Well Purging Measurements

- 1. Stick-up (ground surface to top of well casing) 0 ft.
- 2. Elevation top of well casing 99.84 ft.
- 3. Depth to water from top of well casing 6.11 ft.
- 4. Elevation Groundwater Surface (#2-#3) 93.73 ft.
- 5. Total Well depth from top of well casing 14.32 ft.

- 6. Elevation bottom of well 85.52 ft.
- 7. Total vertical ft of water in well (#3-#5) or (#4-#6) 8.21 ft.
- 8. Volume of water in well (0.163 gal/ft for a 2" ID well) 1.34 gal.
- 9. Number of well volumes purged 3.74 #
- 10. Number of gallons purged (#8 x#9) 5.00 gal.

Temp. of sample (F) Field:           

Spec. Cond. (uohms) - Field:           

pH (units) - Field:           

Sample Field Filtered - Inorganics (Y/N):           

Total Dissolved Solids - Field:           

PID Reading (well opening):           

FIELD COMMENTS

Weather Conditions: sunny, cool, 55°F

Specific Location of Sample: see map

Type of Sampling Point: monitoring well

Sampling Method: stainless steel bailer

Sample Appearance: clear

Additional Comments: petroleum odor

Sampling Team: Andrew Fetterolf

# MONITORING WELL SAMPLING INFORMATION

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-5

Sample Date  
11/13/01

Sample Time  
2:05 P.M.

### Field Measurements

#### Well Purging Measurements

1. Stick-up (ground surface to top of well casing) 0 ft.
2. Elevation top of well casing 99.57 ft.
3. Depth to water from top of well casing 5.67 ft.
4. Elevation Groundwater Surface (#2-#3) 93.90 ft.
5. Total Well depth from top of well casing 13.98 ft.

6. Elevation bottom of well 85.59 ft.
7. Total vertical ft of water in well (#3-#5) or (#4-#6) 8.31 ft.
8. Volume of water in well (0.163 gal/ft for a 2" ID well) 1.35 gal.
9. Number of well volumes purged 3.69 #
10. Number of gallons purged (#8 x #9) 5.00 gal.

Temp. of sample (F) Field: \_\_\_\_\_

Spec. Cond. (uohms) - Field: \_\_\_\_\_

pH (units) - Field: \_\_\_\_\_

Sample Field Filtered - Inorganics (Y/N): \_\_\_\_\_

Total Dissolved Solids - Field: \_\_\_\_\_

PID Reading (well opening): \_\_\_\_\_

### FIELD COMMENTS

Weather Conditions: sunny, cool, 55°F

Specific Location of Sample: see map

Type of Sampling Point: monitoring well

Sampling Method: stainless steel bailer

Sample Appearance: turbid

Additional Comments: slight odor

Sampling Team: Andrew Fetterolf

# MONITORING WELL SAMPLING INFORMATION

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-6

Sample Date  
11/13/01

Sample Time  
1:35 P.M.

### Field Measurements

### Well Purging Measurements

1. Stick-up (ground surface to top of well casing) 0 ft.
2. Elevation top of well casing 99.37 ft.
3. Depth to water from top of well casing 5.59 ft.
4. Elevation Groundwater Surface (#2-#3) 93.78 ft.
5. Total Well depth from top of well casing 13.55 ft.

6. Elevation bottom of well 85.82 ft.
7. Total vertical ft of water in well (#3-#5) or (#4-#6) 7.96 ft.
8. Volume of water in well (0.163 gal/ft for a 2" ID well) 1.30 gal.
9. Number of well volumes purged 3.47 #
10. Number of gallons purged (#8 x#9) 4.50 gal.

Temp. of sample (F) Field: \_\_\_\_\_

Spec. Cond. (uohms) - Field: \_\_\_\_\_

pH (units) - Field: \_\_\_\_\_

Sample Field Filtered - Inorganics (Y/N): \_\_\_\_\_

Total Dissolved Solids - Field: \_\_\_\_\_

PID Reading (well opening): \_\_\_\_\_

### FIELD COMMENTS

Weather Conditions: sunny, cool, 55°F

Specific Location of Sample: see map

Type of Sampling Point: monitoring well

Sampling Method: stainless steel bailer

Sample Appearance: turbid

Additional Comments: none

Sampling Team: Andrew Fetterolf

**MONITORING WELL SAMPLING INFORMATION**

Site Name: Warsaw/ITCO

Generator I.D. #: 1790455007

Site Address: Route 122

I.E.M.A. #: 981987

Minier, IL 61759

Project Manager: T BIRKY

County: Tazewell

Company Name: MECRS

Sample I.D.  
MW-7

Sample Date  
11/13/01

Sample Time  
12:35 P.M.

Field Measurements

Well Purging Measurements

- 1. Stick-up (ground surface to top of well casing) 0 ft.
- 2. Elevation top of well casing 100.07 ft.
- 3. Depth to water from top of well casing 6.23 ft.
- 4. Elevation Groundwater Surface (#2-#3) 93.84 ft.
- 5. Total Well depth from top of well casing 13.43 ft.

- 6. Elevation bottom of well 86.64 ft.
- 7. Total vertical ft of water in well (#3-#5) or (#4-#6) 7.20 ft.
- 8. Volume of water in well (0.163 gal/ft for a 2" ID well) 1.17 gal.
- 9. Number of well volumes purged 3.41 #
- 10. Number of gallons purged (#8 x#9) 4.00 gal.

Temp. of sample (F) Field:           

Spec. Cond. (uohms) - Field:           

pH (units) - Field:           

Sample Field Filtered - Inorganics (Y/N):           

Total Dissolved Solids - Field:           

PID Reading (well opening):           

FIELD COMMENTS

Weather Conditions: windy, cool, 55°F

Specific Location of Sample: see map

Type of Sampling Point: monitoring well

Sampling Method: stainless steel bailer

Sample Appearance: very turbid

Additional Comments: slight odor

Sampling Team: Andrew Fetterolf

**APPENDIX D**

**SOIL AND GROUNDWATER SAMPLING PROTOCOL**

## SOIL SAMPLING PROTOCOL - ENCORES

### TO BE USED WHEN SAMPLING L.U.S.T. SITE EXCAVATIONS

#### 1. Sampling Methodology & Decontamination Procedures

- A. All sampling equipment to be used will be decontaminated using an alconox wash and distilled water rinse prior to and between samples.
- B. Soil samples will be taken from excavation extents using a 5-gram Encore (or equivalent) sampling device. The encore sampling device will be inserted into the soil as per the manufacturers directions, until completely full so as to take a sample of undisturbed material. The sample will be immediately capped with the manufacturer provided cap. Three 5-gram Encore samplers will be collected per sample.
- C. The sample will then be labeled, and placed into the zip-lock type bag that the manufacturer has provided with the Encore sampling device, and then placed on the chain of custody.

Representative grab samples will be collected along excavation sidewalls at a minimum of one sample per twenty feet of sidewall. When sidewall lengths exceed twenty feet, additional sidewall representative samples will be collected. Sidewall samples will be collected from an area parallel to the lower one-third of the tank.

Representative sampling of the excavation floor will require a minimum of two grab samples to be collected in areas representing the tank invert ends. If excavation floor extents exceed 400 square feet, additional representative samples will be collected at a minimum of one sample per additional 400 square feet.

If a release has occurred along product distribution lines, representative grab samples will be collected from below areas where distribution lines were previously located. These samples will be collected at twenty foot intervals.

#### 2. Sample Storage and Transport

- A. Samples will be immediately placed on ice in an insulated cooler and chilled to 4 Celsius. Samples will be transported on ice to an IEPA certified laboratory as soon as possible.
- B. A chain of custody record will be kept for all laboratory analyzed samples.

## GROUNDWATER SAMPLING PROTOCOL

To be used when sampling groundwater monitoring wells for IEPA approved investigations.

### 1. Sampling Methodology - Bailer Method

- A. Verification will be made that all sampling equipment to include bailers, buckets, chords, water level meters, have been properly decontaminated prior to sampling initiation.
- B. All equipment will be decontaminated in accordance with the following protocol:
  - 1.) Bailers will be decontaminated between samples using Alconox wash, a 30% methanol/distilled water rinse, and a final triple rinse with distilled water.
  - 2.) Water level probes and associated equipment will be decontaminated between readings using an Alconox wash and distilled water rinse.
  - 3.) A new section of line will be used for bailing and sampling each individual well.
- C. A record of the following will be made at the time of well sampling:
  - 1.) Depth to water from top of well casing.
  - 2.) Total well depth from top of well casing.
  - 3.) Total vertical feet of water in well.
  - 4.) Number of well volumes purged.
  - 5.) Number of gallons purged.
  - 6.) Sampling methods.
  - 7.) Sample appearance.
- D. Wells will be purged and sampled using the following method:

The total vertical feet of water in the 2" ID monitor well will be multiplied by 0.163 gal./ft. in order to determine the total volume of water in the well. A total of three well volumes will be purged from the well. Groundwater samples will then be withdrawn via a stainless steel bailer and collected in 40 milliliter, properly labeled vials. The samples will be immediately placed on ice for temporary storage until the samples can be transported to an IEPA certified laboratory.

## SOIL SAMPLING PROTOCOL

### 1. Sampling Methodology - Shelby Tube Samples

- A. All sampling equipment to be used will be cleaned and decontaminated using deionized water prior to and between samples.
- B. Verification will be made that all boring equipment to include augers, shelby tube samplers and associated equipment has been properly cleaned and decontaminated prior to initiating investigation.
- C. All boring and associated samplers will be decontaminated in accordance with the following schedule.
  - 1.) Augers and center plugs will be decontaminated between borings using a high pressure washer or steam cleaner.
  - 2.) Shelby tube samplers will be inspected prior to use. No samplers will be used showing indications of damage, corrosion or contamination. Samplers will not be reused or washed in the field.
- D. Shelby tube samplers will be carefully removed to minimize sample disturbance and volatilization or contamination.
- E. Plastic end caps will immediately be placed on the shelby tubes as they are removed.

### 2. Sample Storage, Handling, & Transport

- A. Shelby tube samples will be placed in a thermally insulated cooler with ice or cooler packs (Blue Ice).
- B. No sample will be allowed to remain in the possession of the engineer or laboratory for more than two weeks prior to analysis.
- C. A chain of custody record will be kept for all samples taken for laboratory analysis.
- D. No samples will be removed from the Shelby tubes except by the laboratory performing analysis.

**SOIL SAMPLING PROTOCOL - ENCORES**  
**For Subsurface Investigations**

1. Sampling Methodology - Split Spoon Sampling

- A. All sampling equipment to be used will be cleaned and decontaminated using deionized water prior to and between samples.
- B. Verification will be made that all boring equipment to include augers, split spoon samplers and associated equipment has been properly cleaned and decontaminated prior to initiating investigation.
- C. All boring and associated samplers will be decontaminated in accordance with the following schedule.
  - 1.) Augers and center plugs will be decontaminated between borings using a high pressure washer or steam cleaner.
  - 2.) Split Spoon Samplers will be decontaminated between samples using a warm water Alconox wash and triple rinsing.
- D. Samples representative of the interval retrieved will be taken from the split spoon using a 5-gram Encore (or equivalent) sampling device. The encore sampling device will be inserted into the soil as per the manufacturers directions, until completely full so as to take a sample of undisturbed material. The sample will be immediately capped with the manufacturer provided cap. Three 5-gram Encore samplers will be collected per sample.
- E. The sample will then be labeled, and placed into the zip-lock type bag that the manufacturer has provided with the Encore sampling device, and then placed on the chain of custody.
- F. A log of all borings will be recorded during sampling. The logs will include data regarding soil types and depths, anomalies, odor, HNU readings, and moisture contents.

2. Sample Storage, Handling and Transport

- A. Samples for analysis will be immediately cooled using a thermally insulated cooler and ice. The samples will be transported, on ice, as soon as possible, to the laboratory or to the engineering office cooler to await transport to the laboratory.
- B. The sample will be prepared within 48 hours (the allowable hold time) of sample collection by the laboratory, two with methanol and one with sodium bisulfate.
- C. A chain of custody record will be kept for all samples taken for laboratory analysis.

## SOIL SAMPLING PROTOCOL - ENCORES

To be used when sampling L.U.S.T. site excavations for IEPA closure.

1. Sampling Methodology
  - A. All sampling equipment to be used will be cleaned and decontaminated using deionized water prior to and between samples.
  - B. Soil samples will be taken from excavation extents using a 5-gram Encore (or equivalent) sampling device. The encore sampling device will be inserted into the soil as per the manufacturers directions, until completely full so as to take a sample of undisturbed material. The sample will be immediately capped with the manufacturer provided cap. Three 5-gram Encore samplers will be collected per sample.
  - C. The sample will then be labeled, and placed into the zip-lock type bag that the manufacturer has provided with the Encore sampling device, and then placed on the chain of custody.
2. Sample Storage and Transport
  - A. Samples for analysis will be immediately cooled using a thermally insulated cooler and ice. The samples will be transported, on ice, as soon as possible, to the laboratory or to the engineering office cooler to await transport to the laboratory.
  - B. The sample will be prepared within 48 hours (the allowable hold time) of sample collection by the laboratory, two with methanol and one with sodium bi-sulfate.
  - C. A chain of custody record will be kept for all samples taken for laboratory analysis.
3. Samples will be taken from the excavation extents and floor at the following intervals.
  - A. A minimum of one sample per twenty feet for sidewall extents. When lengths of extent exceed twenty feet, samples will be taken at equally spaced intervals, not to exceed twenty feet.
  - B. Samples will be taken at a height relating to the projection of the lower one third of the former under ground storage tanks onto the sidewall extents. Samples will be taken at a distance relating to one-third the total excavation height from the floor if tank elevations are unknown.

**APPENDIX E**

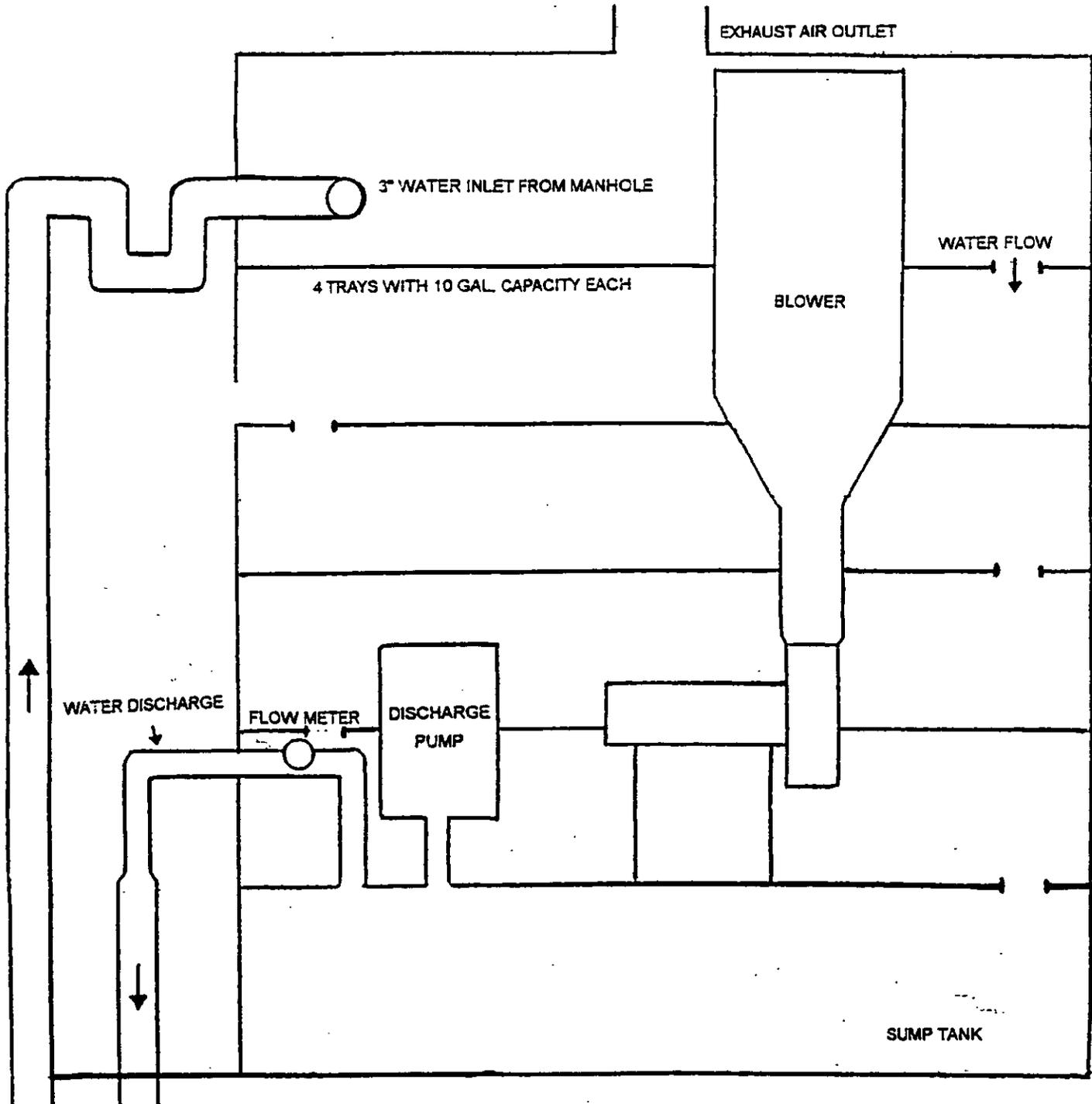
**LIST OF REPORTS PREVIOUSLY SUBMITTED TO THE IEPA**

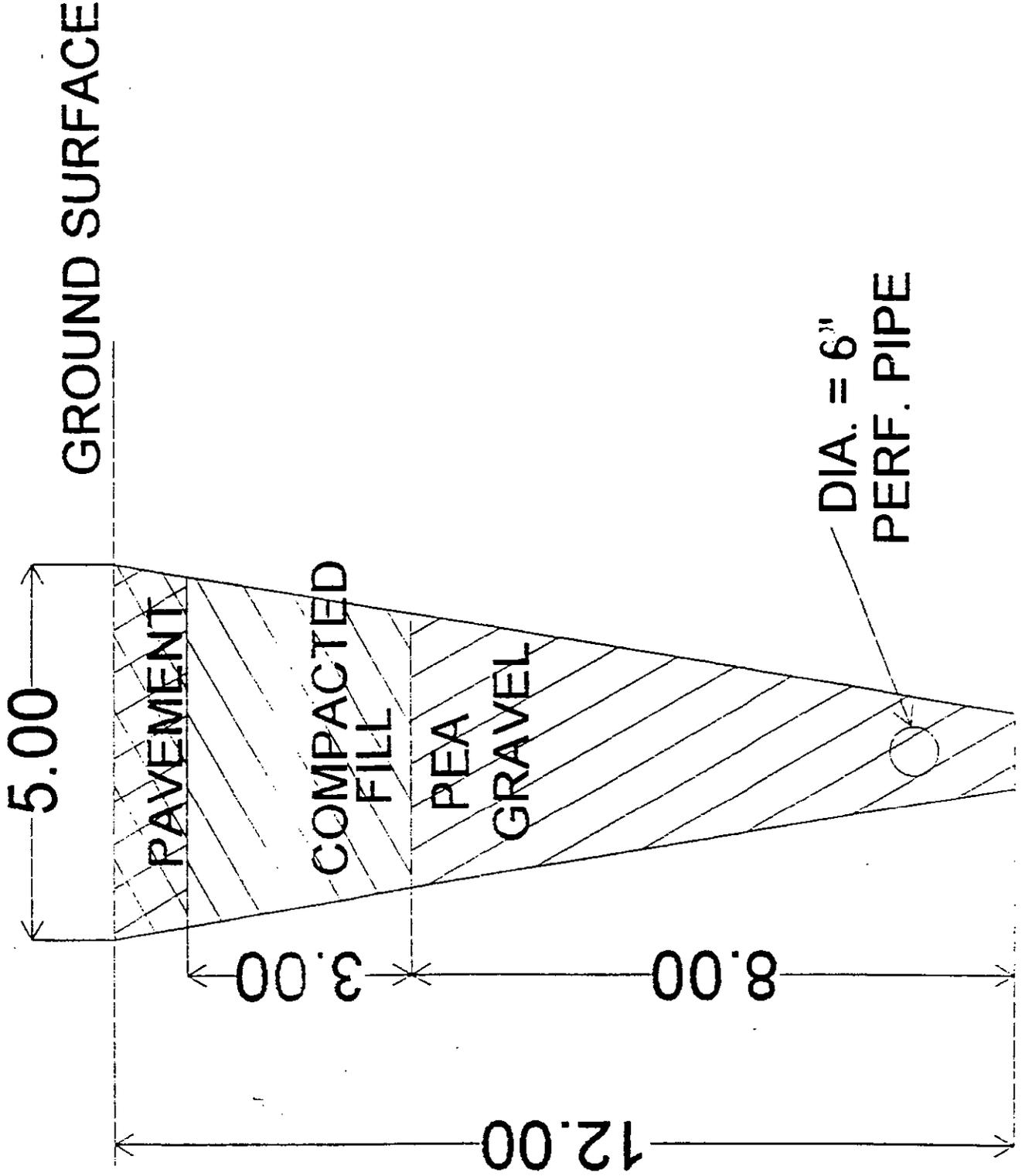
981987	1790455007	Warsaw, Howard	Site Classification Work Plan Budget	10/20/99	2/17/00	AOL	11/3/99
981987	1790455007	Warsaw, Howard	Site Classification Work Plan	10/20/99	2/17/00	AOL	11/3/99
981987	1790455007	Warsaw, Howard	Site Classification Completion Report	7/14/00	11/11/00	APR	10/20/00
981987	1790455007	Warsaw, Howard	High Priority Corrective Action Plan Budget	12/8/00	4/7/01	APR	3/30/01
981987	1790455007	Warsaw, Howard	High Priority Corrective Action Plan	12/8/00	4/7/01	APR	3/30/01

981987	1790455007	Warsaw, Howard Free Product Report received	9/10/99
981987	1790455007	Warsaw, Howard 45 Day Report Addendum received	9/10/99
981987	1790455007	Warsaw, Howard Review Letter sent	10/4/99
981987	1790455007	Warsaw, Howard Early Action Extension Approval Letter sent	4/22/99
981987	1790455007	Warsaw, Howard Early Action Extension Request received	3/24/99
981987	1790455007	Warsaw, Howard Early Action Extension Approval Letter sent	5/27/99
981987	1790455007	Warsaw, Howard Early Action Extension Request received	5/12/99
981987	1790455007	Warsaw, Howard Early Action Extension Request received	10/9/98
981987	1790455007	Warsaw, Howard Review Letter sent	11/4/98
981987	1790455007	Warsaw, Howard 45 Day Report received	10/9/98
981987	1790455007	Warsaw, Howard 20 Day Report received	9/8/98
981987	1790455007	Warsaw, Howard Notice of Release Letter sent	8/20/98

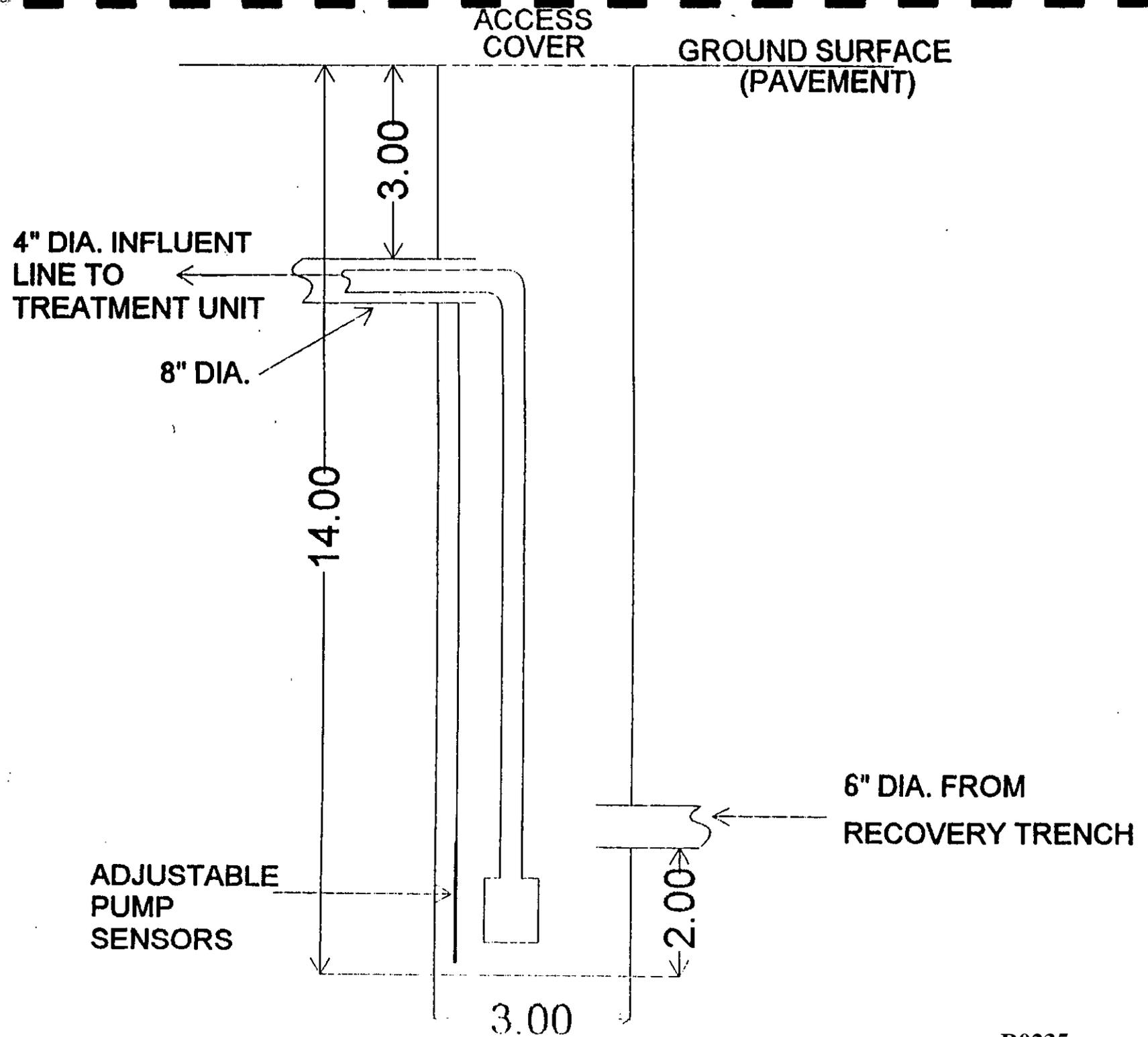
**APPENDIX F**  
**SYSTEM SPECIFICATIONS**

# TREATMENT UNIT FLOW DIAGRAM





CROSS SECTION OF RECOVERY TRENCH



INFLUENT VS. EFFLUENT EFFICIENCY  
FOR A SIMILAR GROUNDWATER TREATMENT SYSTEM  
BEING OPERATED BY MIDWEST ENVIRONMENTAL

The appearance of the    images

following this page is due to

**Poor Quality Original Documents**

**and not the scanning or filming processes.**

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# Analytical Services

CLIENT: MIDWEST ENVIRONMENTAL  
 PROJECT: ILLICO-STERLING  
 PROJECT #: MWE 010  
 SAMPLED BY: CLIENT  
 ANALYST: S. JOHNSON/J. CORCORAN  
 INSTRUMENT: GC/MS & VARIAN AA

DATE SAMPLED: 3/21/93  
 DATE RECEIVED: 3/26/93  
 DATE FINISHED: 4/7/93  
 REPORT DATE: 4/7/93  
 METHOD: EPA 8260/7420

SAMPLE I.D.	TREAT. INF.	TREAT. EFF.	PSC
LAB I.D.	S9303282	S9303283	LIMITS
SAMPLE DESCRIPTION:	LIQUID	LIQUID	
UNIT VALUES:	ug/L	ug/L	ug/L

BETX			
Benzene	2423	<2	<100
Toluene	2043	<2	<100
Ethylbenzene	4	<2	<100
Total Xylene	1653	<5	<100
Hexane		<5	<100
Total Lead		<7.5	<200

SIGNED: \_\_\_\_\_

*Joseph M. Bart*  
 JOSEPH M. BART

Laboratory Manager

# **Remedial Systems, Inc.**

---

56 Leonard Street  
Foxboro, MA 02035-2929  
(508) 543-1512  
FAX (508) 543-7485

RTS Series  
Low Profile  
Air Strippers

Operation, Installation  
And Maintenance Manual

R0239

## INTRODUCTION

Remedial Systems' Air Strippers and Tray Strippers are the most economical process equipment for removing dissolved volatile organic chemicals (VOC's) from water. Air stripping and tray stripping is a simple, easy to automate process.

With a tray stripper, water is introduced into the uppermost tray of the unit through a nozzle located in the cover. A tray consists of an aluminum sheet perforated with a pattern of small diameter holes. The water flows across the tray and builds up as a layer. The water is kept from falling through the tray holes by the air pressure that is introduced by a blower at the bottom of the unit. Not only does the air maintain the water on the tray, but also acts as the vehicle by which VOC's are removed from the water. In this way, the VOC's pass from the liquid phase into the gas phase.

Once the water has made its way across a tray, it flows down a transfer tube onto the tray below. The water continues this path through a series of trays until it reaches the sump of the tray stripper, where it is discharged.

Effluent air is emitted from the top of the stripper into the atmosphere unless air purification is desired, in which case vapor phase carbon, a catalytic incinerator, etc. can be supplied.

The size of the tray stripper and its components is determined by the contaminant concentration and properties, water flow rate, and desired removal efficiency.

## INSPECTION AND OFF-LOADING

Inspect the tray stripper upon delivery for any damage which may have occurred in shipment. Areas susceptible to damage may be the air inlet, siphon drain, hold down brackets, or corners of the trays. If the tray stripper is damaged, Remedial Systems, Inc. (RSI) should be notified immediately. The off loading personnel should note the extent of damage and sign and date the bill of lading. A claim should be filed with the delivering freight carrier.

The tray stripper must be carefully removed from the truck so the unit is not damaged. Components for the tray stripper are often supplied in a separate carton.

## SYSTEM INSTALLATION

When placing the tray stripper for system operation, be sure it is installed on a foundation which provides adequate support under full load operating conditions. Even if a mounting skid is used, a concrete pad or other properly designed structure must be installed as a foundation. The length and width of this pad are dependent upon the footprint of the tray stripper and other components in the treatment system. Thickness of the concrete pad depends on local soil and frost conditions. A local qualified civil engineer should be contacted to determine these dimensions.

Generally, a tray stripper is shipped skid-mounted and preassembled, with any major system components, such as the blower, already in place. In such case, it is best to use a fork lift truck to off-load and place the equipment.

If the unit is shipped to be assembled in the field, it is possible for two people to handle the various pieces without the use of heavy lifting equipment.

The sump of the tray stripper must be properly leveled in its final mounting location. This must be done to insure that the trays are as level as possible. The sump must be level to within 1/8" total from side to side in any direction. Grout underneath the sump and shim the hold down lugs as necessary to achieve this requirement.

The next step toward system start up involves the plumbing and electrical connections. Any valves and/or piping should be adequately supported and accepted piping and valve practices must be followed for proper system operation.

## BLOWER/INSTRUMENT INSTALLATION

The blower (Appendix D), if supplied separate for installation in the field, should be bolted to the concrete pad, mounting skid, or blower stand at a distance from the tower so a flexible duct can be used to connect the blower discharge to the stripper air inlet. Flexible duct is used so that any vibrations from the blower during operation are not transmitted to the tower and air inlet.

A properly sized flexible duct should be used in making the connection between the blower and tower. In instances where the blower discharge is a different size than the air inlet, RSI provides a transition piece so the connection can be easily made. An air damper is provided on the blower, in most cases, so the air flowrate can be adjusted to fluctuating water flowrates and misting effects can be minimized.

Once the blower has been bolted in place and it is connected to the stripper air inlet, it must be wired to an appropriate power and control source such as Remedial Systems' LRS-100, RSI-1000, or REMSYS-2000 Control Panel, or another adequate power and control source. Proper wire and circuit breaker sizing is essential and accepted electrical practices must be followed. A local licensed electrician must perform all connection per all applicable electrical codes.

The temperature gauge (Appendix C) should be threaded into the 1/2 inch port provided in the stripper sump. The magnehelic gauge (Appendix C) should be installed next. Using the hardware provided with this gauge, plug the high and low pressure ports located on the side of the gauge.

Thread the 3/8 nipple into the 3/8 x 1/8 elbow and screw this assembly into the 3/8 NPT port in the top of the sump. The 1/8 nipple should be facing forward. Install the 1/8 coupling into this assembly and thread the 1/8 inch fitting into the high pressure port located on the back of the gauge. Leave the low pressure port on the back of the gauge open to atmosphere. This gauge is used to measure the pressure drop through the tray stripper. It provides valuable operating data in case of problems arising due to plugging and/or tray fouling or improper water distribution. The gauge is sized according to stripper and blower characteristics. The gauge should read at least 2" of pressure for each tray in the system with the blower operating and water flowing through the system.

(See Appendix C for instrumentation installation.)

Consult the RSI Control Panel Manual for proper control panel installation and wiring.

Connect the contaminated water source line the stripper water inlet or delivery pump inlet port.

Connect the sump drain port or discharge pump port to an effluent water line.

## SYSTEM START-UP

Now that all connections have been made, the tray stripper and other components in the recovery and treatment process may be started.

During initial start-up, as well as during each and every monitoring period, water temperature, differential pressure reading, and influent water flowrate should be checked and their status noted. A general overview of the entire system should also be noted. Throughout the monitoring period, influent and effluent water samples, in addition to those items mentioned above, are extremely important in evaluating system operation.

Once all electrical and mechanical connections have been completed and verified, the system may be started using the following procedure. Refer to the control panel manual as necessary.

- A.) Verify that all electrical inputs and shutdown indicators are as required per the appropriate control panel manual.
- B.) Close the valve on the inlet water line or pump.
- C.) Turn the power on to the system control panel. Check that all the control functions are properly indicated.
- D.) Start the system blower.
- E.) Start the water delivery pump or pumps. Now open the valve on the influent water line slowly until the desired water flow rate is reached.
- F.) Run the system for 1,2 minutes then turn the inlet water off. After 1 minute, turn off the blower. This procedure will insure that the water down tube

in the sump is immersed in water, creating a seal against air escaping up the down tube. The system is now ready for continuous process operation.

- G.) The system may now be turned on by first turning on the blower, followed by the influent water.

#### MAINTENANCE

The tray stripper is easily maintained, in the event sand, silt, or solids have been pumped into the unit or scaling or biological growths have developed internally. The unit is easily disassembled through the following procedure.

- A.) Disconnecting the influent pipe from the top of the unit.
- B.) Unsnap each of the clips which hold one tray to another.
- C.) Lift off each tray, one at a time, from the unit.

The inside of the unit can be now quickly cleaned through the use of pressure hosing of the individual trays and sump.

## OPTIONAL ACCESSORIES

RSI can provide optional accessories with its tray strippers. RSI level switches and blower fail safe switches are intrinsically safe and require no outside source of power other than the signal voltage provided by the control panel. Likewise, no special wiring in hazardous areas is required. Installation of some of the most common accessories is discussed below.

### 1. Mist Eliminator

Although a blower air damper is provided to minimize the effect of misting, this sometimes must be controlled by an RSI Mist Eliminator. This multilayer polypropylene pad is installed in the tower above the spray nozzle assembly on the support brackets provided.

### 2. Blower Fail Safe Switch

RSI Control Panels can provide blower fail safe circuitry that will sense loss of air flow and in turn will shut down influent water supply pumps. The Blower Fail Safe Switch is connected to the port on the front side of the air inlet. Details on hook-up are included with the switch (Appendix C) and in the RSI Control Panel Operator's Manual.

### 3. Emergency High Level Switch

This is used to shut down any influent water supply pumps if the tower sump backs up with water due to effluent piping or infiltration gallery plugging. This switch is threaded into the 2 inch port provided in the tower at an elevation just below the air inlet. A 2x1 PVC bushing is used to install the switch in the coupling. Details are provided

with the switch (Appendix C) and with the RSI Control Panel Manual.

4. Transfer Pump w/ Level Controls

a. Transfer Pump

A transfer pump may be used to move the air stripper effluent water to another point in the treatment process or to an end discharge point which is either upgradient or too far away for gravity drainage. Proper piping and valving procedures must be followed. Details on installation are included with the pump and in the RSI Control Panel Manual.

b. Level Controls

Additional level controls can be provided for proper pump operation. The switches are similar to the Emergency High Level Switch previously described. The Hi Level Switch is installed in the port located just below the emergency high port and the Lo Level Switch is installed in the port just above the drain. Exact installation instructions are provided with the switches (Appendix C) and in the RSI Control Panel Manual.

5. Mounting Skid

Installation of the air stripping system on a mounting skid is the same as previously discussed. Please note that for stability and safety reasons, a mounting skid should be anchored to another type of support, such as a concrete pad.

## TROUBLE SHOOTING

As previously stated, air stripping is a simple and economical process. During the operation of such a system, however, certain situations may arise which need to be addressed. Some of the more common occurrences are discussed below. It is important to notify RSI immediately when any of these situations occur so that they can be properly addressed.

### 1. Low Tower Efficiency

It is unlikely that the actual efficiency of the air stripping tower will be less than the designed efficiency. However, if this does occur, the most likely cause is that the system is being operated outside of its design range. If the water influent rate is to be changed to a figure other than the system design point, contact Remedial System for advice on adjusting air flow in order to return system to proper operation.

### 2. Blower Motor Overheating

If the blower motor appears to be overheating, the condition of the bearings should be checked. Noisy bearings may need to be replaced. The voltage supply should be within +/- 10% of the rated voltage. Also, the air inlet should be checked for any blockage.

**NOTE:** Provided with each RSI Air Stripping System is a copy of this installation manual, as well as blower data and a drawing of the tower designed for your specific site. Should you have any questions regarding your air stripper do not hesitate to contact the factory in Foxboro, Massachusetts. Phone: 508-543-1512.

Your RSI air stripper will give you long term corrosion-free performance when it is handled and installed in accordance with these specifications. Failure to comply with these provisions shall invalidate the warranty (Appendix B).

The Purchaser is fully responsible for proper inspection, handling and installation, and shall insure that good workmanship practices and construction procedures are followed during the handling and installation of the air stripper, regardless of the inclusions or omissions of any applicable suggestion in these instruction. The Purchaser also accepts all liability for loss or damage to the air strippers or contents resulting from improper handling and/or installation. Unknown situations or conditions not covered in this specification must be the responsibility of the Purchaser. The presence of a Company Representative at the site does not relieve the Purchaser of his responsibility for proper handling and installation.

#### INSPECTION

Inspect your air stripper immediately upon receipt. Claims for any damage which might have occurred in transit should be filed promptly with the delivering carrier.

RSI air strippers are skidded or blocked for shipment in accordance with the carrier's rules and are thoroughly inspected prior to shipment. Nevertheless, damage can occur in transit. The air stripper must be inspected both inside and outside.

Inspection should include a complete check for:

- (a) External surface damage such as: cuts, penetrations, delaminations, fractured areas, etc.
- (b) Nozzle damage such as: broken nozzles or flanges, gouged flange faces, etc.
- (c) Internal surface damage such as: crazing, white areas with star-shaped surface cracks, etc.

#### HANDLING

RSI air strippers are designed to withstand normal handling procedures; and because of their relatively light weight they are easy to handle. Here are some normal precautions to follow to avoid damage:

1. Proper rigging practices should be observed at all times. Hoisting equipment operators should attach a guide line to prevent the air stripper from swinging out of control.
2. Do not drop the air stripper or allow it to fall hard in the process of inverting, turning, or moving.
3. Do not slide the air stripper.
4. In working around the air stripper, care should be taken to prevent tools from striking it or being dropped inside it. Ladders used inside or outside in contact with the airstripper must be wooden or have rubber protection on both ends and not be permitted to scratch the surface.
5. Under no conditions should chains or cables be put around the air stripper.

## INSTALLATION

Air strippers must be installed on a foundation which provides firm and continuous support over the entire bottom area. The foundation must have sufficient strength to support the weight of the air stripper under operating conditions without any sagging, and it must provide even, restricted settling in local soil conditions. A local qualified civil engineer should be consulted for the foundation design and construction.

The support foundation can be either a properly designed reinforced concrete pad; or, if elevated mounting is required, a properly designed structure with a sufficiently heavy platform to meet the preceding requirements. Aluminum air strippers need not be grouted, although the absence of any kind of insulation between foundation and air stripper puts a high degree of importance on the pad being smooth and clean. Should the foundation be rough, 1/2" thick sheets of 2# density polyurethane foam or 15# roofing felt is recommended as insulation.

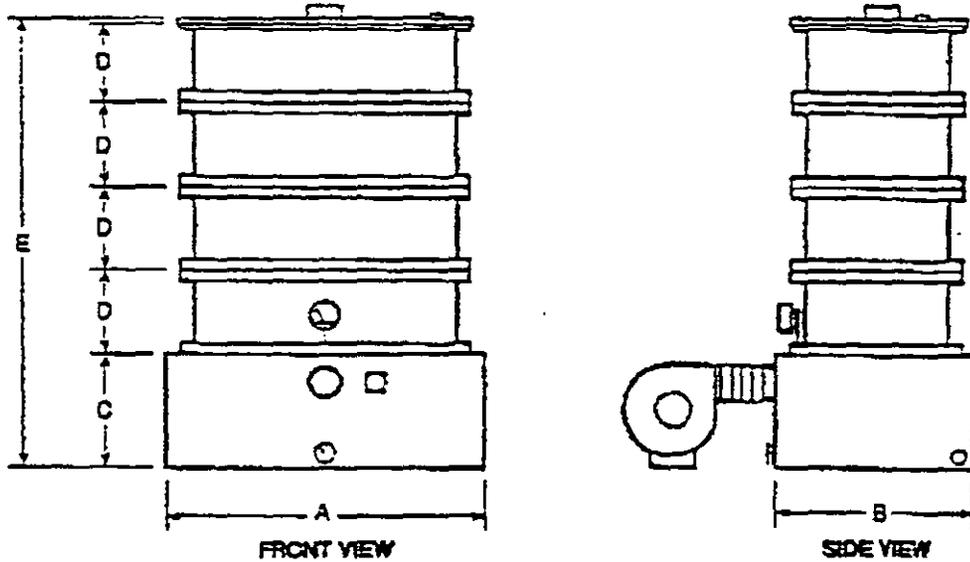
All tie down lugs must be used to secure the air stripper to its pad. Shim under the lugs whenever there is any space beneath them before tightening down. Valves and piping attached to the air stripper nozzles shall be independently supported. Follow accepted good piping practices.

APPENDIX 'A

AIR STRIPPER DRAWING

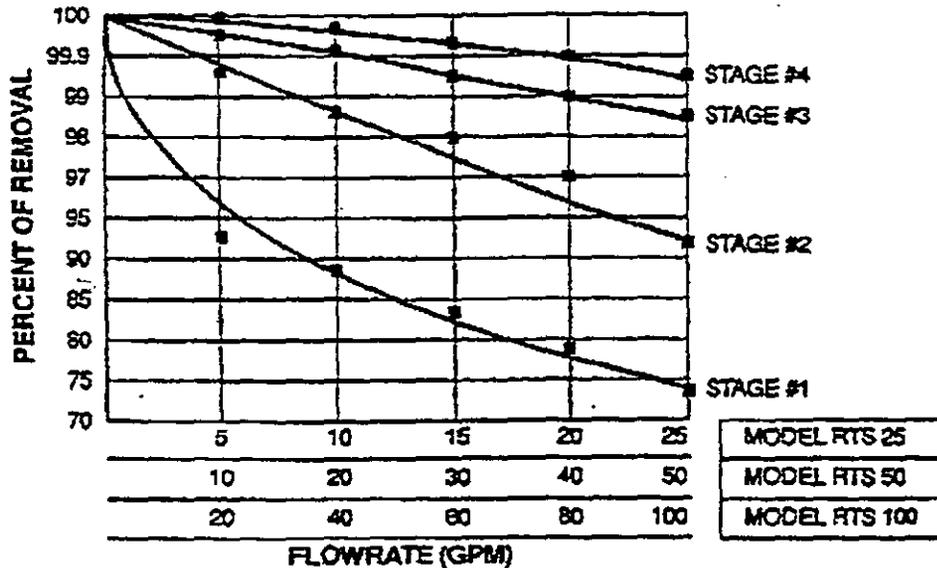
# Low Profile Air Stripper

## Specifications and Dimensions



MODEL	GPM	CFM	A"	B"	C"	D"	E"	SHIP WT.	OPER. WT.	H <sub>2</sub> O IN (GPT)	H <sub>2</sub> O OUT (GPT)	AIR IN (PVC)	AIR OUT (PVC)
RTS-25	0-25	600	44	32	18	12	68	250	950	1.5	2.5	4	6
RTS-50	0-50	1200	86	36	18	12	68	500	2200	2	3	8	8
RTS-100	0-100	1600	140	60	24	12	68	1000	4000	4	6	8	12

### BTEX REMOVAL



**Remedial Systems, Inc.**

## Low Profile Air Stripper



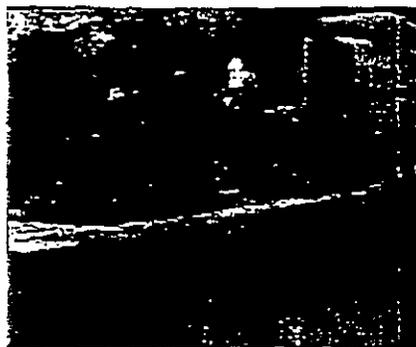
Skid-Mounted Low Profile Air Stripper  
(Under 6 feet high).

Remedial Systems, Inc., Low Profile Air Stripper Systems eliminate the need for tall air stripper towers when removing volatile organic chemicals (VOCs) and Radon from contaminated water. Less than 6 feet tall, these skid-mounted or free-standing systems can economically treat a wide variety of commonly air stripped contaminants. Other VOCs that are difficult to strip and usually require use of costly carbon adsorption, biological or other processes can also be removed.

The Low Profile Air Stripper System overcomes some of the most often cited problems associated with conventional stripper towers and treatment processes. The principle advantages of using the Low Profile Systems are:

- **Low Cost.** Our pre-engineered, modular, off-the-shelf design results in a system cost much lower than conventional stripper towers.
- **Aesthetically unobtrusive.** Our compact units fit behind utility sheds, gas stations or stockade fences.
- **Non-fouling.** No packing media to get fouled by iron and calcium precipitates. Vigorous turbulence is created by our flow pattern design that washes off any scale that might attempt to adhere to any inner surfaces.
- **Easy to install.** The Model RTS-25 (25 gpm) can be assembled and disassembled by one person with no tools or heavy construction equipment such as cranes, cherry pickers or back-hoes. The Low Profile design does not require guy wires or additional support for wind loading.
- **Easy to Clean.** The system cleans quickly with pressure hosing of interior surfaces following disassembly of compartments. Hosing will remove sand, silt, internal biological growths, and solids that may have been pumped into the unit.
- **Capable of treating VOCs that are difficult to air strip.** The RSI Low Profile Air Stripper design makes possible low cost stripping of contaminants such as MTBE, diesel components and ketones with high removal rates exceeding 99.0%.

Vapor emissions from air stripping equipment must often be treated to remove the vaporized hydrocarbons. Remedial Systems' Low Profile Air Strippers can be equipped with an RSI Thermal Oxidizer, Catalytic Oxidizer or Vapor Phase Carbon Adsorber to destroy or capture the hydrocarbon emissions. When carbon adsorption is chosen, but disposal of spent carbon is either too costly or objectionable, Remedial Systems can supply its adsorbers with an Integral Carbon Regeneration Module, allowing the system operator to regenerate the carbon media on-site.



Complete Skid Mounted, preassembled,  
factory-tested Remediation System including  
Low Profile Air Stripper.

Remedial Systems, Inc., provides complete, fully automated groundwater remediation and hydrocarbon recovery systems. After receipt of design parameters from your contamination assessment survey, we will design, size and manufacture a fully integrated remediation system for you or your client.

Our staff of professional engineers will also supply all necessary drawings, calculations and submittal documentation that you may need.

APPENDIX B

WARRANTY

# Remedial Systems, Inc.

56 Leonard  
Foxboro, MA 0203  
(508) 54  
FAX (508) 54

## WARRANTY CONDITIONS

This warranty is a LIMITED Warranty; anything in the warranty notwithstanding. Implied warranties for particular purpose and merchantability shall be limited to the duration of the express warranty. The manufacturer expressly disclaims and excludes any liability of consequential or incidental damages for breach of any express or implied warranty.

Remedial System's equipment is warranted as to workmanship, material, and performance when properly installed, used, and cared for. Should any part or parts prove defective within twelve (12) months from date of purchase, it will be replaced F.O.B. destination without charge, provided the part (or parts) is returned transportation charges prepaid. Exception to this warranty will be hoses and pump seals; these items will be subject to the same warranty except for a period of six (6) months from date of purchase.

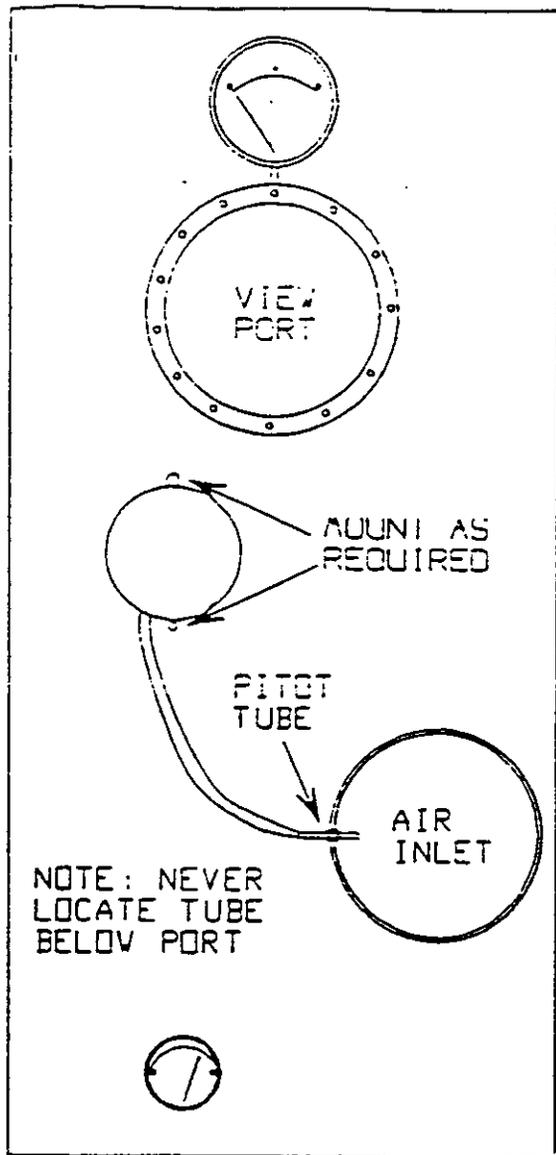
Remedial System's equipment is warranted as to workmanship, material and performance when properly installed, used, and cared for, provided that the original design criteria represent actual field data at the time of operation.

No allowance will be made for labor, transportation, or other charges incurred in the replacement or repair of defective parts by the customer. This warranty does not apply when damage is caused by sand or abrasive materials pumped with the fluids, lightning, improper voltage supply, careless handling, improper installation, improper well design, stray electric interference or due to substances or factors that were unknown to Remedial Systems at the time of purchase. Buyer shall have no claim and no product or part shall be deemed defective by reason of failure to resist erosive or corrosive action nor for problems resulting from buildup of material within the equipment.

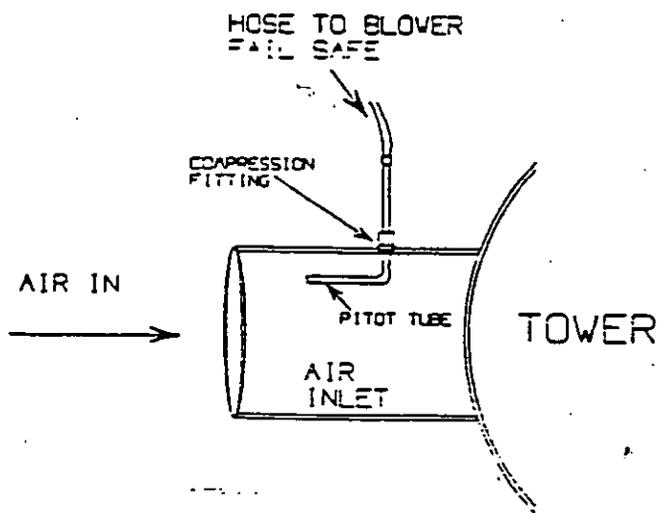
This warranty applies only to seller's equipment, under use and service in accordance with the seller's written instructions, recommendations and ratings for installation, operating and maintenance and service. All claims for defective products, parts or work under this warranty must be made in writing immediately upon discovery and in any event within one year of purchase.

APPENDIX C

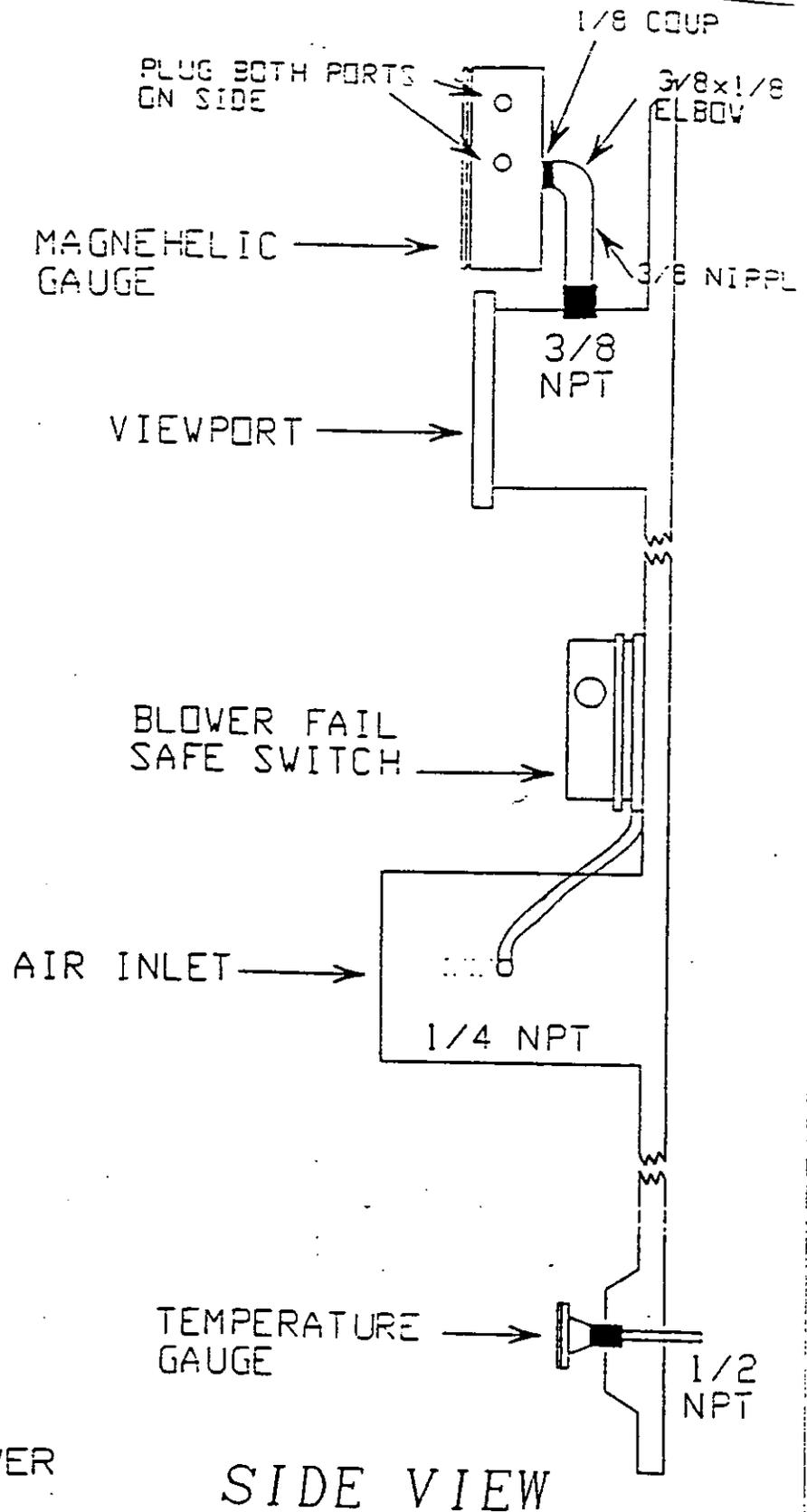
INSTRUMENTATION  
*and* INTERNALS



FRONT VIEW



TOP VIEW



SIDE VIEW

REMEDIAL SYSTEMS INC.			
55 LEONARD STREET FOXBORO, MA 02235			
(508) 543-1512			
DRAWING NAME: AIR STRIPPER INSTRUMENTATION			
PROJ: AIR STRIPPER MANUAL			
DRN BY: MLV	DATE: 01/28/92	REV	VER
DRAWING FILE NAME: INSTRU		SCALE: NTS	

# INSTRUCTIONS FOR THE SELECTION, INSTALLATION AND USE OF THE TYPE 91 SERIES ADAPTER SET

The Type 91 series adapter sets were designed to provide a simple means of installing a Bi-metal Dial Thermometer into an existing Industrial Glass Thermometer well.

The adapter set consists of:

1. A metal liner and spring assembly.
2. An adapter nut.
3. A small supply of heat conducting medium.

## METHOD OF SELECTING THE SET

The adapter sets are available in four different sizes, to cover various depths of wells. The "Selection Chart" shows the adapter set number and the Bi-metal Dial Thermometer stem length to use for any well depth from 3 1/8" up to 25 1/8".

To select the proper adapter set and Bi-metal Dial Thermometer stem length, measure first the well depth by inserting a pencil, or any small diameter rod or stiff wire until it reaches the bottom. (See Figure 1). Be sure the rod does not hang up on any shoulder inside the well. Using your thumb as an index, withdraw the rod and measure the distance from the end of the rod to the index point. (See Figure 2).

Then use the chart to select the adapter set and the Bi-metal Dial Thermometer stem length to fit the well.

Note that one stem length of thermometer covers several different well depths by using the correct adapter set.

For example, a thermometer with a 9" long stem can be used for all well depths between 7 1/8" and 10 1/8", by choosing the correct adapter set.

The liner is tapped with a 1/8" — 18 machine thread so it can be removed from the well if desired.

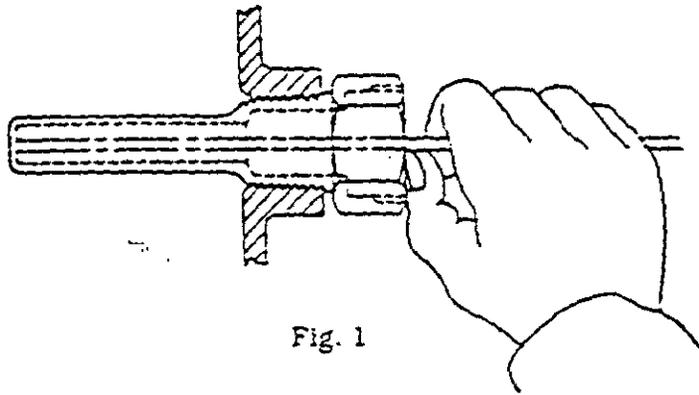


Fig. 1

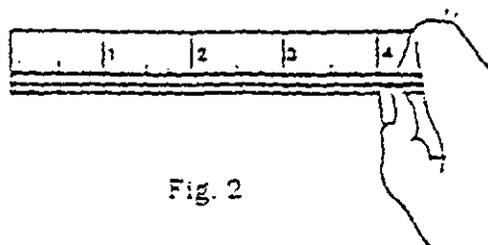


Fig. 2

## INSTALLATION

Assemble the adapter nut into the well securely. (See Figure 3).

Before installing the Bi-metal Dial into the adapter and well, coat the lower the thermometer stem with a layer of heat conducting medium. This will improve the temperature of the thermometer.

The metal liner is then slipped over the thermometer stem and a coating of heat conducting medium is applied to the outside wall of the well.

The thermometer and liner are then the well and tightened in position. Do not turn more than is necessary to prevent the thermometer turning.

Where service temperatures exceed the heat conducting medium may smoke when heated to a high temperature. This is characteristic in the heat conducting medium, vapor leaving the dry solids behind. This should be taken as an alarm. The dry solids will act equally well as a heat conducting medium for temperatures up to 1000°F.

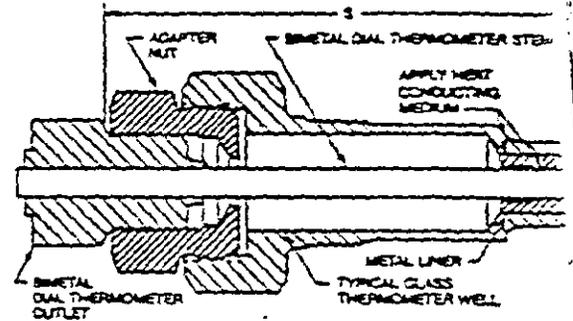


Fig. 3

## SELECTION CHART

Well Depth (inches)	Adapter Set	Thermometer Stem Length (inches)	Thermometer Model
3 1/8"	10	38	91B 18
4 1/8"	11	39	91A
5 1/8"	12	40	91D
6 1/8"	13	41	91C
7 1/8"	14	42	91B
8 1/8"	15	43	91A
9 1/8"	16	44	91D
10 1/8"	17	45	91C
11 1/8"	18	46	91B
12 1/8"	19	47	91A
13 1/8"	20	48	91D
14 1/8"	21	49	91C
15 1/8"	22	50	91B
16 1/8"	23	51	91A
17 1/8"	24	52	91D
18 1/8"	25	53	91C
19 1/8"	26	54	91B
20 1/8"	27	55	91A
21 1/8"	28	56	91D
22 1/8"	29	57	91C
23 1/8"	30	58	91B
24 1/8"	31	59	91A
25 1/8"	32	60	91D
26 1/8"	33	61	91C
27 1/8"	34	62	91B
28 1/8"	35	63	91A

# INSTRUCTIONS FOR THE INSTALLATION AND USE OF ASHCROFT® BI-METAL DIAL THERMOMETERS

## GENERAL

In removing the thermometer out of the packing box, handle it by the case or case outlet. Avoid handling it by the stem.

## INSTALLATION OF THERMOMETERS

The thermometer should be mounted at any convenient location where it will be subjected to the average temperature variations to be indicated.

Avoid bending the stem as this will cause misalignment of the internal parts, resulting in undue frictional errors.

To tighten the thermometer to the apparatus, use a wrench applied to the hexagon head of the threaded connection located just outside of the case.

## INSTALLATION

Locate the stem so that at least the last two inches will be subjected to the average temperature to be measured.

Exposing the stem to a temperature in excess of the highest dial reading should be avoided.

The thermometer is normally provided with a threaded connection. To tighten the thermometer to the apparatus or into the well, use an open-end wrench applied to the hexagon head of the threaded connection. Turn until reasonably tight, then tighten still further in the same manner as a pipe elbow or similar pipe fitting until the scale is in the desired position for reading. **DO NOT TIGHTEN BY TURNING THE THERMOMETER CASE. Install the thermometer so that the maximum case temperature is kept below 200° F at all times.**

When a thermometer is equipped with a well, the well should be installed onto the apparatus first. The stem of the thermometer should then be coated with a heat conducting medium (a mixture of glycerine and graphite or vaseline or any other heavy lubricant may be used), after which the thermometer stem is inserted, and tightened into the well.

**CAUTION:** Bi-metal Thermometers operating below freezing must have a perfectly tight case to prevent entrance of moisture which eventually will condense and freeze inside the stem. This condition shows up as a failure of the thermometer to read accurately below 32° F or 0° C. For this reason it is important to avoid damage to the glass front, while the stem temperature is at freezing or below.

Thermometers fitted with the non-removable ring are hermetically sealed in a dry atmosphere at the factory and require no further maintenance.

**CAUTION:** Thermowells should be used on all pressurized applications, to protect the thermometer stem from corrosion or physical damage, and to facilitate removal of thermometer without disturbing the process.

## TESTING

Ashcroft Bi-metal Dial Thermometers are carefully calibrated at the factory and under most operating conditions will retain their accuracy indefinitely. However, as in the case of all instruments, it is well to make periodic checks for accuracy against known standards.

## ADJUSTMENT

If it is necessary to make an adjustment to the thermometer, proceed as follows:

On thermometers fitted with an "External Adjustment"—Use a small wrench, small screwdriver or a coin to turn the slotted hexagon head in the back of the case until the pointer indicates the proper temperature on the dial.

## MAINTENANCE OF DIAL THERMOMETERS

Aside from occasional testing, little or no maintenance is required.

Be sure that the gasketed glass cover is on the case at all times, as moisture and dirt inside the case will eventually cause the thermometer to lose its accuracy. (See caution note below).

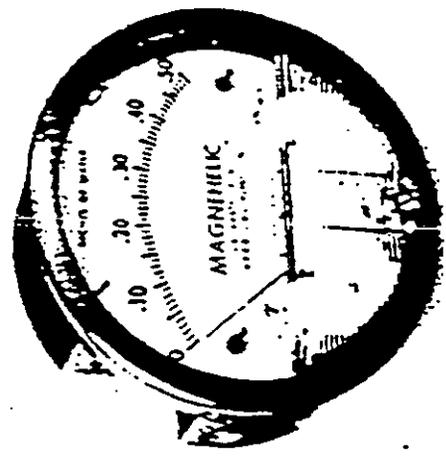
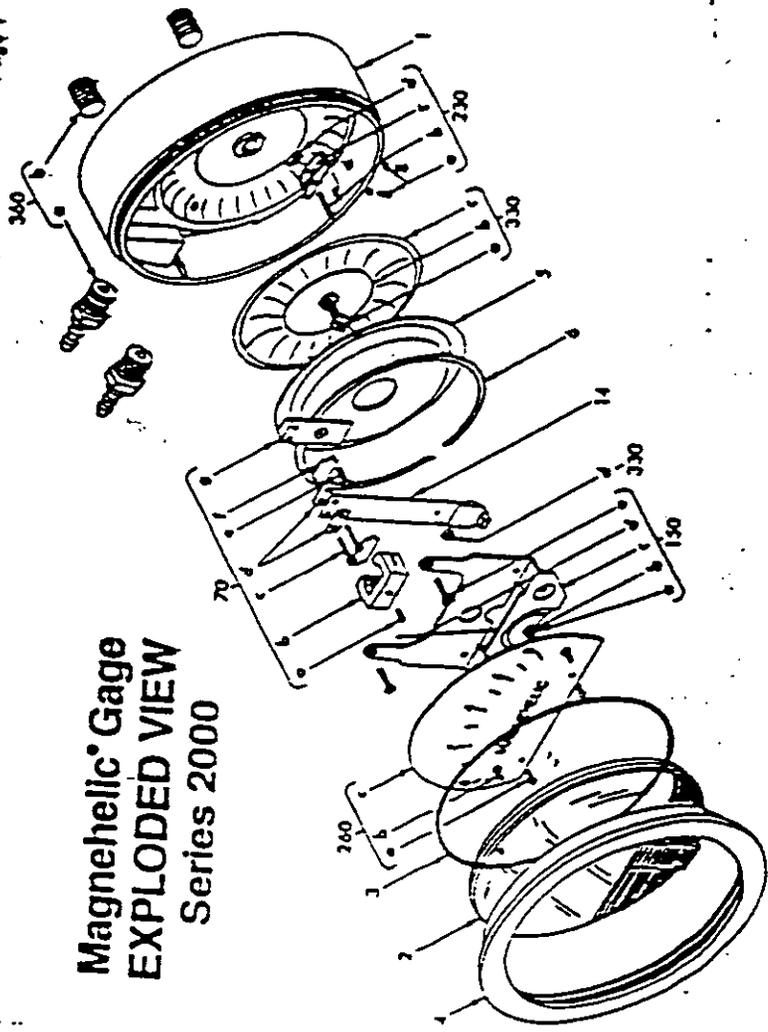
If the thermometer is used for measuring the temperature of a material that may harden and build up an insulating layer on the stem, the thermometer should be removed from the apparatus occasionally and the stem cleaned. Observe this precaution to insure the sensitivity of the instrument.



INSTRUMENT DIVISION  
DRESSER INDUSTRIES INC.  
STRATFORD, CONNECTICUT 06497

BULLETIN NO. A-2  
OPERATING INSTRUCTIONS and PARTS LIST  
**Magnehelic® Differential Pressure Gage**

**Magnehelic® Gage  
EXPLODED VIEW  
Series 2000**



**SPECIFICATIONS**

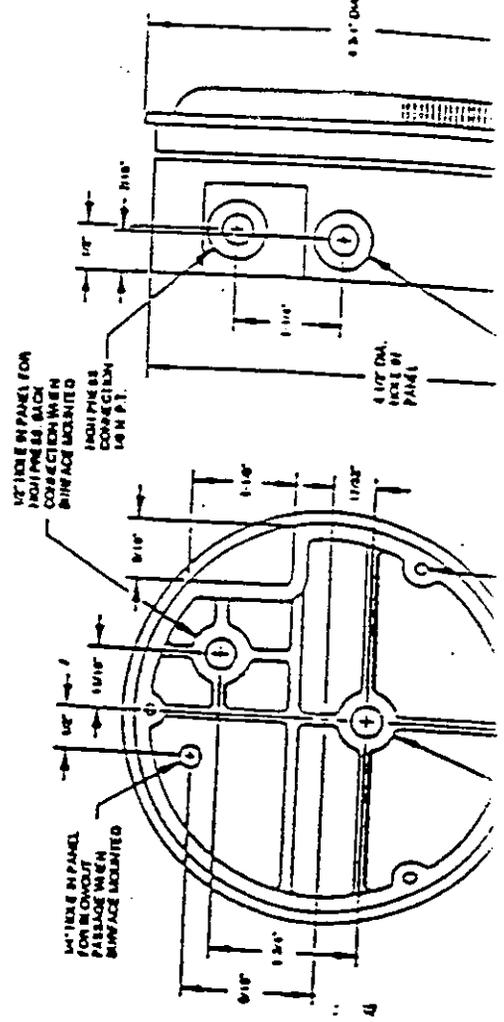
Dimensions: 4-3/4" dia. X 2-3/16" deep.  
Weight: 1 lb. 2 oz.  
Finish: Baked dark gray enamel.  
Connections: 1/8" N.P.T. high and low pressure taps, duplicated, one per side, and one per back.  
Accuracy: Plus or minus 2% of full scale, at 70°F. (Model 2000 0, 3/4, 2100 00, 4/2).  
Pressure Rating: 15 PSI.  
Ambient Temperature Range: 20° to 140°F.  
Standard gage accessories include two 1/8" N.P.T. plugs for duplicate pressure taps, two 1/8" pipe flared to miter tubing adapters, and three flush mounting adapters with screws.

**Caution:** For use with air or compatible gases only. For repeated over-ranging or high cycle rates, contact factory.

**Hydrogen Gas Precautionary Note:** The rectangular rare earth magnet used in the standard gage may not be suitable for use with hydrogen gas since a toxic and explosive gas may form. For hydrogen service, consult the factory for an alternate gage construction.

- 1. Case
- 2. Cover with zero adjust Assy.
- 3. O-ring seal
- 4. Borel
- 5. Diaphragm sealing plate
- 6. Retaining ring
- 70. Range Spring assembly
  - a. Clamp seal screw
  - b. Clamp
  - c. Mounting screws (2 req'd)
  - d. Clamping shoe (2 req'd)
  - e. Clamp plate screw
  - f. Spacer (2 req'd)
  - g. Clamp plate
- 14. Range Spring with magnet
- 150. Washbone Assembly - consists of:
  - a. Front jewel
  - b. Locking nut
  - c. Washbone
  - d. Pointer
  - e. Mounting screws (2 req'd)
  - f. Heltz assembly (not shown)
  - g. Pivots (2 req'd) (not shown)
  - h. Rear jewel (not shown)

- 230. Zero adjust assembly - consists of:
  - a. Foot screws with washers (2 req'd)
  - b. Adjust screw
  - c. Foot
  - d. Finger
- 250. Scale Assembly - consists of:
  - a. Mounting screws (2 req'd)
  - b. Bumper pointer stop (2 req'd)
  - c. Scale
- 330. Diaphragm Assembly - consists of:
  - a. Arbor press (not shown)
  - b. Linkage Assy. complete
  - c. Front plate
  - d. Diaphragm
  - e. Rear plate (not shown)
  - f. Plate washer (not shown)
  - g. Adapter - pipe plug W\* NPT to rubber tubing - (2 req'd)
  - h. Pipe plug W\* NPT - (2 req'd)
  - i. Mounting lug (3 req'd)
  - j. Long screw (3 req'd)
  - k. Short screw (3 req'd)
- 360. Mounting Hardware Kit
  - a. Adapter - pipe plug W\* NPT to rubber tubing - (2 req'd)
  - b. Mounting lug (3 req'd)
  - c. Long screw (3 req'd)
  - d. Short screw (3 req'd)

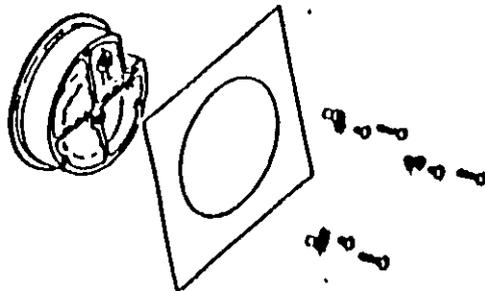


## MAGNEHELIC<sup>®</sup> INSTALLATION

Page 2

**Overpressure Protection:** Standard Magnehelic gages are rated for a maximum pressure of 15 psig and should not be used where that limit can be exceeded. Newer models employ a rubber plug on the rear which will unseat and vent the gage at approximately 25 psig. When surface mounting units with this feature, provide a vent hole, as indicated on the dimension drawing, or allow a minimum 1/8" clearance when flush mounting.

### 4. Flush Mounting



Provide a 4 3/8" dia. opening in panel. Insert gage and secure in place with No. 6-32 machine screws of appropriate length, with adaptors, Part No. 360c, firmly secured in place. To mount gage on 1 1/2" pipe, order optional A-610 pipe mounting kit.

### 5. To zero the gage after installation

Set the indicating pointer exactly on the zero mark, using the external zero adjust screw on the cover at the bottom. Note that the zero check or adjustment can only be made with the high and low pressure taps both open to atmosphere.

### Operation

**Positive Pressure:** Connect tubing from source of pressure to either of the two high pressure ports. Plug the port not used. Vent one or both low pressure ports to atmosphere.

**Negative Pressure:** Connect tubing from source of vacuum or negative pressure to either of the two low pressure ports. Plug the port not used. Vent one or both high pressure ports to atmosphere.

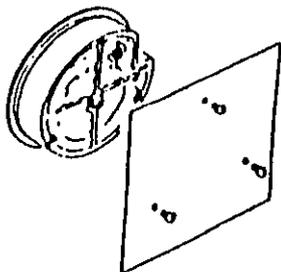
**Differential Pressure:** Connect tubing from the greater of two pressure sources to either high pressure port and the lower to either low pressure port. Plug both unused ports.

When one side of gage is vented in a dirty, dusty atmosphere, we suggest an A-331 Filter Vent Plug be installed in the open port to keep inside of gage clean.

a. For portable use or temporary installation, use 1/8" pipe thread to rubber tubing adaptor and connect to zero.

1. Select a location free from excessive vibration and where the ambient temperature will not exceed 140°F. Also, avoid direct sunlight which accelerates discoloration of the clear plastic cover. Sensing lines may be run any necessary distance. Long tubing lengths will not affect accuracy but will increase response time slightly. Do not restrict lines. If pulsating pressures or vibration cause excessive pointer oscillation, consult the factory for ways to provide additional damping.

### 3. Surface Mounting



Locate mounting holes, 120° apart on a 4-1/8" dia. circle. Use No. 6-32 machine screws of appropriate length.

## MAINTENANCE

BULLETIN A-27  
Page 3

**Maintenance:** No lubrication or periodic servicing is required. Keep case exterior and cover clean. Occasionally disconnect pressure lines to vent both sides of gage to atmosphere and re-zero. Optional vent valves, (bulletin S-101), should be used in permanent installations.

**Calibration Checks:** Select a second gage or manometer of known accuracy and in an appropriate range. Using short lengths of rubber or vinyl tubing, connect the high pressure side of the Magnehelic gage and the test gage to two legs of a tee. Very slowly apply pressure through the third leg. Allow a few seconds for pressure to equalize, fluid to drain, etc., and compare readings. If accuracy unacceptable, gage may be returned to factory for recalibration. To calibrate in the field, use the following procedure.

### Calibration:

1. With gage case, P/N 1, held firmly, loosen bezel, P/N 4 by turning counter-clockwise. To avoid damage, a canvas strap wrench or similar tool should be used.
2. Lift out plastic cover and "O" ring.
3. Remove scale screws and scale assembly. Be careful not to damage pointer.
4. The calibration is changed by moving the clamp, P/N, 70-b. Loosen the clamp screw(s) and move slightly toward the helix if gage is reading high, and away if reading low. Tighten clamp screw and install scale assembly.
5. Place cover and O-ring in position. Make sure the hex shaft on inside of cover is properly engaged in zero adjust screw, P/N 230-b.
6. Secure cover in place by screwing bezel down snug. Note that the area under the cover is pressurized in operation and therefore gage will leak if not properly tightened.

**Caution:** If bezel binds when installing, lubricate threads sparingly with light oil or molybdenum disulphide compound.

**Warning:** Attempted field repair may void your warranty. Recalibration or repair by the user is not recommended. For best results, return gage to the factory. Ship prepaid to:

Dwyer Instruments, Inc.  
Attn. Repair Department  
33 Ward Street  
Wakarusa, IN 46333

### Trouble Shooting Tips:

- Gage won't indicate or is sluggish.
  - 1. Duplicate pressure port not plugged.
  - 2. Diaphragm ruptured due to overpressure.
  - 3. Fittings or sensing lines blocked, pinched, or leaking.
  - 4. Cover loose or "O" ring damaged, missing.
  - 5. Pressure sensors, (static tips, Pitot tube, etc.) improperly located.
  - 6. Ambient temperature too low. For operation below 20°F, order gage with low temperature, (LT) option.
- Pointer stuck-gage can't be zeroed.
  - 1. Scale touching pointer.
  - 2. Spring/magnet assembly shifted and touching helix.
  - 3. Metallic particles clinging to magnet and interfering with helix movement.
  - 4. Cover zero adjust shaft broken or not properly engaged in P/N 230-b adjusting screw.

We generally recommend that gages needing repair be returned to the factory. Parts used in various sub-assemblies vary from one range of gage to another, and use of incorrect components may cause improper operation or failure. Gages repaired at the factory are carefully calibrated and tested to assure "fit."

R0263

REMEDIAL SYSTEMS, INC.

Instruction Bulletin  
No. 143640

## LS-1 Side-Mounted Level Switch

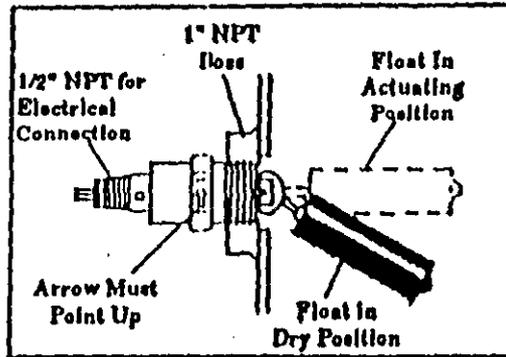
### INSTALLATION AND MAINTENANCE

#### Installation . . .

Units are side-mounted in the tank, right at the point of high, low or intermediate level sensing.

To install LS-1 with Buna N float, insert unit from the outside through 1" NPT boss in the tank side and tighten so that the arrows on the unit housing are pointed upward.

**IMPORTANT:** Unit should be installed in environments free from excessive contamination and high shock.



LS-1 Level Switch

#### Specifications . . .

Stem Material	Brass
Float Material	Buna N
Other Wetted Materials	Stainless Steel, Beryl, Copper, Teflon, Ceramic
Operating Temperature	-40° to 180°F
PSIG Max.	150 @ 70°F
Mounting and Mtg. Attitude	1" NPT - Horizontal (±15°)
Switch SPDT	20 VA Pilot duty
Switch Differential in Liquid	1/2" Min.
Liquid Specific Gravity	.8 Min.
Lead Wires	118 AWG, 24" Long

#### Electrical Wiring Diagram . . .

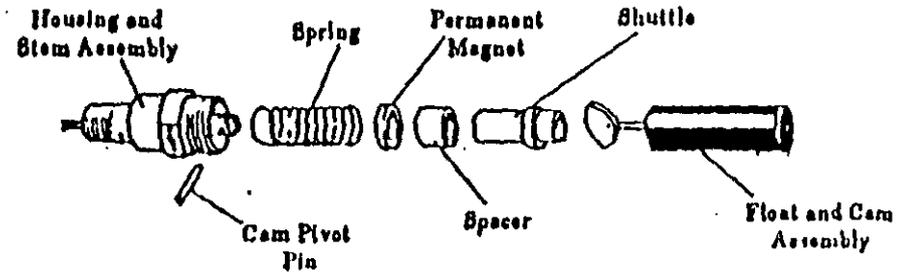
N.O. Orange

#### Switch Ratings - Max. Resistive Load . . .

VA	Volts	Amps A.C.	Amps D.C.

#### To Clean Unit . . .

Compress split end of cam pivot pin. Remove pin and disassemble unit as shown in diagram below. Wipe parts clean with hydrocarbon solvent and reassemble unit. Lock cam pivot pin by spreading split end slightly with screwdriver.



#### Maintenance . . .

An occasional cleaning when excessive contamination is present in the liquid is all that is normally required.

#### WARNING

Product must be maintained and installed in strict accordance with the technical brochure and instruction bulletin. Failure to observe this warning could result in serious injuries or damages. For hazardous area applications involving such things as (but not limited to) ignitable mixtures, combustible dust and flammables, use an appropriate explosion-proof enclosure or intrinsically safe interface device.

#### CAUTION

The pressure and temperature limitations shown on the individual catalog pages and drawings for the specified level switches must not be exceeded. These pressures and temperatures must take into consideration possible system surge pressures, temperatures and their frequencies.

The liquids used must be compatible with the materials of construction.

Ambient temperature changes do affect switch set points, since specific gravities of liquids vary with temperature. Consult Factory for assistance.

Level switches have been designed to be shock and vibration resistant; however, shock and vibration should be minimized. Consult Factory for assistance.

Excessive contaminants in fluid may inhibit float operation and occasional wipe-down may be necessary. Consult Factory for assistance.

Troubleshooting and maintenance of level switches should be in strict compliance with procedures set forth in the troubleshooting and maintenance sections of the technical brochure or an instruction bulletin.

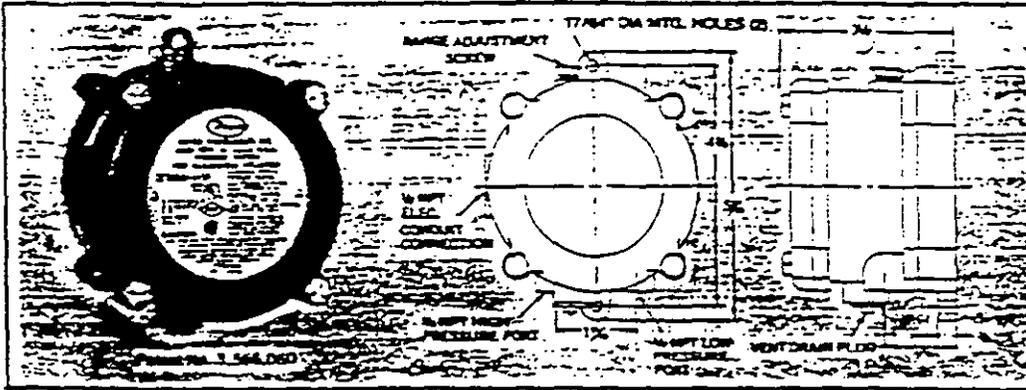
Electrical entries and mounting points require liquid/vapor sealing.

Level switches



# Series 1950 Explosion-Proof Differential Pressure Switches

Compact, low cost, explosion-proof and weather-proof, U.L., CSA listed, FM approved.



Model 1950 Explosion-Proof Differential Pressure Switch combines the best features of the popular Dwyer series 1900 with an integral explosion-proof and weather-proof housing, making it an exceptional value for either application. It is U.L. and CSA listed, FM approved for use in Class I Groups C and D, Class II Groups E, F, and G and Class III hazardous atmospheres. Weatherproof features include a drain plug and O-ring seal in cover. Electrical connections are easily made by removing front cover. For convenience the set point adjustment screw is located on the outside of the housing. Twelve models offer set points from .03 to 20 inches w.c. and from .5 to 50 PSI. The unit is very light and compact - about half the weight and bulk of other explosion-proof or weather-proof switches with separate enclosures.

## PHYSICAL DATA

Temperature Range: -40°F to 140°F  
 0°F to 140°F for 1950P-3, 15, 25, and  
 -30°F to 130°F for 1950-04

Maximum surge pressure:  
 1950 - 10 PSI, 1950P - 50 PSI  
 1950P-50 only - 90 PSI

Rated pressure:  
 1950 - 45 IN. W.C., 1950P - 35 PSI  
 1950P-50 only - 70 PSI

Pressure Connections: 1/4" NPT.

Electrical Rating: 15 amps, 125, 250, 500 volts, 50 Hz. A.C. Resistive 1/2 H.P. @ 250 volts, 1/2 H.P. @ 250 volts, 50 Hz. A.C.

Wiring connections: 3 screw type; common, norm. open and norm. close.  
 Conduit connection: 1/2" NPT.

Set point adjustment: Screw type top of housing. Field adjustable.

Housing: Anodized cast aluminum.

Diaphragm: Molded fluoro-silicone - bet. 04 model, silicone on mylon.

Calibration Spring: Stainless steel.

Installation: Mount with diaphragm vertical position.

Weight: 3 1/2 lbs., 04 model, 4 lbs., 7 oz.

## SERIES 1950 SWITCHES - OPERATING RANGES AND DEAD BANDS

Model Number	Operating Range - inches W.C.	Approximate Dead Band	
		Min. Set Point	Max. Set Point
1950-04	.03 to .35	0.02	0.09
1950-07	.07 to .15	0.04	0.05
1950-15	.15 to .5	0.10	0.15
1950-15P	.15 to 1.6	0.15	0.20
1950-50	1.4 to 5.5	0.3	0.4
1950-10	3.0 to 11.0	0.4	0.5
1950-20	4.0 to 20.0	0.4	0.6

Model Number	Operating Range - PSI	Approximate Dead Band	
		Min. Set Point	Max. Set Point
1950P-25	2.5 to 7.0	0.15	0.25
1950P-35	3.5 to 8.0	0.20	0.30
1950P-15	3.0 to 15.0	0.20	0.30
1950P-25	4.0 to 25.0	0.30	0.40
1950P-50	15.0 to 50.0	0.40	0.50

\*Model 1950-04, 7/16" dia. x 4 1/2" H.

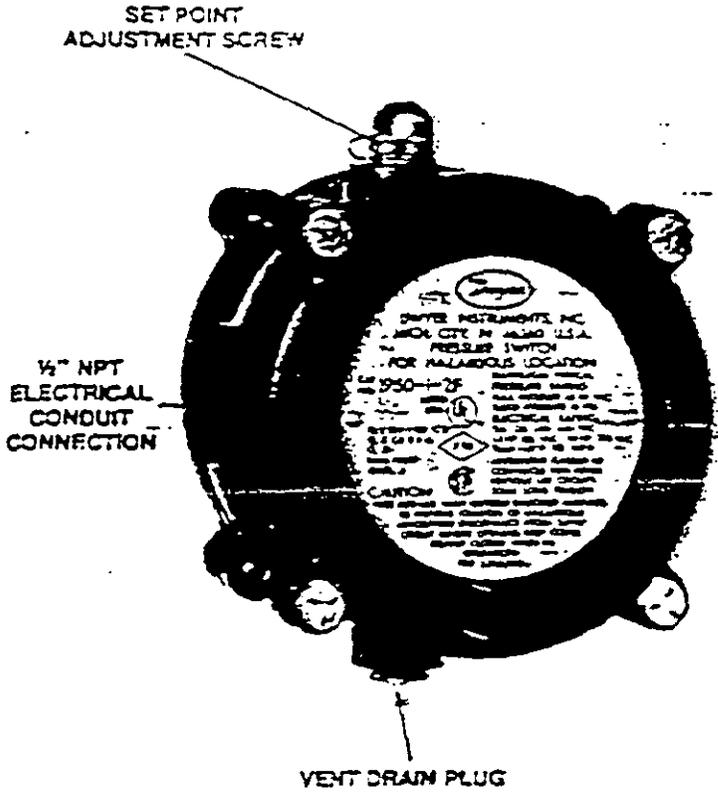
CAUTION: FOR USE ONLY WITH AIR OR COMPATIBLE GASES



SERIES 1950

INTEGRAL EXPLOSION-PROOF PRESSURE SWITCH  
Specifications - Installation and Operating Instruc

UL and CSA Listed, FM Approved For  
CL I GR. C,D - CL II GR. E,F,G - CL III



Model 1950 Switches: Operating ranges and dead

To order specify Model Number	Operating Range Inches. W.C.	Approximate Dead Band	
		At Min. Set Point	At Max. Set Point
1950-04	0.03 to 0.35	0.02	0.1
1950-00	0.07 to 0.15	0.04	0.07
1950-0	0.15 to 0.5	0.10	0.1
1950-1	0.4 to 1.5	0.15	0.2
1950-5	1.4 to 5.5	0.3	0.4
1950-10	3.0 to 11.0	0.4	0.5
1950-20	4.0 to 20.0	0.4	0.5

Model Number	Operating Range PSI	Approximate Dead Band	
		Min. Set Point	Max. Set
1950P-2	.5 to 2.0	0.3 PSI	0.3 P
1950P-8	1.5 to 8.0	1.0 PSI	1.0 P
1950P-15	3.0 to 15.0	0.9 PSI	0.9 P
1950P-25	4.0 to 25.0	0.7 PSI	0.7 P
1950P-50	15.0 to 50	1.0 PSI	1.5 P

PHYSICAL DATA

Temperature Limits: -40°C to 140°C, 0°F to 140°F for 1950P-8, 15, 25  
 Rated Pressure: 1950 - 45 IN. W.C., 1950P - 35 PSI, 1950P-50 only -  
 Maximum surge pressure: 1950 - 70 PSI, 1950P - 50 PSI, 1950P-50  
 - 90 PSI  
 Pressure Connections: 1/8" NPT  
 Electrical Ratings: 15 amps, 125, 250, 480 volts, 50 Hz. A.C. Resistive  
 @ 125 volts, 1/4 H.P. @ 250 volts, 60 Hz. A.C.  
 Wiring connections: 3 screw type, common, norm. open and norm. -  
 Conduit connections: 1/2" NPT  
 Set point adjustment: Screw type on top of housing. Field adjust  
 Housing: Anodized cast aluminum.  
 Diaphragm: Molded fluorosilicone rubber. 04 model, silicone on  
 Calibration Spring: Stainless Steel.  
 Installation: Mount with diaphragm in vertical position.  
 Weight: 3 1/4 lbs. 04 model, 4 lbs., 7 oz.

The New Model 1950 Explosion-Proof Switch combines the best features of the popular Dwyer Series 1900 Pressure Switch with a compact explosion-proof housing.

The unit is U.L. and CSA listed, FM approved for use in Class I, Groups C & D, Class II, Groups E, F, & G and Class III atmospheres. It is also totally rain-tight for outdoor installations. Twelve models allow set-points from .03 to 20 inches W.C. and from .5 to 50 PSI.

Easy access to the SPDT switch for electrical hook-up is provided by removing the top plate of the three-part aluminum housing. Adjustment to the set point of the switch can be made without disassembly of the housing. The unit is very compact, about half the weight and bulk of equivalent conventional explosion-proof switches.

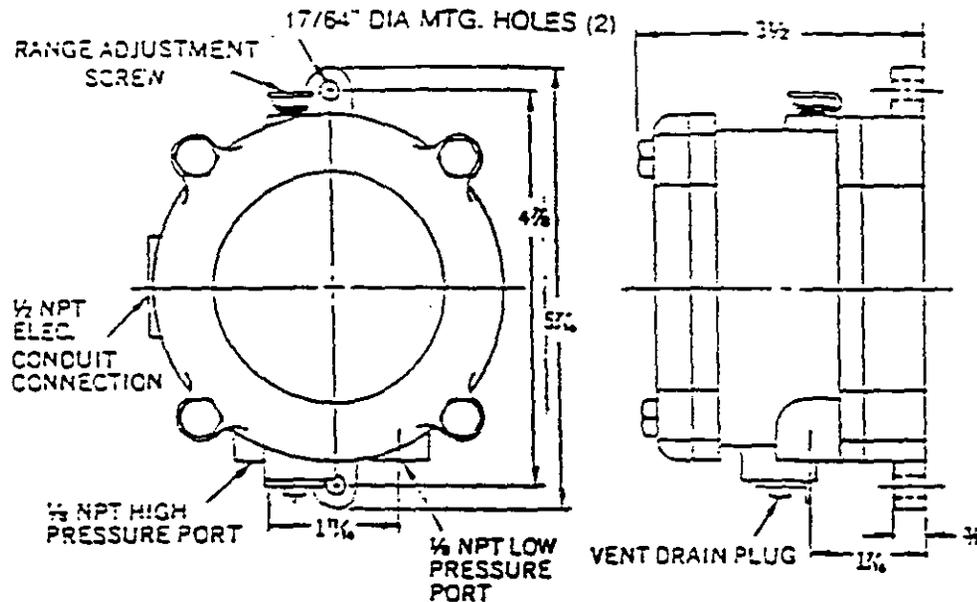
**CAUTION:** Use of the Model 1950 switch with explosive media connected to the low pressure port (including differential pressure applications in such media) is not recommended. Switch contact arcing can cause an explosion inside the switch housing which, while contained, may render the switch inoperative. If switch is being used to sense a single positive pressure relative to atmosphere, run a line from the low pressure port to a non-hazardous area free of combustible gases.

**Response Time:** Because of restrictive effect of flammable arrestors, switch response time may be as much as 10-15 seconds where applied pressures are near set point.

**NOTE:** The last number-letter combination in the 1950 model number identifies the switch electric rating (number) and diaphragm material (letter). The 2F combination is standard as described in the physical data above. In the case of special model a number 1 rating is the same as 2; a number 3 or 4 rating is 10A 125, 250, 480 VAC - 1/8 HP 125 VAC, 1/4 HP 250 VAC; and a number 5 or 6 rating is 1A 125 VAC. A letter B indicates a Buna-N diaphragm, Neoprene, S: Silicone, and V: Viton.

# INTEGRAL EXPLOSION-PROOF PRESSURE SWITCHES

## Installation and Operating Instructions



NOTE: For dimension Model 1950-04, see drawing 28-700175-00

1950 SWITCH OUTLINE DIMENSIONS

### INSTALLATION

1. Select a location that is free from excessive vibration, corrosive atmosphere and where the ambient temperature is between  $-40^{\circ}$  and  $+140^{\circ}$ F. Switch may be installed outdoors or in areas where the hazard of explosion exists. (See pg. 1 for specific types of hazardous service).
2. Mount standard switches with the diaphragm in a vertical plane and with switch lettering and Dwyer nameplate in an upright position. Some switches are position sensitive and may not reset properly unless they are mounted with the diaphragm vertical. (Special units can be furnished for other than vertical mounting arrangements if required.)
3. Connect switch to source of pressure, vacuum or differential pressure. Metal tubing with  $1/4"$  O.D. is recommended, but any tubing which will not restrict the air flow can be used. Connect to the two  $1/2"$  NPT female pressure ports as noted below:
  - A. Differential pressures - connect pipes or tubes from source of greater pressure to high pressure port marked HIGH PRESS. and from source of lower pressure to low pressure port marked LOW PRESS.
  - B. Pressure only (above atmospheric) - connect tube from source of pressure to high pressure port. The low pressure port is left open to atmosphere.
  - C. Vacuum only (below atmospheric pressure) - connect tube from source of vacuum to low pressure port. The high pressure port is left open to atmosphere.
4. To make electrical connections, remove the three hex head screws from the cover and, after loosening the fourth captive screw, swing the cover aside. Electrical connections to the standard single pole, double throw snap switch are provided by means of screw terminals marked "common", "norm open", and "norm closed". The normally open contacts close and the normally closed contacts open when pressure increases beyond the set point. Switch loads for standard models should not exceed the maximum specified current rating of 15 amps resistive. Remember that switch capabilities decrease with an increase in ambient temperature, load inductance, or cycling rate. Whenever

an application involves one or more of these factors, the use is desirable to limit the switched current to 10 amps or interest of prolonging switch life.

### ADJUSTMENT

To change the set point:

- A. Remove the plastic cap and turn the slotted Adjustment at the top of the housing clockwise to raise the set point and counter-clockwise to lower the set point. After callie replace the plastic cap.
- B. The recommended procedure for calibrating or checking callie is to use a "T" assembly with three rubber tubing leads, all as close as possible and the entire assembly offering minimum flow restriction. Run one lead to the pressure switch, another to a manometer known accuracy and appropriate range, and apply pressure to the third tube. Make final approach to the set point very slowly. Note that manometer and pressure switch will have different reset times due to different internal volumes, lengths of tubing, drainage, etc. Be certain the switch is checked in the position assume in use, i.e. with diaphragm in a vertical plane and lettering and Dwyer nameplate in an upright position.
- C. For highly critical applications it is a good idea to check the set adjustment and reset it as necessary once or twice in the first months of operation. This will compensate for any change in tension which may occur in the spring and diaphragm. For applications this change will not be significant and no resetting be required.

### MAINTENANCE

The moving parts of these switches need no maintenance or lubrication only adjustment is that of the set point. Care should be taken to keep reasonably clean. Periodically the vent drain plug should be rotated clockwise then returned to its original position. This will dislodge which could accumulate in applications where there is excessive condensation within the switch.

Litho in U.S.A.



DWYER INSTRUMENTS INC

25100 E. Michigan, Livonia, Michigan 48150  
Phone 219/836000, Telex 25916, Fax 219/8770972

**APPENDIX G**  
**TACO CALCULATIONS AND RESULTS**

## Initial Cleanup Objectives - RBCA Procedure - Construction Worker Exposure Scenario

This report presents the initial cleanup objectives for the constituents at the site as determined by the ASTM Risk-based Corrective Action (RBCA) procedure. If the Mixture Rule is applicable, these initial Cleanup Objectives may be modified according to the procedures set forth in 35 IAC 740.805. All objectives are in mg/kg.

Constituent	<u>Combined Pathways</u>		<u>Inhalation</u>	
	CUO	Comments	CUO	Comments
Benzene	1,477.458	Based on carcinogenicity	2,765.391	Based on carcinogenicity: Capped by Csat
Ethylbenzene	1,552.144	Based on non-carcinogenic effects: Capped by Csat	1,552.144	Based on non-carcinogenic effects: Capped by Csat
Toluene	2,450.343	Based on non-carcinogenic effects: Capped by Csat	2,450.343	Based on non-carcinogenic effects: Capped by Csat
Xylenes (total)	1,229.104	Based on non-carcinogenic effects: Capped by Csat	NC	No toxicological information for this exposure pathway
<b>Total CUO Concentration</b>	<b>6,709.05</b>		<b>6,767.88</b>	

## Initial Cleanup Objectives - RBCA Procedure - Industrial/Commercial Exposure Scenario

This report presents the initial cleanup objectives for the constituents at the site as determined by the ASTM Risk-based Corrective Action (RBCA) procedure. If the Mixture Rule is applicable, these initial Cleanup Objectives may be modified according to the procedures set forth in 35 IAC 740.805. All objectives are in mg/kg.

Constituent	<u>Combined Pathways</u>		<u>Inhalation</u>	
	CUO	Comments	CUO	Comments
Benzene	10.264	Based on carcinogenicity	375.555	Based on carcinogenicity
Ethylbenzene	1,552.144	Based on non-carcinogenic effects: Capped by Csat	1,552.144	Based on non-carcinogenic effects: Capped by Csat
Toluene	2,450.343	Based on non-carcinogenic effects: Capped by Csat	2,450.343	Based on non-carcinogenic effects: Capped by Csat
Xylenes (total)	1,229.104	Based on non-carcinogenic effects: Capped by Csat	NC	No toxicological information for this exposure pathway
<b>Total CUO Concentrations</b>	<b>5,241.86</b>		<b>4,378.04</b>	

## Initial Cleanup Objectives - RBCA Procedure - Residential Exposure Scenario

This report presents the initial cleanup objectives for the constituents at the site as determined by the ASTM Risk-based Corrective Action (RBCA) procedure. If the Mixture Rule is applicable, these initial Cleanup Objectives may be modified according to the procedures set forth in 35 IAC 740.805. All objectives are in mg/kg.

Constituent	<u>Combined Pathways</u>		<u>Inhalation</u>	
	CUO	Comments	CUO	Comments
Benzene	5.807	Based on carcinogenicity	223.544	Based on carcinogenicity
Ethylbenzene	1,552.144	Based on non-carcinogenic effects: Capped by Csat	1,552.144	Based on non-carcinogenic effects: Capped by Csat
Toluene	2,450.343	Based on non-carcinogenic effects: Capped by Csat	2,450.343	Based on non-carcinogenic effects: Capped by Csat
Xylenes (total)	1,229.104	Based on non-carcinogenic effects: Capped by Csat	NC	No toxicological information for this exposure pathway
<b>Total CUO Concentrations</b>	<b>5,237.40</b>		<b>4,226.03</b>	

## Initial Cleanup Objectives - RBCA Procedure - Protection of Ground Water

This report presents the initial cleanup objectives (CUO) for the constituents at the site as determined by the ASTM Risk-based Corrective Action (RBCA) procedure to protect ground waters. If the Mixture Rule is applicable these initial Cleanup Objectives may be modified according to the procedures set forth in 35 IAC 740.805. Soil objectives are in mg/kg; ground water objectives are in mg/L.

Constituent	Class I				Class II			
	CUO (Soil)	Comments	CUO (GW)	Comments	CUO (Soil)	Comments	CUO (GW)	Comments
Benzene	0.153		0.0914		0.765		0.4569	
Ethylbenzene	1641.917		169.000		1641.917		169.000	
Toluene	2586.998		526.000		2586.998		526.000	
Xylenes (total)	1299.197		186.000		1299.197		186.000	
<b>Total CUO Concentrations</b>	<b>5,528.27</b>				<b>5,528.88</b>			

## Mixture Rule Cleanup Objectives - RBCA Procedure - Protection of Ground Waters

This report presents the Mixture Rule cleanup objectives (MRCUO) for the constituents at the site as determined by the procedures of 35 IAC 742.805(c) as applied to initial cleanup objectives determined by the ASTM Risk-based Corrective Action (RBCA) procedure to protect ground waters. Soil objectives are in mg/kg; ground water objectives are in mg/L.

Constituent	<u>Soil to Protect GW</u>		<u>Class I Ground Waters</u>	
	MRCUO	Comments	MRCUO	Comments
Benzene		Not affected by Mixture Rule		Not affected by Mixture Rule
Ethylbenzene	1,641.917	Based on non-carcinogenic effects: Capped by Solubility	167.112	Based on non-carcinogenic effects
Toluene	2,586.998	Based on non-carcinogenic effects: Capped by Solubility	520.125	Based on non-carcinogenic effects
Xylenes (total)		Not affected by Mixture Rule		Not affected by Mixture Rule

## Mixture Rule Cleanup Objectives - SSL Procedure - Construction Worker Exposure

This report presents the Mixture Rule cleanup objectives (MRCUO) for the constituents at the site as determined by the procedures set forth in 35 IAC 740.805 as applied to the initial cleanup objectives determined according to the Soil Screening Level (SSL) procedure. Soil cleanup objectives are in mg/kg.

Constituent	Ingestion		Inhalation	
	MRCUO	Comments	MRCUO	Comments
Ethylbenzene	10,202.26	Based on non-carcinogenic effects	897.56	Based on non-carcinogenic effects
Toluene	204,045.14	Based on non-carcinogenic effects	641.55	Based on non-carcinogenic effects

## Mixture Rule Cleanup Objectives - SSL Procedure - Protection of Ground Water

This report presents the Mixture Rule cleanup objectives (MRCUO) for the constituents at the site as determined by the procedures set forth in 35 IAC 740.805 as applied to the initial cleanup objectives determined according to the Superfund Soil Screening Level (SSL) procedure. Soil cleanup objectives are in mg/kg; Ground water objectives are in mg/L.

Constituent	Soils to Protect Class I GW		Class I Ground Waters	
	MRCUO	Comments	MRCUO	Comments
Benzene				
Ethylbenzene	68.008	Based on non-carcinogenic effects	0.3500000	Based on non-carcinogenic effects
Toluene	49.182	Based on non-carcinogenic effects	0.5000000	Based on non-carcinogenic effects
Xylenes (total)				

## Mixture Rule Cleanup Objectives - SSL Procedure - Industrial/Commercial Exposure

This report presents the Mixture Rule cleanup objectives (MRCUO) for the constituents at the site as determined by the procedures set forth in 35 IAC 740.805 as applied to the initial cleanup objectives determined according to the Soil Screening Level (SSL) procedure. Soil cleanup objectives are in mg/kg.

Constituent	Ingestion		Inhalation	
	MRCUO	Comments	MRCUO	Comments
Ethylbenzene	102,200.00	Based on non-carcinogenic effects	1,552.14	Based on non-carcinogenic effects: Capped by Csat
Toluene	204,400.00	Based on non-carcinogenic effects	2,450.34	Based on non-carcinogenic effects: Capped by Csat

## Mixture Rule Cleanup Objectives - SSL Procedure - Residential Exposure

This report presents the Mixture Rule cleanup objectives (MRCUO) for the constituents at the site as determined by the procedures set forth in 35 IAC 740.805 as applied to the initial cleanup objectives determined according to the Soil Screening Level (SSL) procedure. Soil cleanup objectives are in mg/kg.

Constituent	Ingestion		Inhalation	
	MRCUO	Comments	MRCUO	Comments
Ethylbenzene	3,910.71	Based on non-carcinogenic effects	1,552.14	Based on non-carcinogenic effects: Capped by Csat
Toluene	7,821.43	Based on non-carcinogenic effects	2,450.34	Based on non-carcinogenic effects: Capped by Csat

**Datasheet RBCA-I. Carcinogenic Contaminants Ingestion of Soil, Inhalation of Vapors and Particulates, and Dermal Contact**

Datasheet RBCA-I is to be used to propose soil cleanup objectives for the ingestion, inhalation and dermal contact exposure routes for carcinogens calculated by the equation in Appendix C, Table C of TACO: Equation R1 (residential, industrial/commercial and construction worker scenarios). Since the values in Datasheets RBCA-VIII and RBCA-IX are used in this evaluation, these datasheets must also be submitted

For industrial/commercial properties, soil cleanup objectives for both the industrial/commercial scenario and the construction worker scenario must be calculated. Therefore, two RBCA-I datasheets must be submitted: one for the industrial/commercial scenario and one for the construction worker scenario.

Land Use Scenario: **Residential**

Institutional Control	NO	YES
Engineered Barrier	NO	YES

TR (unitless)	0.000001	SA (cm <sup>2</sup> /d)	3,160.0
BW (kg)	70.00	M (mg/cm <sup>2</sup> )	0.50
ATc (yr)	70.0	RAFd - volatiles and pesticides (unitless)	0.50
EF (d/yr)	350	RAFd - PNAs (unitless)	0.05
ED (yr)	30	RAFd - metals	0.00
SFo [1/(mg/kg-d)]*	See below	SFi [1/(mg/kg-d)]*	See below
IRsoil (mg/d)	100	IRair (m <sup>3</sup> /d)	20.00
RAFo (unitless)	1.00	VFss (kg/m <sup>3</sup> ) **	See below
		VFp (kg/m <sup>3</sup> )***	4.48E-010

\* Toxicological Properties (see Datasheet D)

\*\* VFss value reported on Datasheet RBCA-VIII

\*\*\* VFp value reported on Datasheet RBCA-IX

Chemical Name	SFo [1/(mg/kg-d)]	SFi [1/(mg/kg-d)]	VFss (kg/m <sup>3</sup> )	Soil Cleanup Objective (mg/kg)
Benzene	0.0290	0.0290	6.07E-006	5.807
Ethylbenzene	0.0000		2.68E-006	1,552.144
Toluene	0.0000		3.75E-006	2,450.343
Xylenes (total)	0.0000		2.83E-006	1,229.104

**Datasheet RBCA-I. Carcinogenic Contaminants Ingestion of Soil, Inhalation of Vapors and Particulates, and Dermal Contact**

Datasheet RBCA-I is to be used to propose soil cleanup objectives for the ingestion, inhalation and dermal contact exposure routes for carcinogens calculated by the equation in Appendix C, Table C of TACO: Equation R1 (residential, industrial/commercial and construction worker scenarios). Since the values in Datasheets RBCA-VIII and RBCA-IX are used in this evaluation, these datasheets must also be submitted

For industrial/commercial properties, soil cleanup objectives for both the industrial/commercial scenario and the construction worker scenario must be calculated. Therefore, two RBCA-I datasheets must be submitted: one for the industrial/commercial scenario and one for the construction worker scenario.

*Land Use Scenario:* **Industrial/Commercial**

Institutional Control	NO	YES
Engineered Barrier	NO	YES

TR (unitless)	0.000001	SA (cm <sup>2</sup> /d)	3,160.0
BW (kg)	70.00	M (mg/cm <sup>2</sup> )	0.50
ATc (yr)	70.0	RAFd - volatiles and pesticides (unitless)	0.50
EF (d/yr)	250	RAFd - PNAs (unitless)	0.05
ED (yr)	25	RAFd - metals	0.00
SFo [1/(mg/kg-d)]*	See below	SFi [1/(mg/kg-d)]*	See below
IRsoil (mg/d)	50.00	IRair (m <sup>3</sup> /d)	20.00
RAFo (unitless)	1.00	VFss (kg/m <sup>3</sup> ) **	See below
		VFp (kg/m <sup>3</sup> )***	4.48E-01

\* Toxicological Properties (see Datasheet D)      \*\* VFss value reported on Datasheet RBCA-VIII

\*\*\* VFp value reported on Datasheet RBCA-IX

Chemical Name	SFo [1/(mg/kg-d)]	SFi [1/(mg/kg-d)]	VFss (kg/m <sup>3</sup> )	Soil Cleanup Objective (mg/kg)
Benzene	0.0290	0.02900	6.07E-006	10.264
Ethylbenzene			2.68E-006	1,552.144
Toluene			3.75E-006	2,450.343
Xylenes (total)			2.83E-006	1,229.104

**Datasheet RBCA-I. Carcinogenic Contaminants Ingestion of Soil, Inhalation of Vapors and Particulates, and Dermal Contact**

Datasheet RBCA-I is to be used to propose soil cleanup objectives for the ingestion, inhalation and dermal contact exposure routes for carcinogens calculated by the equation in Appendix C, Table C of TACO: Equation R1 (residential, industrial/commercial and construction worker scenarios). Since the values in Datasheets RBCA-VIII and RBCA-IX are used in this evaluation, these datasheets must also be submitted

For industrial/commercial properties, soil cleanup objectives for both the industrial/commercial scenario and the construction worker scenario must be calculated. Therefore, two RBCA-I datasheets must be submitted: one for the industrial/commercial scenario and one for the construction worker scenario.

*Land Use Scenario: Construction Worker* Institutional Control NO YES  
 Engineered Barrier NO YES

TR (unitless)	0.000001	SA (cm <sup>2</sup> /d)	3,160.0
BW (kg)	70.00	M (mg/cm <sup>2</sup> )	0.50
ATc (yr)	70.0	RAFd - volatiles and pesticides (unitless)	0.50
EF (d/yr)	30	RAFd - PNAs (unitless)	0.05
ED (yr)	1	RAFd - metals	0.00
SFo [1/(mg/kg-d)]*	See below	SFi [1/(mg/kg-d)]*	See below
IRsoil (mg/d)	480.00	IRair (m <sup>3</sup> /d)	20.00
RAFo (unitless)	1.00	VFss (kg/m <sup>3</sup> )**	See below
		VFp (kg/m <sup>3</sup> )***	4.48E-010

\* Toxicological Properties (see Datasheet D) \*\* VFss value reported on Datasheet RBCA-VIII

\*\*\* VFp value reported on Datasheet RBCA-IX

Chemical Name	SFo [1/{mg/kg-d}]	SFi [1/(mg/kg-d)]	VFss (kg/m <sup>3</sup> )	Soil Cleanup Objective (mg/kg)
Benzene	0.0290	0.02900	6.07E-006	1,477.458
Ethylbenzene			2.68E-006	1,552.144
Toluene			3.75E-006	2,450.343
Xylenes (total)			2.83E-006	1,229.104

**Datasheet RBCA-II. Noncarcinogenic Contaminants Ingestion of Soil, Inhalation of Vapors and Particulates, and Dermal Contact**

Datasheet RBCA-II is to be used to propose soil cleanup objectives for the ingestion, inhalation and dermal contact exposure routes for noncarcinogens calculated by the equation in Appendix C, Table C of TACO: Equation R2 (residential, industrial/commercial and construction worker scenarios). Since the values in Datasheets RBCA-VIII and RBCA-IX are used in this evaluation, these datasheets must also be submitted

For industrial/commercial properties, soil cleanup objectives for both the industrial/commercial scenario and the construction worker scenario must be calculated. Therefore, two RBCA-II datasheets must be submitted: one for the industrial/commercial scenario and one for the construction worker scenario.

*Land Use Scenario:* **Residential**

Institutional Control	NO	YES
Engineered Barrier	NO	YES

THQ (unitless)	1.0	M (mg/cm <sup>2</sup> )	0.5
BW (kg)	70.0	RAF <sub>d</sub> - volatiles and pesticides (unitless)	0.50
AT <sub>n</sub> (yr)	30	RAF <sub>d</sub> - PNAs (unitless)	0.05
EF (d/yr)	350	RAF <sub>d</sub> - metals	0.00
ED (yr)	30	RfD <sub>o</sub> (mg/kg-d)*	See below
IR <sub>soil</sub> (mg/d)	100.0	IR <sub>air</sub> (m <sup>3</sup> /d)	20.00
RAF <sub>o</sub> (unitless)	1.0	VF <sub>ss</sub> (kg/m <sup>3</sup> )**	See below
SA (cm <sup>2</sup> /d)	3,160.0	VF <sub>p</sub> (kg/m <sup>3</sup> )***	4.48E-010
		RfD <sub>i</sub> (mg/kg-d)*	See below

\* Toxicological Properties (see Datasheet D)

\*\* VF<sub>ss</sub> value reported on Datasheet RBCA-VIII

\*\*\* VF<sub>p</sub> value reported on Datasheet RBCA-IX

Chemical Name	RfD <sub>o</sub> (mg/kg-d)	VF <sub>ss</sub> (kg/m <sup>3</sup> )	RfD <sub>i</sub> (mg/kg-d)	Soil Cleanup Objective (mg/kg)
Ethylbenzene	0.100000	.68E-006	0.290000	1,552.14
Toluene	0.200000	.75E-006	0.110000	2,450.34
Xylenes (total)	2.000000	.83E-006		1,229.10



**Datasheet RBCA-II. Noncarcinogenic Contaminants Ingestion of Soil, Inhalation of Vapors and Particulates, and Dermal Contact**

Datasheet RBCA-II is to be used to propose soil cleanup objectives for the ingestion, inhalation and dermal contact exposure routes for noncarcinogens calculated by the equation in Appendix C, Table C of TACO: Equation R2 (residential, industrial/commercial and construction worker scenarios). Since the values in Datasheets RBCA-VIII and RBCA-IX are used in this evaluation, these datasheets must also be submitted

For industrial/commercial properties, soil cleanup objectives for both the industrial/commercial scenario and the construction worker scenario must be calculated. Therefore, two RBCA-II datasheets must be submitted: one for the industrial/commercial scenario and one for the construction worker scenario.

*Land Use Scenario: Construction Worker*                      Institutional Control      NO      YES  
    Engineered Barrier            NO      YES

THQ (unitless)	1.0	M (mg/cm <sup>2</sup> )	0.5
BW (kg)	70.0	RAF <sub>d</sub> - volatiles and pesticides (unitless)	0.50
AT <sub>n</sub> (yr)	0.115	RAF <sub>d</sub> - PNAs (unitless)	0.05
EF (d/yr)	30	RAF <sub>d</sub> - metals	0.00
ED (yr)	1	RfDo (mg/kg-d)*	See below
IR <sub>soil</sub> (mg/)	480.0	IR <sub>air</sub> (m <sup>3</sup> /d)	20.00
RA <sub>Fo</sub> (unitless)	1.0	VF <sub>ss</sub> (kg/m <sup>3</sup> ) **	See below
SA (cm <sup>2</sup> /d)	3,160.0	VF <sub>p</sub> (kg/m <sup>3</sup> )***	4.48E-01
		RfDi (mg/kg-d)*	See below

\* Toxicological Properties (see Datasheet D)      \*\* VF<sub>ss</sub> value reported on Datasheet RBCA-VIII

\*\*\* VF<sub>p</sub> value reported on Datasheet RBCA-IX

Chemical Name	RfDo (mg/kg-d)	VF <sub>ss</sub> (kg/m <sup>3</sup> )	RfDi (mg/kg-d)	Soil Cleanup Objective (mg/kg)
Ethylbenzene	0.1000	2.68E-006	0.2900	1,552.14
Toluene	2.0000	3.75E-006	0.2900	2,450.34
Xylenes (total)	2.0000	2.83E-006		1,229.10

**Datasheet RBCA-III. Carcinogenic Contaminants through Ambient Vapor Inhalation (Outdoor)**

Datasheet RBCA-III is to be used to propose soil cleanup objectives for the inhalation of ambient vapor for carcinogens calculated by the equations in Appendix C, Table C of TACO: Equations R7 and R9 (residential, industrial/commercial and construction worker scenarios). Since the values listed in Datasheet RBCA-X are used in this evaluation, this datasheet must also be submitted.

For industrial/commercial properties, soil cleanup objectives for both the industrial/commercial scenario and the construction worker scenario must be calculated. Therefore, two RBCA-III datasheets must be submitted: one for the industrial/commercial scenario and one for the construction worker scenario.

*Land Use Scenario: Residential* Institutional Control YES NO  
 Engineered Barrier YES NO

RBSLair ( $\mu\text{g}/\text{m}^3$ )	See below	SFi [ $1/(\text{mg}/\text{kg}\cdot\text{d})$ ]*	See below
VFsamb** [( $\text{mg}/\text{m}^3\text{air}$ )/( $\text{mg}/\text{kg}\text{soil}$ )]	See below	IRair ( $\text{m}^3/\text{d}$ )	20.0
TR (unitless)	0.000001	EF (d/yr)	350
ATc (yr)	70	ED (yr)	30

\* Toxicological Properties (see Datasheet D)

\*\* VFsamb value reported on Datasheet RBCA-X

Chemical Name	RBSLair ( $\mu\text{g}/\text{m}^3$ )	VFsamb ( $\text{kg}/\text{m}^3$ )	SFi [ $1/(\text{mg}/\text{kg}\cdot\text{d})$ ]	Soil Cleanup Objective (mg/kg)
Benzene	0.2937	1.31E-006	0.02900	223.5445



**Datasheet RBCA-III. Carcinogenic Contaminants through Ambient Vapor Inhalation (Outdoor)**

Datasheet RBCA-III is to be used to propose soil cleanup objectives for the inhalation of ambient vapor for carcinogens calculated by the equations in Appendix C, Table C of TACO: Equations R7 and R9 (residential, industrial/commercial and construction worker scenarios). Since the values listed in Datasheet RBCA-X are used in this evaluation, this datasheet must also be submitted.

For industrial/commercial properties, soil cleanup objectives for both the industrial/commercial scenario and the construction worker scenario must be calculated. Therefore, two RBCA-III datasheets must be submitted: one for the industrial/commercial scenario and one for the construction worker scenario.

*Land Use Scenario: Construction Worker* Institutional Control YES NO  
 Engineered Barrier YES NO

RBSLair ( $\mu\text{g}/\text{m}^3$ )	See below	SFi [ $1/(\text{mg}/\text{kg}\cdot\text{d})$ ]*	See below
VFsamb** [( $\text{mg}/\text{m}^3\text{air}$ )/( $\text{mg}/\text{kg}\text{soil}$ )]	See below	IRair ( $\text{m}^3/\text{d}$ )	20
TR (unitless)	0.000001	EF (d/yr)	30
ATc (yr)	70	ED (yr)	1

\* Toxicological Properties (see Datasheet D)      \*\* VFsamb value reported on Datasheet RBCA-X

Chemical Name	RBSLair ( $\mu\text{g}/\text{m}^3$ )	VFsamb ( $\text{kg}/\text{m}^3$ )	SFi [ $1/(\text{mg}/\text{kg}\cdot\text{d})$ ]	Soil Cleanup Objective ( $\text{mg}/\text{kg}$ )
Benzene	102.7874	1.31E-006	0.02900	2,897.0527

**Datasheet RBCA-IV. Noncarcinogenic Contaminants through Ambient Vapor Inhalation (Outdoor)**

Datasheet RBCA-IV is to be used to propose soil cleanup objectives for the inhalation of ambient vapor exposure route for noncarcinogens calculated by the equations in Appendix C, Table C of TACO: Equations R8 and R10 (residential, industrial/commercial and construction worker scenarios). Since the values listed in Datasheet RBCA-X are used in this evaluation, this datasheet must also be submitted.

For industrial/commercial properties, soil cleanup objectives for both the industrial/commercial scenario and the construction worker scenario must be calculated. Therefore, two RBCA-IV datasheets must be submitted: one for the industrial/commercial scenario and one for the construction worker scenario.

*Land Use Scenario:* **Residential** Institutional Control YES NO  
 Engineered Barrier YES NO

RBSLair ( $\mu\text{g}/\text{m}^3$ )	See below	ATn (yr)	30
VFsamb** [( $\text{mg}/\text{m}^3\text{air}$ )/( $\text{mg}/\text{kgsoil}$ )]	See below	IRair ( $\text{m}^3/\text{d}$ )	20
THQ (unitless)	1.0	EF (d/yr)	350
RfDi ( $\text{mg}/\text{kg-d}$ )**	See below	ED (yr)	30
BW (kg)	70.0		

\* Toxicological Properties (see Datasheet D)

\*\* VFsamb value reported on Datasheet RBCA-X

Chemical Name	RBSLair ( $\mu\text{g}/\text{m}^3$ )	VFsamb ( $\text{kg}/\text{m}^3$ )	RfDi ( $\text{mg}/\text{kg-d}$ )	Soil Cleanup Objective ( $\text{mg}/\text{kg}$ )
Benzene	NC	1.31E-006		2,897.0527
Ethylbenzene	211.7	2.54E-007	0.290000	1,641.9171
Toluene	80.3	4.97E-007	0.110000	2,586.9976
Xylenes (total)	NC	2.83E-007		1,299.1965

**Datasheet RBCA-IV. Noncarcinogenic Contaminants through Ambient Vapor Inhalation (Outdoor)**

Datasheet RBCA-IV is to be used to propose soil cleanup objectives for the inhalation of ambient vapor exposure route for noncarcinogens calculated by the equations in Appendix C, Table C of TACO: Equations R8 and R10 (residential, industrial/commercial and construction worker scenarios). Since the values listed in Datasheet RBCA-X are used in this evaluation, this datasheet must also be submitted.

For industrial/commercial properties, soil cleanup objectives for both the industrial/commercial scenario and the construction worker scenario must be calculated. Therefore, two RBCA-IV datasheets must be submitted: one for the industrial/commercial scenario and one for the construction worker scenario.

*Land Use Scenario: Industrial/Commercial* Institutional Control YES NO  
 Engineered Barrier YES NO

RBSLair ( $\mu\text{g}/\text{m}^3$ )	See below	ATn (yr)	25
VFsamb** [( $\text{mg}/\text{m}^3\text{air}$ )/( $\text{mg}/\text{kgsoil}$ )]	See below	IRair ( $\text{m}^3/\text{d}$ )	20
THQ (unitless)	1.0	EF (d/yr)	250
RfDi ( $\text{mg}/\text{kg-d}$ )**	See below	ED (yr)	25
BW (kg)	70.0		

\* Toxicological Properties (see Datasheet D)

\*\* VFsamb value reported on Datasheet RBCA-X

Chemical Name	RBSLair ( $\mu\text{g}/\text{m}^3$ )	VFsamb ( $\text{kg}/\text{m}^3$ )	RfDi ( $\text{mg}/\text{kg-d}$ )	Soil Cleanup Objective ( $\text{mg}/\text{kg}$ )
Benzene	NC	1.31E-006		2,897.0527
Ethylbenzene	1,481.9	2.54E-007	0.290000	1,641.9171
Toluene	562.1	4.97E-007	0.110000	2,586.9976
Xylenes (total)	NC	2.83E-007		1,299.1965

**Datasheet RBCA-IV. Noncarcinogenic Contaminants through Ambient Vapor Inhalation (Outdoor)**

Datasheet RBCA-IV is to be used to propose soil cleanup objectives for the inhalation of ambient vapor exposure route for noncarcinogens calculated by the equations in Appendix C, Table C of TACO: Equations R8 and R10 (residential, industrial/commercial and construction worker scenarios). Since the values listed in Datasheet RBCA-X are used in this evaluation, this datasheet must also be submitted.

For industrial/commercial properties, soil cleanup objectives for both the industrial/commercial scenario and the construction worker scenario must be calculated. Therefore, two RBCA-IV datasheets must be submitted: one for the industrial/commercial scenario and one for the construction worker scenario.

*Land Use Scenario: Construction Worker* Institutional Control YES NO  
 Engineered Barrier YES NO

RBSLair ( $\mu\text{g}/\text{m}^3$ )	See below	ATn (yr)	0.115
VFsamb** [( $\text{mg}/\text{m}^3\text{air}$ )/( $\text{mg}/\text{kgsoil}$ )]	See below	IRair ( $\text{m}^3/\text{d}$ )	20
THQ (unitless)	1.0	EF (d/yr)	30
RfDi ( $\text{mg}/\text{kg-d}$ )**	See below	ED (yr)	1
BW (kg)	70.0		

\* Toxicological Properties (see Datasheet D)

\*\* VFsamb value reported on Datasheet RBCA-X

Chemical Name	RBSLair ( $\mu\text{g}/\text{m}^3$ )	VFsamb ( $\text{kg}/\text{m}^3$ )	RfDi ( $\text{mg}/\text{kg-d}$ )	Soil Cleanup Objective ( $\text{mg}/\text{kg}$ )
Benzene	NC	1.31E-006		2,897.0527
Ethylbenzene	1,420.1542	2.54E-007	0.29000	1,641.9171
Toluene	1,420.1542	4.97E-007	0.29000	2,586.9976
Xylenes (total)	NC	2.83E-007		1,299.1965

## Datasheet RBCA-IX. VFp

Datasheet RBCA-IX is to be used to propose the volatilization factor(s) for surficial soils regarding particulates (VFp) calculated by the equation in Appendix C, Table C of TACO: Equation R5 (residential, industrial/commercial and construction worker scenarios)

*Land Use Scenario:* **Residential, Industrial/Commercial and Construction Worker**

Pe (g/cm <sup>2</sup> -s)	6.9E-14
W (cm)	6,096
U <sub>air</sub> (cm/s)	469
δ <sub>air</sub> (cm)	200
VFp (kg/m <sup>3</sup> )	4.48E-01

### Datasheet RBCA-V. Migration to Ground Water - Class 1

Datasheet RBCA-V is to be used to propose soil cleanup objectives for the migration to ground water exposure route calculated by the equation in Appendix C, Table C of TACO: Equation R12 (residential, industrial/commercial and construction worker scenarios). Equations described under RBCA-VI and RBCA-VIII as well as the equations in 35 Ill. Adm. Code 620, Subpart F may also be required to generate some of the input values for equation R12. Note; use 35 Ill. Code 620, Subpart F to calculate cleanup objectives for noncarcinogens. Since values listed in RBCA-XIII are used in this evaluation, this datasheet must be submitted. In cases where the target cancer risk (TR) exceeds 1 in 1,000,000, Datasheet -VI must also be submitted.

Land Use Scenario: **ALL**

Institutional Control	YES	NO
Engineered Barrier	YES	NO

GW <sub>source</sub> (mg/L)	See below	X (cm)	500.00
LF <sub>sw</sub> [(mg/L)/(mg/kg)]*	See below	α <sub>x</sub> (cm)	50
GW <sub>comp</sub> (mg/L)**	See below	α <sub>y</sub> (cm)	17
C(x)/C <sub>source</sub> (unitless)***	See below	α <sub>z</sub> (cm)	3
U (cm/d)	0.1200	S <sub>w</sub> (cm)	5,639
K (cm/d)	1.745	λ (1/d)****	See below
i (cm/cm)	0.0150	S <sub>d</sub> (cm)	200
θ <sub>T</sub> (cm <sup>3</sup> /cm <sup>3</sup> -soil)*****	0.22		

\* LF<sub>sw</sub> reported on Datasheet RBCA-XIII

\*\* GW<sub>comp</sub> reported on Datasheet RBCA-VI

\*\*\* C(x)/C<sub>source</sub> reported on Datasheet RBCA-VI

\*\*\*\* Chemical Parameters (see Datasheet C)

\*\*\*\*\* Physical Soil Parameters (see Datasheet B)

Chemical Name	GW <sub>source</sub> (mg/L)	LF <sub>sw</sub> (mg/L)/(mg/kg)	GW <sub>comp</sub> (mg/L)	C(x)/C <sub>source</sub> (unitless)	λ (1/day)	Soil Cleanup Objective (mg/kg)
Benzene	0.0914	5.97E-01	0.005	5.47E-02	0.000900	0.153
Ethylbenzene	169.000	1.02E-01	0.7	7.12E-04	0.003000	1641.917
Toluene	526.000	2.01E-01	1	4.20E-08	0.011000	2586.998
Xylenes (total)	186.000	1.42E-01	10	5.48E-03	0.001900	1299.197

### Datasheet RBCA-V. Migration to Ground Water - Class 2

Datasheet RBCA-V is to be used to propose soil cleanup objectives for the migration to ground water exposure route calculated by the equation in Appendix C, Table C of TACO: Equation R12 (residential, industrial/commercial and construction worker scenarios). Equations described under RBCA-VI and RBCA-VIII as well as the equations in 35 Ill. Adm. Code 620, Subpart F may also be required to generate some of the input values for equation R12. Note; use 35 Ill. Code 620, Subpart F to calculate cleanup objectives for noncarcinogens. Since values listed in RBCA-XIII are used in this evaluation, this dataheet must be submitted. In cases where the target cancer risk (TR) exceeds 1 in 1,000,000, Datasheet -VI must also be submitted.

Land Use Scenario: ALL

Institutional Control      YES      NO  
 Engineered Barrier          YES  
 NO

GW <sub>source</sub> (mg/L)	See below	X (cm)	500.00
LF <sub>sw</sub> [(mg/L)/(mg/kg)]*	See below	α <sub>x</sub> (cm)	50
GW <sub>comp</sub> (mg/L)**	See below	α <sub>y</sub> (cm)	17
C(x)/C <sub>source</sub> (unitless)***	See below	α <sub>z</sub> (cm)	3
U (cm/d)	0.1200	S <sub>w</sub> (cm)	5,639
K (cm/d)	1.745	λ (1/d)****	See below
i (cm/cm)	0.0150	S <sub>d</sub> (cm)	200
θ <sub>T</sub> (cm <sup>3</sup> /cm <sup>3</sup> -soil)*****	0.22		

\* LF<sub>sw</sub> reported on Datasheet RBCA-XIII      \*\* GW<sub>comp</sub> reported on Datasheet RBCA-VI  
 \*\*\* C(x)/C<sub>source</sub> reported on Datasheet RBCA-VI      \*\*\*\* Chemical Parameters (see Datasheet C)  
 \*\*\*\*\* Physical Soil Parameters (see Datasheet C)

Chemical Name	GW <sub>source</sub> (mg/L)	LF <sub>sw</sub> (mg/L)/(mg/kg)	GW <sub>comp</sub> (mg/L)	C(x)/C <sub>source</sub> (unitless)	λ (1/day)	Soil Cleanup Objective (mg/kg)
Benzene	0.4569	5.97E-01	0.025	5.47E-02	0.000900	0.765
Ethylbenzene	169.000	1.02E-01	1	7.12E-04	0.003000	1641.917
Toluene	526.000	2.01E-01	2.5	4.20E-08	0.011000	2586.998
Xylenes (total)	186.000	1.42E-01	10	5.48E-03	0.001900	1299.197





## Datasheet RBCA-VII. Concentration of Contaminant in Groundwater Source

Datasheet RBCA-VII is to be used to predict the groundwater concentration at a specified distance from the source as calculated by the equation in Appendix C of TACO: Equation R26 (residential, industrial/ commercial and construction worker scenarios). Since values listed in Datasheet RBCA-V are used in this evaluation, this datasheet must also be submitted.

Csource (mg/L)	See below	$\alpha_y$ (cm)	17
X (cm)	500.00	Sd (cm)	200
$\alpha_x$ (cm)*	50	$\alpha_z$ (cm)	3
$\lambda$ (1/day)***	See below	K (cm/d)	1.75
U (cm/d)*	0.1200	i (unitless)	0.0150
Sw (cm)	5,639	$\theta_T$ (unitless)**	0.22

\*  $\alpha_x$ ,  $\alpha_y$ ,  $\alpha_z$ , and U are reported on Datasheet RBCA-V    \*\* Physical Soil Parameter (see Datasheet B)

\*\*\* Chemical Properties (see Datasheet C)

Chemical Name	$\lambda$ (1/day)	C <sub>source</sub> * (mg/L)	C <sub>(x)</sub> (mg/L)
Benzene	0.0009000	2.30000	1.26E-01
Ethylbenzene	0.0030000	8.15000	5.80E-03
Toluene	0.0110000	12.00000	5.04E-07
Xylenes (total)	0.0019000	23.60000	1.29E-01

\* Note: C<sub>source</sub> is the measured concentration at the source for this form.

**Datasheet RBCA-VIII. VFss**

Datasheet RBCA-VIII is to be used to propose the volatilization factor(s) for surficial soils (VFss) calculated by the equations in RBCA: Equations R3 and R4 (residential, industrial/commercial and construction worker scenarios). VFss calculated by each equation must be provided. The lower value calculated using Equations R3 and R4 is to be used as the VFss in the RBCA models. Since the values listed in Datasheets RBCA-XI and RBCA-XII are used in this evaluation, these datasheets must also be submitted.

*Land Use Scenario: Industrial/Commercial*

W (cm)	6,096.00	Physical Soil Parameters*	
U <sub>air</sub> (cm/s)	469	ρ <sub>s</sub> (g/cm <sup>3</sup> )	2.01
δ <sub>air</sub> (cm)	200	θ <sub>ws</sub> (unitless)	0.21
D <sub>s</sub> <sup>eff</sup> (cm <sup>2</sup> /s)**	See below	θ <sub>as</sub> (unitless)	0.03
H' (unitless)***	See below		
π (unitless)	3.14159		
k <sub>s</sub> (g/gsoil) ****	See below		
τ (s)	3,600,000		
d (cm)	100.00		

\* Physical Sol Parameters (see Datasheet B)    \*\* Dseff value reported on Datasheet RBCA-XII

\*\*\* Chemical Properties (see Datasheet C)    \*\*\*\* k<sub>s</sub> value reported on Datasheet RBCA-XI

Chemical Name	D <sub>s</sub> <sup>eff</sup> (cm <sup>2</sup> /s)	H' (unitless)	k <sub>s</sub> (g/gsoil)/(g/cm <sup>3</sup> )	VFss (kg/m <sup>3</sup> )
Benzene	2.15E-005	2.28E-001	1.47250	6.07E-006
Ethylbenzene	1.72E-005	3.23E-001	9.07500	2.68E-006
Toluene	2.03E-005	2.72E-001	4.55000	3.75E-006
Xylenes (total)	1.78E-005	2.50E-001	6.50000	2.83E-006

**Datasheet RBCA-VIII. VFss**

Datasheet RBCA-VIII is to be used to propose the volatilization factor(s) for surficial soils (VFss) calculated by the equations in RBCA: Equations R3 and R4 (residential, industrial/commercial and construction worker scenarios). VFss calculated by each equation must be provided. The lower value calculated using Equations R3 and R4 is to be used as the VFss in the RBCA models. Since the values listed in Datasheets RBCA-XI and RBCA-XII are used in this evaluation, these datasheets must also be submitted.

*Land Use Scenario: Industrial/Commercial*

W (cm)	6,096.00	Physical Soil Parameters*	
U <sub>air</sub> (cm/s)	469	ρ <sub>s</sub> (g/cm <sup>3</sup> )	2.01
δ <sub>air</sub> (cm)	200	θ <sub>ws</sub> (unitless)	0.21
D <sub>s</sub> <sup>eff</sup> (cm <sup>2</sup> /s)**	See below	θ <sub>as</sub> (unitless)	0.03
H' (unitless)***	See below	[REDACTED]	
π (unitless)	3.14159		
k <sub>s</sub> (g/gsoil)****	See below		
τ (s)	790,000,000		
d (cm)	100.00		

\* Physical Sol Parameters (see Datasheet B)    \*\* Dseff value reported on Datasheet RBCA-XII  
 \*\*\* Chemical Properties (see Datasheet C)    \*\*\*\* k<sub>s</sub> value reported on Datasheet RBCA-XI

Chemical Name	D <sub>s</sub> <sup>eff</sup> (cm <sup>2</sup> /s)	H' (unitless)	k <sub>s</sub> (g/gsoil)/(g/cm <sup>3</sup> )	VFss (kg/m <sup>3</sup> )
Benzene	2.15E-005	2.28E-001	1.47250	6.07E-006
Ethylbenzene	1.72E-005	3.23E-001	9.07500	2.68E-006
Toluene	2.03E-005	2.72E-001	4.55000	3.75E-006
Xylenes (total)	1.78E-005	2.50E-001	6.50000	2.83E-006

### Datasheet RBCA-VIII. VFss

Datasheet RBCA-VIII is to be used to propose the volatilization factor(s) for surficial soils (VFss) calculated by the equations in RBCA: Equations R3 and R4 (residential, industrial/commercial and construction worker scenarios). VFss calculated by each equation must be provided. The lower value calculated using Equations R3 and R4 is to be used as the VFss in the RBCA models. Since the values listed in Datasheets RBCA-XI and RBCA-XII are used in this evaluation, these datasheets must also be submitted.

*Land Use Scenario: Residential*

W (cm)	6,096	Physical Soil Parameters*	
U <sub>air</sub> (cm/a)	469	ρ <sub>s</sub> (g/cm <sup>3</sup> )	2.01
θ <sub>air</sub> (cm)	200	θ <sub>ws</sub> (unitless)	0.21
D <sub>s</sub> <sup>eff</sup> (cm <sup>2</sup> /s)**	See below	θ <sub>as</sub> (unitless)	0.03
H' (unitless)***	See below		
π (unitless)	3.14159		
k <sub>s</sub> (g/gsoil) ****	See below		
τ (s)	946,000,000		
d (cm)	100.00		

\* Physical Sol Parameters (see Datasheet B)    \*\* Dseff value reported on Datasheet RBCA-XII  
 \*\*\* Chemical Properties (see Datasheet C)    \*\*\*\* k<sub>s</sub> value reported on Datasheet RBCA-XI

Chemical Name	D <sub>s</sub> <sup>eff</sup> (cm <sup>2</sup> /s)	H' (unitless)	k <sub>s</sub> (g/gsoil)/(g/cm <sup>3</sup> )	VFss (kg/m <sup>3</sup> )
Benzene	2.15E-005	2.28E-001	1.47250	6.07E-006
Ethylbenzene	1.72E-005	3.23E-001	9.07500	2.68E-006
Toluene	2.03E-005	2.72E-001	4.55000	3.75E-006
Xylenes (total)	1.78E-005	2.50E-001	6.50000	2.83E-006

### Datasheet RBCA-X. VF<sub>samb</sub>

Datasheet RBCA-X is to be used to propose the volatilization factor for subsurface soil to ambient air (VF<sub>samb</sub>) calculated by the equations in Appendix C, Table C of TACO: Equation R11 (residential, industrial/commercial and construction worker scenarios). Since the values in Datasheets RBCA-XI and RBCA-XII are used in this evaluation, these datasheets must also be submitted

**Land Use Scenario:** Residential, Industrial/Commercial and Construction Worker

H' (unitless)***	See below	Physical Soil Parameters*	
ks (g/gsoil) ****	See below	ρs (g/cm <sup>3</sup> )	2.01
U <sub>air</sub> (cm/s)	469	θ <sub>ws</sub> (unitless)	0.21
δ <sub>air</sub> (cm)	200	θ <sub>as</sub> (unitless)	0.03
L <sub>s</sub> (cm)	152		
D <sub>s</sub> <sup>eff</sup> (cm <sup>2</sup> /s)**	See below		
W (cm)	6,096		

\* Physical Sol Parameters (see Datasheet B)    \*\* D<sub>s</sub><sup>eff</sup> value reported on Datasheet RBCA-XII

\*\*\* Chemical Properties (see Datasheet C)    \*\*\*\* k<sub>s</sub> value reported on Datasheet RBCA-XI

Chemical Name	D <sub>s</sub> <sup>eff</sup> (cm <sup>2</sup> /s)	H' (Unitless)	k <sub>s</sub> (g/g <sub>soil</sub> )/(g/cm <sup>3</sup> )	VF <sub>s,amb</sub> (kg/m <sup>3</sup> )
Benzene	0.0000215	2.28E-001	1.4725	1.31E-006
Ethylbenzene	0.0000172	3.23E-001	9.0750	2.54E-007
Toluene	0.0000203	2.72E-001	4.5500	4.97E-007
Xylenes (total)	0.0000178	2.50E-001	6.5000	2.83E-007

### Datasheet RBCA-XI. ks

Datasheet RBCA-XI is to be used to propose the soil water sorption coefficient (ks) calculated by the equation in Appendix C, Table C of TACO: Equation R20 (residential, industrial/commercial and construction worker scenarios).

*Land Use Scenario:*    **Residential, Industrial/Commercial and Construction Worker**

Chemical Name	Surface Soils				Subsurface Soils			
	pH	Koc* (cm <sup>3</sup> /g)	foc** (g/g)	ks (g/gsoil)/(g/cm <sup>3</sup> water)	pH	Koc* (cm <sup>3</sup> /g)	foc** (g/g)	ks (g/gsoil)/(g/cm <sup>3</sup> water)
Benzene	6.80	5.89E+00	0.025	1.47250	6.80	5.89E+001	0.026	1.56085
Ethylbenzene	6.80	3.63E+00	0.025	9.07500	6.80	3.63E+002	0.026	9.61950
Toluene	6.80	1.82E+00	0.025	4.55000	6.80	1.82E+002	0.026	4.82300
Xylenes (total)	6.80	2.60E+00	0.025	6.50000	6.80	2.60E+002	0.026	6.89000

\* Chemical Properties (see Datasheet C)

\*\* Physical Soil Parameters (see Datasheet B)

### Datasheet RBCA-XII. Dseff

Datasheet RBCA-CII is to be used to propose the effective diffusion coefficient in soil based on vapor-phase concentration (Dseff) as calculated by the equation in Appendix C, Table C of TACO: Equation R6 (residential, industrial/commercial and construction worker scenarios).

*Land Use Scenario:* **Residential, Industrial/Commercial and Construction Worker**

Dair (cm <sup>2</sup> /s)*	See below
Dwater (cm <sup>2</sup> /s)*	See below
θ <sub>T</sub> (unitless)**	0.24
θ <sub>as</sub> (unitless)**	0.03
θ <sub>ws</sub> (unitless)**	0.21
H' (unitless)*	See below

\* Chemical Properties (see Datasheet C)

\*\* Physical Soil Parameters (see Datasheet

Chemical Name	Dair (cm <sup>2</sup> /s)	Dwater (cm <sup>2</sup> /s)	H' (unitless)	Ds <sup>eff</sup> (cm <sup>2</sup> /s)
Benzene	8.80E-002	9.80E-006	2.28E-001	0.00002
Ethylbenzene	7.50E-002	7.80E-006	3.23E-001	0.00002
Toluene	8.70E-002	8.60E-006	2.72E-001	0.00002
Xylenes (total)	7.20E-002	9.34E-006	2.50E-001	0.00002

### Datasheet RBCA-XIII. LFsw

Datasheet RBCA-XIII is to be used to propose the leaching factor calculated by the equation in Appendix C, Table C of TACO: Equation R14 (residential, industrial/commercial and construction worker scenarios). The use of Equations R20 and R24 in TACO are necessary to generate some of the input values for Equation R14. Since the values in Datasheet RBCA-XI are used in this evaluation, this Datasheet must also be submitted.

$k_s$ (gwater/gsoil)*	See below	$\rho_s$ (g/cm <sup>3</sup> )**	2.07
H' (unitless)***	See below	$\theta_{ws}$ (unitless)**	0.19
$U_{gw}$ (cm/yr)****	9.55	$\theta_{as}$ (unitless)**	0.03
K (cm/yr)	637.00		
i (unitless)	0.015		
$\delta_{gw}$ (cm)	200		
I (cm/yr)	30		
W (cm)	6,401		

\*  $k_s$  value reported on Datasheet RBCA-XI  
 \*\*\*Chemical Properties (see Datasheet C)

\*\* Physical Soil Properties (see Datasheet B)  
 \*\*\*\*  $U_{gw}$  value as calculated using Equation R24

Chemical Name	$k_s$ (gwater/gsoil)	H' (unitless)	LFsw (mg/Lwater)/(mg/kgsoil)
Benzene	1.5609	2.28E-001	5.97E-01
Ethylbenzene	9.6195	3.23E-001	1.02E-01
Toluene	4.8230	2.72E-001	2.01E-01
Xylenes (total)	6.8900	2.50E-001	1.42E-01

**APPENDIX H**  
**HIGH PRIORITY CAP BUDGET**

**BUDGET AND BILLING FORM FOR  
LEAKING UNDERGROUND STORAGE  
TANK SITES**

**A. SITE INFORMATION**

Site Name: Warsaw, Howard

Site Address: Route 122 City: Minier

Zip: 61759

County: Tazewell IEPA Generator No.: 1790455007

IEMA Incident No: 981987 IEMA Notification Date: May 19, 1999

Date this Form was Prepared: January 16, 2002

This form is being submitted as a:

- Budget Proposal
- Budget Amendment (Budget Amendments must include only the costs over the previous budget)

Amendment Number: 1

Billing Package for costs incurred pursuant to 35 Illinois Administrative Code (IAC), Part 732 ("new program")

Name(s) of report(s) documenting the costs requested: \_\_\_\_\_

Date(s): \_\_\_\_\_

This form is being submitted for the Site Activities indicated below (check one):

- Early Action  Site Classification
- Low Priority Corrective Action  High Priority Corrective Action
- Other (indicate activities): \_\_\_\_\_

**DO NOT SUBMIT "NEW PROGRAM" COSTS AND "OLD PROGRAM"  
COSTS AT THE SAME TIME, ON THE SAME FORMS.**

A-1

IL 532-2263  
LPC 494 Rev. 2/99

This form must be submitted in duplicate.  
The Agency is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder.  
This form has been approved by the Forms Management Center.

**RECEIVED**  
FEB 08 2002  
IEPA/BOL

R0304

If eligible for reimbursement, where should reimbursement checks be sent? Please note that only owners or operators or USTs may be eligible for reimbursement. Therefore, payment can only be made to an owner or operator.

Pay to the order of: Howard Warsaw

Send in care of: Howard Warsaw

Address: Route 122

City: Minier State: IL Zip: 61759

Number of Petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101: X 101 or more: \_\_\_\_\_

Number of USTs at the site: 7 (Number of USTs included USTs presently at the site and USTs that have been removed.)

Number of incidents reported to IEMA: 2

Incident Numbers assigned to the site due to releases from USTs: 981987, 991610

Please list all tanks which have ever been located at the site and are presently located at the site:

Product Stored	Size (gallons)	Did UST have a release?		Incident No.	Type of Release
<u>gasoline</u>	<u>500</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>gasoline</u>	<u>500</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>gasoline</u>	<u>2,000</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>diesel</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
_____	_____	<u>Yes</u>	<u>No</u>	_____	_____
_____	_____	<u>Yes</u>	<u>No</u>	_____	_____

**B. PROPOSED BUDGET SUMMARY AND BUDGET TOTAL**

1. Investigation Costs:	<u>\$0.00</u>
2. Analysis Costs:	<u>\$10,150.00</u>
3. Personnel Costs:	<u>\$66,623.00</u>
4. Equipment Costs:	<u>\$1,728.00</u>
5. Field Purchases and Other Costs:	<u>\$143,370.00</u>
6. Handling Charges:	<u>\$7,957.40</u>

**TOTAL PROPOSED BUDGET = \$229,828.40**



<u>          </u>	pH	samples X	<u>          </u>	per sample =	<u>      \$0.00</u>
<u>          </u>	paint filter	samples X	<u>          </u>	per sample =	<u>      \$0.00</u>
<u>          </u>	TCLP Lead	samples x	<u>          </u>	per sample =	<u>      \$0.00</u>
<u>          </u>	flash point	samples X	<u>          </u>	per sample =	<u>      \$0.00</u>
<u>          </u>	Lab and/or Field Blank	samples X	<u>          </u>	per sample =	<u>      \$0.00</u>
<u>          </u>		samples X	<u>          </u>	per sample =	<u>      \$0.00</u>
<u>          </u>		samples X	<u>          </u>	per sample =	<u>      \$0.00</u>
<u>          </u>		samples X	<u>          </u>	per sample =	<u>      \$0.00</u>
<u>          </u>		samples X	<u>          </u>	per sample =	<u>      \$0.00</u>

3. Groundwater Analysis Costs - This must be for laboratory analysis only.

<u>      111</u>	BTEX	samples X	<u>      \$70.00</u>	per sample =	<u>      \$7,770.00</u>
<u>          </u>	PNA	samples X	<u>          </u>	per sample =	<u>      \$0.00</u>
<u>          </u>	LUST Pollutant	samples X	<u>          </u>	per sample =	<u>      \$0.00</u>
<u>          </u>	pH	samples X	<u>          </u>	per sample =	<u>      \$0.00</u>
<u>          </u>	Lab and/or Field Blank	samples X	<u>          </u>	per sample =	<u>      \$0.00</u>
<u>          </u>	flash point	samples X	<u>          </u>	per sample =	<u>      \$0.00</u>
<u>      7</u>	Selective Plate Count	samples X	<u>      \$50.00</u>	per sample =	<u>      \$350.00</u>
<u>      7</u>	Total Plate Count	samples X	<u>      \$50.00</u>	per sample =	<u>      \$350.00</u>
<u>      7</u>	Ammonia/Nitrogen	samples X	<u>      \$15.00</u>	per sample =	<u>      \$105.00</u>
<u>      7</u>	Ortho-Phosphate	samples X	<u>      \$25.00</u>	per sample =	<u>      \$175.00</u>
<u>          </u>		samples X	<u>          </u>	per sample =	<u>      \$0.00</u>
<u>          </u>		samples X	<u>          </u>	per sample =	<u>      \$0.00</u>
<b>Total Analysis Costs =</b>			<u>      \$10,150.00</u>		

**G. PERSONNEL**

All personnel costs that are not included elsewhere in the budget/billing form must be listed here. Costs must be listed per task, not personnel type. The following are some examples of tasks: Drafting, data collection, plan, report or budget preparation for \_\_\_\_\_ (i.e., site classification work plan, 45 day report, or high priority corrective action budget), sampling, field oversight for \_\_\_\_\_ (i.e. drilling/well installation, corrective action, or early action), of maintenance of \_\_\_\_\_. The above list is not inclusive of all possible tasks.

**FOR CAP PREPARATION:**

Registered P.E. : 12 hours x \$125.00 per hour = \$1,500.00

Task to be performed for the above hours: CAP preparation; review and certify CAP & Reimbursements, system design

Principal : 25 hours x \$120.00 per hour = \$3,000.00

Task to be performed for the above hours: CAP Preparation, GW System research, planning, system design

Sr. Environmental Manager : 40 hours x \$110.00 per hour = \$4,400.00

Task to be performed for the above hours: CAP & Budget preparation, bids, planning, system design research

Professional Geologist : 3 hours x \$110.00 per hour = \$330.00

Task to be performed for the above hours: GW System research, background data

Sr. Project Manager : 24 hours x \$98.00 per hour = \$2,352.00

Task to be performed for the above hours: CAP Preparation; data acquisition; remedial approach research (enhanced bio)

Sr. Environmental Hydrogeologist : 80 hours x \$98.00 per hour = \$7,840.00

Task to be performed for the above hours: CAP & Budget preparation; system data research, remedial approach research

Project Manager : 4 hours x \$78.00 per hour = \$312.00

Task to be performed for the above hours: Sample preparation; mapping

Environmental Technician : 8 hours x \$65.00 per hour = \$520.00

Task to be performed for the above hours: sampling, sample preparation; groundwater data

Admin/Clerical : 6.5 hours x \$42.00 per hour = \$273.00

Task to be performed for the above hours: Review, copy, bind and mail reports & reimbursements

Reimbursement Manager : 4 hours x \$55.00 per hour = \$220.00

Task to be performed for the above hours: Reimbursement Preparation

**FOR CAP IMPLEMENTATION:**

Sr. Env. Hydrogeo/Sr. Env. Manag. : 75 hours x \$98.00 per hour = \$7,350.00

Task to be performed for the above hours: Trench excavation oversight, trench sampling, system setup oversight

Sr. Project Manager : 24 hours x \$98.00 per hour = \$2,352.00

Task to be performed for the above hours: scheduling system installation, subcontractor coordination

Principal : 16 hours x \$120.00 per hour = \$1,920.00

Task to be performed for the above hours: System installation planning, subcontractor coordination

Sr. Environmental Manager : 20 hours x \$110.00 per hour = \$2,200.00

Task to be performed for the above hours: Direct system setup oversight

Environmental Technician : 130 hours x \$65.00 per hour = \$8,450.00

Task to be performed for the above hours: Quarterly well sampling, monthly system influent/effluent sampling as required over 2 years

Principal : 16 hours x \$120.00 per hour = \$1,920.00

Task to be performed for the above hours: Annual LUST Status reports, GW data review, permits

Sr. Environmental Manager : 24 hours x \$110.00 per hour = \$2,640.00

Task to be performed for the above hours: Annual LUST Status reports, GW data review, permits

Sr. Environmental Hydrogeologist : 60 hours x \$98.00 per hour = \$5,880.00

Task to be performed for the above hours: Data collection, LUST status reports, data review CAD; IEPA correspondence

Sr. Project Manager : 24 hours x \$98.00 per hour = \$2,352.00

Task to be performed for the above hours: GW data, mapping, system checkups

Project Manager : 56 hours x \$78.00 per hour = \$4,368.00

Task to be performed for the above hours: Data collection, site, minor system adjustments over 2 years; permits

Sr. Project Manager : 36 hours x \$98.00 per hour = \$3,528.00

Task to be performed for the above hours: Reimbursement preparation

Admin/Clerical : 18 hours x \$42.00 per hour = \$756.00

Task to be performed for the above hours: Report & reimbursement review, copy, bind and mail

Reimbursement Manager : 12 hours x \$55.00 per hour = \$660.00

Task to be performed for the above hours: Reimbursement preparation

Registered Professional Engineer : 12 hours x \$125.00 per hour = \$1,500.00

Task to be performed for the above hours: Reimbursement and report review & certifications

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours: \_\_\_\_\_

**TOTAL PERSONNEL COSTS: \$66,623.00**





**Other Costs** - A listing and description of all other costs which will be/were incurred and are not specifically listed on this form should be attached. The listing should include a cost breakdown in a time and materials format.

Color copies:	\$1.00 each X	50 copies =	<b>\$50.00</b>
encore samplers (3/sample):	\$10.00 each X	60 samplers =	<b>\$600.00</b>

For groundwater treatment system setup as per bid as follows: **\$52,400.00**  
 Excavate 400 lineal feet of trench, 3' wide and 10' deep. Off haul all excavated materials to landfill.  
 Install specified perforated, wrapped PVC piping in trenches and backfill with 3/8" pea gravel to subgrade and top with 8" CA-6 gravel. Install specified sumps with manholes, supply materials and labor for 12'x12' insulated, heated building for system. Supply and install 2-60 gpm Grundfos pumps with controllers. Make all connections to system and clean work area.

For treatment system:			<b>\$15,000.00</b>
O & M for GW System	\$1,000.00 /month X	24 months =	<b>\$24,000.00</b>
For Soil Disposal	\$30.50 per ton X	1500 tons =	<b>\$45,750.00</b>
Sewer hookup permit	\$50.00 each x	1 hookup =	<b>\$50.00</b>
Electricity for system:	\$100.00 /month X	24 months =	<b>\$2,400.00</b>
Sewer discharge charge:	\$130.00 /month X	24 months =	<b>\$3,120.00</b>

**Total Other Costs = \$143,370.00**

**Subtotal I-1 = \$0.00**

**Total pages I-1 and I-2: \$143,370.00**

**J. HANDLING CHARGES**

Handling charges are eligible for payment on subcontractor billings and/or field purchases only if they are equal to or less than the amounts determined on the following table:

Subcontractor or Field Purchase Cost	Eligible Charges as a Percentage Of Cost
\$1 - \$5000	12%
\$5,001 - \$15,000	\$600 + 10% of amt. Over \$5,000
\$15,001 - \$50,000	\$1,600 + 8% of amt. Over \$15,000
\$50,001 - \$100,000	\$4,400 + 5% of amt. Over \$50,000
\$100,001 - \$1,000,000	\$6,900 + 2% of amt. Over \$100,000

**A. Subcontractor Charges**

Subcontractor	Section in these Forms where Cost is Listed	Subcontractor Amount
TriMatrix Laboratories	F	\$10,150.00
Tazewell County Recycling & Disposal	I	\$45,750.00
Total Petroleum	I	\$67,400.00
Illinois Oil Marketing Equipment	I	\$24,000.00
CILCO	I	\$2,400.00
Village of Minier	I	\$3,170.00

Subtotal J-1 :	<u>\$152,870.00</u>
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**L. HIGH PRIORITY CORRECTIVE ACTION**

Corrective Action at High Priority Sites may involve both air and soil and groundwater remediation. Below provide a summary of costs for the remediation type(s) chosen and attach the appropriate sections of the budget/billing forms to support the summary of costs.

**A. Preparation of the Corrective Action Plan**

1. Investigation Costs:	<u>\$0.00</u>
2. Analysis Costs:	<u>\$980.00</u>
3. Personnel Costs:	<u>\$20,747.00</u>
4. Equipment Costs:	<u>\$0.00</u>
5. Field Purchases and Other Costs:	<u>\$50.00</u>
6. Handling Charges:	<u>\$51.02</u>

**B. Groundwater Remediation**

1. Analysis Costs	<u>\$8,470.00</u>
2. Personnel Costs:	<u>\$24,524.00</u>
3. Equipment Costs:	<u>\$1,076.00</u>
4. Field Purchases and Other Costs:	<u>\$79,920.00</u>
5. Handling Charges:	<u>\$4,601.00</u>

Of the above costs, please provide a break down of costs associated with operation and maintenance (O&M), if applicable, as requested below:

24 Months of O&M x \$1,000.00 per month = \$24,000.00

**C. Excavation and Disposal**

1. Analysis Costs:	<u>\$700.00</u>
2. Personnel Costs:	<u>\$4,514.00</u>
3. Equipment Costs:	<u>\$576.00</u>
4. Field Purchases and Other Costs:	<u>\$56,350.00</u>
5. Handling Charges:	<u>\$2,938.40</u>

Of the above costs, please provide a break down of the costs associated with excavation, transportation, and disposal as requested below:

Excavation:	<u>1000</u> yards x	<u>\$6.50</u> per yard =	<u>\$6,500.00</u>
Transportation:	<u>1000</u> yards x	<u>\$3.50</u> per yard =	<u>\$3,500.00</u>
Disposal:	<u>1000</u> yards x	<u>\$45.75</u> per yard =	<u>\$45,750.00</u>

L-1

This form must be submitted in duplicate.

R0316

**D. Alternative Technology, Type: N/A**

1. Investigation costs:	<u>                    </u>	<u>          \$0.00</u>
2. Analysis Costs:	<u>                    </u>	<u>          \$0.00</u>
3. Personnel Costs:	<u>                    </u>	<u>          \$0.00</u>
4. Equipment Costs:	<u>                    </u>	<u>          \$0.00</u>
5. Field Purchases and Other Costs:	<u>                    </u>	<u>          \$0.00</u>
6. Handling Charges:	<u>                    </u>	<u>          \$0.00</u>

Of the above costs, please provide a break down of the following costs as requested below if applicable:

Excavation:	<u>                    0</u> yards x	<u>          \$0.00</u> per yard =	<u>          \$0.00</u>
Transportation:	<u>                    0</u> yards x	<u>          \$0.00</u> per yard =	<u>          \$0.00</u>
Treatment:	<u>                    0</u> yards x	<u>          \$0.00</u> per yard =	<u>          \$0.00</u>

Operation and Maintenance (O&M):

<u>                    0</u> Months of O&M x	<u>          \$0.00</u> per month =	<u>          \$0.00</u>
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**E. Backfill Costs**

1. Personnel Costs:	<u>                    \$4,514.00</u>
2. Equipment Costs:	<u>                    \$76.00</u>
3. Field Purchases and Other Costs:	<u>                    \$7,050.00</u>
4. Handling Charges:	<u>                    \$366.98</u>

Of the above costs, please provide a break down of the following costs as requested below if applicable:

Type of backfill:	<u>          3/8' Pea Gravel</u>	
<u>                    955</u> yards x	<u>          \$3.55</u> per yard =	<u>          \$3,390.25</u>
Type of backfill:	<u>          CA-6</u>	
<u>                    45</u> yards x	<u>          \$3.55</u> per yard =	<u>          \$159.75</u>



Office of the Illinois  
**State Fire Marshal**

CERTIFIED MAIL - RECEIPT REQUESTED #Z 082 409 569

September 30, 1999

Howard Warsaw  
Route 122  
Minier, IL 61759

In Re:

Facility No. 3-005023  
IEMA Incident No. 98-1987  
Warsaw ITCO  
Route 122  
Minier, Tazewell Co., IL

Dear Applicant:

The Reimbursement Eligibility and Deductible Application received on September 23, 1999 for the above referenced occurrence has been reviewed. The following determinations have been made based upon this review.

It has been determined that you are eligible to seek payment of costs in excess of \$10,000. The costs must be in response to the occurrence referenced above and associated with the following tanks:

Eligible Tanks

- Tank 1 500 gallon Gasoline
- Tank 2 500 gallon Gasoline
- Tank 3 2,000 gallon Gasoline

You must contact the Illinois Environmental Protection Agency to receive a packet of Agency billing forms for submitting your request for payment.

An owner or operator is eligible to access the Underground Storage Tank Fund if the eligibility requirements are satisfied:

1. Neither the owner nor the operator is the United States Government,
2. The tank does not contain fuel that is exempt from the Motor Fuel Tax Law,
3. The costs were incurred as a result of a confirmed release of any of the following substances:

"Fuel", as defined in Section 1.19 of the Motor Fuel Tax Law

Aviation fuel

Heating oil

General Office

217-785-0969

FAX

217-782-1062

Divisions

CRIMINAL INVESTIGATION

217-782-9116

ELEVATOR and PRESSURE

VESSEL SAFETY

217-782-2696

FIRE PREVENTION

217-785-4714

MANAGEMENT SERVICES

217-782-9889

INFIRS

217-785-5826

HUMAN RESOURCES

217-785-1026

PERSONNEL STANDARDS

and EDUCATION

217-782-4542

PETROLEUM and

CHEMICAL SAFETY

217-785-5878

PUBLIC INFORMATION

217-785-1021

WEB SITE

www.state.il.us/osfm

Kerosene

Used oil, which has been refined from crude oil used in a motor vehicle, as defined in Section 1.3 of the Motor Fuel Tax Law.

4. The owner or operator registered the tank and paid all fees in accordance with the statutory and regulatory requirements of the Gasoline Storage Act.
5. The owner or operator notified the Illinois Emergency Management Agency of a confirmed release, the costs were incurred after the notification and the costs were a result of a release of a substance listed in this Section. Costs of corrective action or indemnification incurred before providing that notification shall not be eligible for payment.
6. The costs have not already been paid to the owner or operator under a private insurance policy, other written agreement, or court order.
7. The costs were associated with "corrective action".

This constitutes the final decision as it relates to your eligibility and deductibility. We reserve the right to change the deductible determination should additional information that would change the determination become available. An underground storage tank owner or operator may appeal the decision to the Illinois Pollution Control Board (Board), pursuant to Section 57.9 (c) (2). An owner or operator who seeks to appeal the decision, shall file a petition for a hearing before the Board within 35 days of the date of mailing of the final decision, (35 Illinois Administrative Code 105.102(a) (2)).

For information regarding the filing of an appeal, please contact:

Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
State of Illinois Center  
100 West Randolph, Suite 11-500  
Chicago, Illinois 60601  
(312) 814-3620

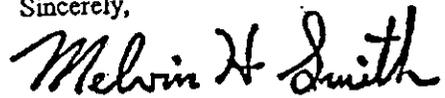
The following tanks are also listed for this site:

Tank 4 2,500 gallon Diesel  
Tank 5 2,500 gallon Gasoline  
Tank 6 2,500 gallon Gasoline  
Tank 7 2,500 gallon Gasoline

Your application indicates that there has not been a release from these tanks under this incident number. You may be eligible to seek payment of corrective action costs associated with these tanks if it is determined that there has been a release from one or more of these tanks. Once it is determined that there has been a release from one or more of these tanks you may submit a separate application for an eligibility determination to seek corrective action costs associated with this/these tanks.

If you have any questions regarding the eligibility or deductibility determinations, please contact our Office at (217) 785-1020 or (217) 785-5878.

Sincerely,



Melvin H. Smith  
Division Director  
Division of Petroleum and Chemical Safety

MHS/dl

cc: IEPA  
Facility File

R0320





ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

217/782-6762

MAY 24 2002

CERTIFIED MAIL  
7001-2510-0002-3280-0403

Howard Warsaw  
Route 122  
Minier, Illinois 61759

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 981987 and 991610  
LUST Technical File

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the High Priority Corrective Action Plan (plan) submitted for the above-referenced incident. This plan, dated January 28, 2002, was received by the Illinois EPA on February 8, 2002. Citations in this letter are from the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 IAC).

Pursuant to 35 IAC Section 732.405(c) and Section 57.7(c)(4) of the Act, the plan is approved. The activities proposed in the plan are appropriate to demonstrate compliance with 35 IAC Part 732 and Title XVI of the Act. Please note that all activities associated with the remediation of this release proposed in the plan must be executed in accordance with all applicable regulatory and statutory requirements, including compliance with the proper permits.

In addition, the proposed budget for the High Priority Corrective Action Plan is rejected for the reason(s) listed in Attachment A (Section 57.7(c)(4) of the Act and 35 IAC Sections 732.405(c) and 732.503(b)).

All future correspondence must be submitted to:

Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the "Re:" block shown at the beginning of this letter.

RELEASABLE

GEORGE H. RYAN, GOVERNOR

MAY 30 2002

R0322

REVIEWER Mh

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board (Board) pursuant to Section 57.7(c)(4)(D) and Section 40 of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the filing of an appeal, please contact:

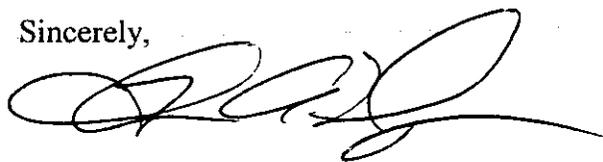
Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
State of Illinois Center  
100 West Randolph, Suite 11-500  
Chicago, IL 60601  
312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency  
Division of Legal Counsel  
1021 North Grand Avenue East  
Springfield, IL 62794-9276  
217/782-5544

If you have any questions or need further assistance, please contact Jim Ransdell at 217/557-6938.

Sincerely,



Thomas A. Henninger  
Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

TAH:JSR:jk\022244.doc

Attachment: Attachment A

cc: Midwest Environmental Consulting & Remediation  
Division File

Attachment A

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 981987 and 991610  
LUST Technical File

NOTE: Citations in this attachment are from 35 Illinois Administrative Code (35 IAC) and the Environmental Protection Act.

1. One of the overall goals of the financial review is to assure that costs associated with materials, activities and services are reasonable (35 IAC Section 732.505(c)).

The budget includes costs that are not reasonable as submitted (Section 57.7(c)(4)(C) of the Act and 35 IAC Section 732.606(hh)). Please note that additional information and/or supporting documentation may be provided to demonstrate the costs submitted are reasonable.

The Agency is requesting further breakdown of the groundwater treatment system and the operation and maintenance for the groundwater system supporting costs, i.e., invoices and receipts for activities, materials, design, time spent, sub-contracting, operation failure and repair rates, life expectancy, salvage value, and any other costs associated with the system.

TAH:JSR:jk\022244.doc

**U.S. Postal Service  
CERTIFIED MAIL RECEIPT**

(Domestic Mail Only; No Insurance Coverage Provided)

7001 2510 0002 3280 0403

981987 TAH/JR

Postage	\$
Certified Fee	2.10
Return Receipt Fee (Endorsement Required)	1.50



Restricted Deliv  
(Endorsement F) 399  
Howard Warsaw  
Route 122  
Minier, Illinois 61759

Total Postage:  
Sent To  
Street, Apt. No.  
or PO Box No.  
City, State, ZIP

PS Form 3811, January 1997 See Reverse for Instructions

- 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:  
  
Howard Warsaw  
Route 122  
Minier, Illinois 61759

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
 Addressee  
 B. Received by (Printed Name) C. Date of Delivery  
 Donald Krueger 5/25/97  
 D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

PO Box 557

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

2. Article Number  
 7001 2510 0002 3280 0403 TAH/JR

981987

UNITED STATES POSTAL SERVICE



First-Class Mail —  
Postage & Fees Paid  
USPS  
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

Illinois Environmental Protection Agency

P.O. Box 19276 Mail Code #

Springfield, IL 62794-9276

24



1790455007 - Tazewell  
Warsaw, Howard  
Lust Tech.

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC.  
22200 ILLINOIS ROUTE 9, POST OFFICE BOX 614  
TREMONT, ILLINOIS 61568-0614  
PHONE NO. (309) 925-5551 FAX NO. (309) 925-5606

LETTER OF TRANSMITTAL

TO: Illinois Environmental Protection Agency  
1021 North Grand Avenue East, Box 19276  
Springfield, Illinois 62794-9276

DATE: November 7, 2002  
JOB NO.: 9890  
RE: Amended CAP & Budget  
Howard Warsaw Property  
IL Route 122  
Minier, Illinois

ATTENTION: Mr. Jim Ransdell

WE ARE SENDING YOU:

- REPORT       LETTER       CONTRACT & RATE SHEET  
 MAPS/DRAWINGS       DOCUMENTS REQUIRING SIGNATURE  
 REIMBURSEMENT DOCUMENTATION       OTHER

COPIES	DESCRIPTION
2	Amended Corrective Action Plan Budget for the above referenced site

THESE ARE TRANSMITTED AS CHECKED BELOW:

- REIMBURSEMENT SUBMITTAL     FOR APPROVAL     AS NEEDED FOR REPORT  
 COPY FOR YOUR RECORDS       SIGNATURE REQUIRED     AS REQUESTED

REMARKS:

Mr. Ransdell,

Please find enclosed the above mentioned documentation for your review. As always, please feel free to contact our office with any questions or comments.

FROM: Gaye Lynn Green; Office Manager  
Midwest Environmental Consulting & Remediation Services, Inc.

RELEASABLE

FEB 03 2003

REVIEWER MM

NOV 12 2002

REPA/SOL

R0327

# Midwest Environmental Consulting & Remediation Services Inc.

22200 Illinois Route 9 • P.O. Box 614

Tremont, IL 61568-0614

Phone: (309) 925-5551 • Fax: (309) 925-5606

November 6, 2002

Mr. Jim Ransdell  
Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Re: LPC #1790455007 – Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 981987  
LUST Technical File

**RELEASABLE**

FEB 03 2003

**REVIEWER MM**

Dear Mr. Ransdell:

Attached please find the budget associated with the High Priority Corrective Action Plan (CAP) dated January 28, 2002. The CAP was approved by the IEPA in a letter dated May 24, 2002. The budget associated with the installation of the groundwater treatment system was rejected because the IEPA requested a further breakdown of the costs associated with the installation of the treatment system. Following several telephone conversations between you and Mr. Todd Birky of this office, the attached budget proposal is submitted for your review. The following modifications have been made in the attached budget proposal:

1. Reduction in the number of groundwater sampled for analysis of BTEX from 111 to 100. 100 samples represents the 8 quarterly groundwater sampling events for seven monitoring wells and 8 quarterly influent/effluent samples (72), and four additional quarterly sampling events of seven monitoring wells (28 samples), two sampling events during the review phase and two events during the groundwater treatment system construction/installation process.
2. Additional personnel hours for preparation of the budget and correspondence between IEPA have been added.
3. O & M costs for the system have been reduced from \$1,000.00 per month to \$800.00 per month.

RECEIVED

NOV 12 2002

IEPA/R0328

Also attached is an invoice for a groundwater treatment system similar to the one approved in the CAP. The invoice includes the costs associated with the tray bubbling system and a blower. The pumps, heater, building and plumbing is not included in the invoice, and is accounted for under Section I of the proposed budget.

If you have any questions or comments, please contact our office.

Sincerely,

Midwest Environmental Consulting and Remediation Services, Inc.



Allan M. Green  
President

TKB/alg  
cc: Mr. Howard Warsaw  
Attachments  
Job No. 9890

RECEIVED  
NOV 12 2002  
EL-A/BOL

**APPENDIX H**  
**HIGH PRIORITY CAP BUDGET**



If eligible for reimbursement, where should reimbursement checks be sent? Please note that only owners or operators or USTs may be eligible for reimbursement. Therefore, payment can only be made to an owner or operator.

Pay to the order of: Howard Warsaw

Send in care of: Howard Warsaw

Address: Route 122

City: Minier State: IL Zip: 61759

Number of Petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101: X 101 or more: \_\_\_\_\_

Number of USTs at the site: 7 (Number of USTs included USTs presently at the site and USTs that have been removed.)

Number of incidents reported to IEMA: 2

Incident Numbers assigned to the site due to releases from USTs: 981987, 991610

Please list all tanks which have ever been located at the site and are presently located at the site:

Product Stored	Size (gallons)	Did UST have a release?		Incident No.	Type of Release
<u>gasoline</u>	<u>500</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>gasoline</u>	<u>500</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>gasoline</u>	<u>2,000</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>diesel</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
_____	_____	<u>Yes</u>	<u>No</u>	_____	_____
_____	_____	<u>Yes</u>	<u>No</u>	_____	_____

This form must be submitted in duplicate.

**B. PROPOSED BUDGET SUMMARY AND BUDGET TOTAL**

1. Investigation Costs:	<u>\$0.00</u>
2. Analysis Costs:	<u>\$9,380.00</u>
3. Personnel Costs:	<u>\$72,601.00</u>
4. Equipment Costs:	<u>\$1,728.00</u>
5. Field Purchases and Other Costs:	<u>\$141,570.00</u>
6. Handling Charges:	<u>\$7,906.00</u>

**TOTAL PROPOSED BUDGET = \$233,185.00**



<u>        </u>	pH	samples X	<u>        </u>	per sample =	<u>        </u> \$0.00
<u>        </u>	paint filter	samples X	<u>        </u>	per sample =	<u>        </u> \$0.00
<u>        </u>	TCLP Lead	samples x	<u>        </u>	per sample =	<u>        </u> \$0.00
<u>        </u>	flash point	samples X	<u>        </u>	per sample =	<u>        </u> \$0.00
<u>        </u>	Lab and/or Field Blank	samples X	<u>        </u>	per sample =	<u>        </u> \$0.00
<u>        </u>		samples X	<u>        </u>	per sample =	<u>        </u> \$0.00
<u>        </u>		samples X	<u>        </u>	per sample =	<u>        </u> \$0.00
<u>        </u>		samples X	<u>        </u>	per sample =	<u>        </u> \$0.00
<u>        </u>		samples X	<u>        </u>	per sample =	<u>        </u> \$0.00

**3. Groundwater Analysis Costs - This must be for laboratory analysis only.**

<u>  100  </u>	BTEX	samples X	<u>  \$70.00  </u>	per sample =	<u>  \$7,000.00  </u>
<u>        </u>	PNA	samples X	<u>        </u>	per sample =	<u>        </u> \$0.00
<u>        </u>	LUST Pollutant	samples X	<u>        </u>	per sample =	<u>        </u> \$0.00
<u>        </u>	pH	samples X	<u>        </u>	per sample =	<u>        </u> \$0.00
<u>        </u>	Lab and/or Field Blank	samples X	<u>        </u>	per sample =	<u>        </u> \$0.00
<u>        </u>	flash point	samples X	<u>        </u>	per sample =	<u>        </u> \$0.00
<u>  7  </u>	Selective Plate Count	samples X	<u>  \$50.00  </u>	per sample =	<u>  \$350.00  </u>
<u>  7  </u>	Total Plate Count	samples X	<u>  \$50.00  </u>	per sample =	<u>  \$350.00  </u>
<u>  7  </u>	Ammonia/Nitrogen	samples X	<u>  \$15.00  </u>	per sample =	<u>  \$105.00  </u>
<u>  7  </u>	Ortho-Phosphate	samples X	<u>  \$25.00  </u>	per sample =	<u>  \$175.00  </u>
<u>        </u>		samples X	<u>        </u>	per sample =	<u>        </u> \$0.00
<u>        </u>		samples X	<u>        </u>	per sample =	<u>        </u> \$0.00
<b>Total Analysis Costs =</b>			<u>  <b>\$9,380.00</b>  </u>		

**G. PERSONNEL**

All personnel costs that are not included elsewhere in the budget/billing form must be listed here. Costs must be listed per task, not personnel type. The following are some examples of tasks: Drafting, data collection, plan, report or budget preparation for \_\_\_\_\_ (i.e., site classification work plan, 45 day report, or high priority corrective action budget), sampling, field oversight for \_\_\_\_\_ (i.e. drilling/well installation, corrective action, or early action), of maintenance of \_\_\_\_\_. The above list is not inclusive of all possible tasks.

**FOR CAP PREPARATION:**

Registered P.E. : 12 hours x \$125.00 per hour = \$1,500.00

Task to be performed for the above hours: CAP preparation; review and certify CAP & Reimbursements, system design

Principal : 25 hours x \$120.00 per hour = \$3,000.00

Task to be performed for the above hours: CAP Preparation, GW System research, planning, system design

Sr. Environmental Manager : 40 hours x \$110.00 per hour = \$4,400.00

Task to be performed for the above hours: CAP & Budget preparation, bids, planning, system design research

Professional Geologist : 3 hours x \$110.00 per hour = \$330.00

Task to be performed for the above hours: GW System research, background data

Sr. Project Manager : 24 hours x \$98.00 per hour = \$2,352.00

Task to be performed for the above hours: CAP Preparation; data acquisition; remedial approach research (enhanced bio)

Sr. Environmental Hydrogeologist : 105 hours x \$98.00 per hour = \$10,290.00

Task to be performed for the above hours: CAP & Budget preparation; system data research, remedial approach research

Project Manager : 4 hours x \$78.00 per hour = \$312.00

Task to be performed for the above hours: Sample preparation; mapping

Environmental Technician : 8 hours x \$65.00 per hour = \$520.00

Task to be performed for the above hours: sampling, sample preparation; groundwater data

Admin/Clerical : 6.5 hours x \$42.00 per hour = \$273.00

Task to be performed for the above hours: Review, copy, bind and mail reports & reimbursements

Reimbursement Manager : 4 hours x \$55.00 per hour = \$220.00

Task to be performed for the above hours: Reimbursement Preparation

**FOR CAP IMPLEMENTATION:**

Sr. Env. Hydrogeo/Sr. Env. Manag. : 75 hours x \$98.00 per hour = \$7,350.00

Task to be performed for the above hours: Trench excavation oversight, trench sampling, system setup oversight

Sr. Project Manager : 24 hours x \$98.00 per hour = \$2,352.00

Task to be performed for the above hours: scheduling system installation, subcontractor coordination

Principal : 16 hours x \$120.00 per hour = \$1,920.00

Task to be performed for the above hours: System installation planning, subcontractor coordination

Sr. Environmental Manager : 20 hours x \$110.00 per hour = \$2,200.00

Task to be performed for the above hours: Direct system setup oversight

Environmental Technician : 130 hours x \$65.00 per hour = \$8,450.00

Task to be performed for the above hours: Quarterly well sampling, monthly system influent/effluent sampling as required over 2 years

Principal : 16 hours x \$120.00 per hour = \$1,920.00

Task to be performed for the above hours: Annual LUST Status reports, GW data review, permits

Sr. Environmental Manager : 24 hours x \$110.00 per hour = \$2,640.00

Task to be performed for the above hours: Annual LUST Status reports, GW data review, permits

Sr. Environmental Hydrogeologist : 60 hours x \$98.00 per hour = \$5,880.00

Task to be performed for the above hours: Data collection, LUST status reports, data review CAD; IEPA correspondence

Sr. Project Manager : 36 hours x \$98.00 per hour = \$3,528.00

Task to be performed for the above hours: GW data, mapping, system checkups/monitoring

Project Manager : 56 hours x \$78.00 per hour = \$4,368.00

Task to be performed for the above hours: Data collection, site, minor system adjustments over 2 years; permits

Sr. Project Manager : 60 hours x \$98.00 per hour = \$5,880.00

Task to be performed for the above hours: High Priority LUST Status reports/Reimbursement preparation

Admin/Clerical : 18 hours x \$42.00 per hour = \$756.00

Task to be performed for the above hours: Report & reimbursement review, copy, bind and mail

Reimbursement Manager : 12 hours x \$55.00 per hour = \$660.00

Task to be performed for the above hours: Reimbursement preparation (4 reimbursements)

Registered Professional Engineer : 12 hours x \$125.00 per hour = \$1,500.00

Task to be performed for the above hours: Reimbursement and report review & certifications (4 reimbursements)

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours: \_\_\_\_\_

**TOTAL PERSONNEL COSTS: \$72,601.00**





**Other Costs** - A listing and description of all other costs which will be/were incurred and are not specifically listed on this form should be attached. The listing should include a cost breakdown in a time and materials format.

Color copies:	\$1.00 each X	50 copies =	<b>\$50.00</b>
encore samplers (3/sample):	\$10.00 each X	60 samplers =	<b>\$600.00</b>

For groundwater treatment system setup as per bid as follows: **\$52,400.00**  
 Excavate 400 lineal feet of trench, 3' wide and 10' deep. Off haul all excavated materials to landfill.  
 Install specified perforated, wrapped PVC piping in trenches and backfill with 3/8" pea gravel to subgrade and top with 8" CA-6 gravel. Install specified sumps with manholes, supply materials and labor for 12'x12' insulated, heated building for system. Supply and install 2-60 gpm Grundfos pumps with controllers. Make all connections to system and clean work area.

For treatment system:			<b>\$15,000.00</b>
O & M for GW System	\$800.00 /month X	24 months =	<b>\$19,200.00</b>
For Soil Disposal	\$32.50 per ton X	1500 tons =	<b>\$48,750.00</b>
Sewer hookup permit	\$50.00 each x	1 hookup =	<b>\$50.00</b>
Electricity for system:	\$100.00 /month X	24 months =	<b>\$2,400.00</b>
Sewer discharge charge:	\$130.00 /month X	24 months =	<b>\$3,120.00</b>

**Total Other Costs = \$141,570.00**

**Subtotal I-1 = \$0.00**

**Total pages I-1 and I-2: \$141,570.00**





**L. HIGH PRIORITY CORRECTIVE ACTION**

Corrective Action at High Priority Sites may involve both and soil and groundwater remediation. Below provide a summary of costs for the remediation type(s) chosen and attach the appropriate sections of the budget/billing forms to support the summary of costs.

**A. Preparation of the Corrective Action Plan**

1. Investigation Costs:	<u>\$0.00</u>
2. Analysis Costs:	<u>\$980.00</u>
3. Personnel Costs:	<u>\$23,736.00</u>
4. Equipment Costs:	<u>\$0.00</u>
5. Field Purchases and Other Costs:	<u>\$50.00</u>
6. Handling Charges:	<u>\$51.02</u>

**B. Groundwater Remediation**

1. Analysis Costs	<u>\$7,700.00</u>
2. Personnel Costs:	<u>\$26,018.50</u>
3. Equipment Costs:	<u>\$1,076.00</u>
4. Field Purchases and Other Costs:	<u>\$79,920.00</u>
5. Handling Charges:	<u>\$4,601.00</u>

Of the above costs, please provide a break down of costs associated with operation and maintenance (O&M), if applicable, as requested below:

24 Months of O&M x \$800.00 per month = \$19,200.00

**C. Excavation and Disposal**

1. Analysis Costs:	<u>\$700.00</u>
2. Personnel Costs:	<u>\$6,008.50</u>
3. Equipment Costs:	<u>\$576.00</u>
4. Field Purchases and Other Costs:	<u>\$56,350.00</u>
5. Handling Charges:	<u>\$2,938.40</u>

Of the above costs, please provide a break down of the costs associated with excavation, transportation, and disposal as requested below:

Excavation:	<u>1000</u> yards x	<u>\$6.50</u> per yard =	<u>\$6,500.00</u>
Transportation:	<u>1000</u> yards x	<u>\$3.50</u> per yard =	<u>\$3,500.00</u>
Disposal:	<u>1000</u> yards x	<u>\$45.75</u> per yard =	<u>\$48,750.00</u>

L-1

This form must be submitted in duplicate.

R0343





Office of the Illinois  
**State Fire Marshal**

CERTIFIED MAIL - RECEIPT REQUESTED #Z 082 409 569

September 30, 1999

Howard Warsaw  
Route 122  
Minier, IL 61759

In Re: Facility No. 3-005023  
IEMA Incident No. 98-1987  
Warsaw ITCO  
Route 122  
Minier, Tazewell Co., IL

Dear Applicant:

The Reimbursement Eligibility and Deductible Application received on September 23, 1999 for the above referenced occurrence has been reviewed. The following determinations have been made based upon this review.

It has been determined that you are eligible to seek payment of costs in excess of \$10,000. The costs must be in response to the occurrence referenced above and associated with the following tanks:

Eligible Tanks

- Tank 1 500 gallon Gasoline
- Tank 2 500 gallon Gasoline
- Tank 3 2,000 gallon Gasoline

You must contact the Illinois Environmental Protection Agency to receive a packet of Agency billing forms for submitting your request for payment.

An owner or operator is eligible to access the Underground Storage Tank Fund if the eligibility requirements are satisfied:

1. Neither the owner nor the operator is the United States Government,
2. The tank does not contain fuel that is exempt from the Motor Fuel Tax Law,
3. The costs were incurred as a result of a confirmed release of any of the following substances:

"Fuel", as defined in Section 1.19 of the Motor Fuel Tax Law

Aviation fuel

Heating oil

Kerosene

Used oil, which has been refined from crude oil used in a motor vehicle, as defined in Section 1.3 of the Motor Fuel Tax Law.

4. The owner or operator registered the tank and paid all fees in accordance with the statutory and regulatory requirements of the Gasoline Storage Act.
5. The owner or operator notified the Illinois Emergency Management Agency of a confirmed release, the costs were incurred after the notification and the costs were a result of a release of a substance listed in this Section. Costs of corrective action or indemnification incurred before providing that notification shall not be eligible for payment.
6. The costs have not already been paid to the owner or operator under a private insurance policy, other written agreement, or court order.
7. The costs were associated with "corrective action".

This constitutes the final decision as it relates to your eligibility and deductibility. We reserve the right to change the deductible determination should additional information that would change the determination become available. An underground storage tank owner or operator may appeal the decision to the Illinois Pollution Control Board (Board), pursuant to Section 57.9 (c) (2). An owner or operator who seeks to appeal the decision, shall file a petition for a hearing before the Board within 35 days of the date of mailing of the final decision, (35 Illinois Administrative Code 105.102(a) (2)).

For information regarding the filing of an appeal, please contact:

Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
State of Illinois Center  
100 West Randolph, Suite 11-500  
Chicago, Illinois 60601  
(312) 814-3620

The following tanks are also listed for this site:

Tank 4 2,500 gallon Diesel  
Tank 5 2,500 gallon Gasoline  
Tank 6 2,500 gallon Gasoline  
Tank 7 2,500 gallon Gasoline

Your application indicates that there has not been a release from these tanks under this incident number. You may be eligible to seek payment of corrective action costs associated with these tanks if it is determined that there has been a release from one or more of these tanks. Once it is determined that there has been a release from one or more of these tanks you may submit a separate application for an eligibility determination to seek corrective action costs associated with this/these tanks.

If you have any questions regarding the eligibility or deductibility determinations, please contact our Office at (217) 785-1020 or (217) 785-5878.

Sincerely,

*Melvin H. Smith*

Melvin H. Smith  
Division Director  
Division of Petroleum and Chemical Safety

MHS/dl

cc: IEPA  
Facility File

R0347

**APPENDIX G**

**SUPPORTING DOCUMENTATION –  
INVOICE FOR COMPARABLE SYSTEM**





LUST TECHNICAL REVIEW NOTES

File Heading:

Re: LPP # 1790455007 Tagewell  
 Minnie W. Howard  
 Rt. 122  
 # 981987

Reviewed By: J. Sandell

Date Reviewed: 1-03

Documents Reviewed: AMCAPBUD

LUST Information in Division File: 20/45 SEPRO/BUD SCCR HPCAP

Review Notes: HPCAP previously approved 3/30/01 & 5/24/02

Budget previously denied: of 5/24/02

Amended Budget: deductions

Ann.	0.00	
Anal.	9350.-	
Pers.	69,161.-	(3,440.-)
Eg	1,728	
FDPY 0111514	44,514.-	(27,056)
Handl.	7,364.88	(541.12)

1. Personnel deduction from reimbursement pkg allowance
2. Field adjustment in math error from calculation of 8 cy/170w soil excavation
3. Handling deduction

Comments/Additional Work Needed: Proposed Summit Frost System to be used for 2 years with no warranty. Valid

Action Taken by Agency: Modify AMCAPBUD

RELEASABLE

FEB 03 2003

Response Due: \_\_\_\_\_

REVIEWER MM

R0351

1790455007 - Tozwell  
Warsaw, Howard  
Hunters Hill

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC.  
22200 ILLINOIS ROUTE 9 - P.O. BOX 614  
TREMONT, ILLINOIS 61568-0614  
PHONE: (309) 925-5551 - FAX: (309) 925-5606

1790455007  
Tozwell

FACSIMILE TRANSMITTAL

TO: COMPANY NAME: LEPA  
ATTENTION: Jim Ransdell  
FAX NO.: (217) 524-4193  
FROM: Todd Birky

NUMBER OF PAGES (including cover sheet): 2

MESSAGE OR SPECIAL INSTRUCTIONS:  
Jim - here is an invoice for a similar system  
that we would like to install at the Howard  
Warsaw site in Minier. Also - I need to  
discuss - another issue with you ASAP. Please give  
me a call at your earliest convenience.  
Thank you,  
Todd

FAX SENT BY: Todd Birky DATE: 1/7/03 TIME: 4:45 pm

RELEASABLE

FEB 03 2003

JAN - 7

REVIEWER MIM

R0352

06 03 04:00p

ILLINOIS OIL MARKETING

309 347 1892

P-2



**ILLINOIS OIL MARKETING EQUIPMENT, INC.**

850 BRENKMAN DRIVE • PEKIN, IL 61554  
PHONE (309) 347-1819 • FAX (309) 347-1881  
E-MAIL: sales@iome.com • HOME PAGE: http://www.iome.com

INVOICE NO. : 58629 CHARGE  
INVOICE DATE: 01/06/03 PAGE: 1

462  
BILL TO: MIDWEST ENVIRONMENTAL  
CONSULTANTS & REMEDIATION  
P.O. BOX 614  
TREMONT, IL 61568-

SHIP TO: MIDWEST ENVIRONMENTAL  
CONSULTANTS & REMEDIATION  
22200 ILLINOIS ROUTE 9  
TREMONT, IL 61568-

P O NUMBER:  
SALESMAN : BRADLEY D. RODGERS

LINE NUMBER	QUANTITY ORDERED	UNIT PRICE	AMOUNT
EXTRACTOR SYSTEM 200 GROUND WATER SYS	1.00	15800.0000	15800.00

TOTAL PRODUCT: 15800.00  
TAX: 1224.50  
INVOICE AMOUNT: \$17,024.50

THANK YOU FOR YOUR BUSINESS  
PLEASE REMIT TO: 850 BRENKMAN DRIVE - PEKIN, IL 61554  
WE ACCEPT VISA-MASTERCARD  
1 1/2% (18% ANNUAL) FINANCE CHARGE WILL BE ADDED AFTER 45 DAYS



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276  
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601

ROD R. BLAGOJEVICH, GOVERNOR      RENEE CIPRIANO, DIRECTOR

217/782-6762

CERTIFIED MAIL

7002 2030 0001 1875 3777

JAN 30 2003

Howard Warsaw  
Attention: John Warsaw  
Route 122  
Minier, IL 61759

Re:    LPC #1790455007 -- Tazewell County  
      Minier/Warsaw, Howard  
      Warsaw Itco/Route 122  
      LUST Incident No. 981987, 991610  
      LUST Technical File

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Amended High Priority Corrective Action Plan Budget (budget) submitted for the above-referenced incident. This budget, dated November 6, 2002, was received by the Illinois EPA on November 12, 2002. Citations in this letter are from the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code).

The Illinois EPA is modifying the proposed budget for the High Priority Corrective Action Plan pursuant to Section 57.7(c)(4) of the Act and 35 Ill. Adm. Code 732.405(c). Based on the modifications listed in Section 2 of Attachment A, the amounts listed in Section 1 of Attachment A have been approved. Please note that the costs must be incurred in accordance with the approved plan. Be aware that the amount of reimbursement may be limited by Sections 57.8(e), 57.8(g) and 57.8(d) of the Act as well as 35 Ill. Adm. Code 732.604, 732.606(s), and 732.611.

All future correspondence must be submitted to:

Illinois Environmental Protection Agency  
Bureau of Land - #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

**RELEASABLE**

JUN 10 2003

**REVIEWER MM**

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board pursuant to Sections 40 and 57.7(c)(4)(D) of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the filing of an appeal, please contact:

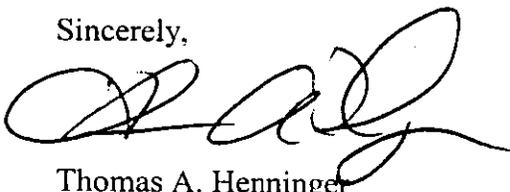
Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
State of Illinois Center  
100 West Randolph, Suite 11-500  
Chicago, IL 60601  
312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency  
Division of Legal Counsel  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276  
217/782-5544

If you have any questions or need further assistance, please contact Jim Ransdell at 217/557-6938.

Sincerely,



Thomas A. Henninger  
Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

TAH:JSR:jk\033566.doc

Attachment: Attachment A

c: Midwest Environmental Consulting & Remediation Services, Inc.  
Division File

Attachment A

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
Warsaw Itco/Route 122  
LUST Incident No. 981987, 991610  
LUST Technical File

Citations in this attachment are from the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code).

**SECTION 1**

As a result of the Illinois EPA's modification(s) in Section 2 of this Attachment A, the following amounts have been approved:

\$0.00	Investigation Costs
\$9,380.00	Analysis Costs
\$69,161.00	Personnel Costs
\$1,728.00	Equipment Costs
\$114,514.00	Field Purchases and Other Costs
\$7,364.88	Handling Charges

Therefore, the total cumulative budget is approved for:

\$0.00	Investigation Costs
\$9,380.00	Analysis Costs
\$69,161.00	Personnel Costs
\$1,728.00	Equipment Costs
\$111,514.00	Field Purchases and Other Costs
\$7,364.88	Handling Charges

**SECTION 2**

1. \$541.12 for an adjustment in handling charges. Handling charges are eligible for payment only if they are equal to or less than the amount determined by the following table (Section 57.8(g) of the Act and 35 Ill. Adm. Code 732.607):

Subcontract or Field Purchase Cost:	Eligible Handling Charges as a Percentage of Cost:
\$0 - \$5,000	12%
\$5,001 - \$15,000	\$600 Plus 10% of amount over \$5,000
\$15,001 - \$50,000	\$1,600 Plus 8% of amount over \$15,000
\$50,001 - \$100,000	\$4,400 Plus 5% of amount over \$50,000
\$100,001 - \$1,000,000	\$6,900 Plus 2% of amount over \$100,000

Subcontract or Field Purchase Cost:	Eligible Handling Charges as a Percentage of Cost:
\$0 - \$5,000	12%
\$5,001 - \$15,000	\$600 Plus 10% of amount over \$5,000
\$15,001 - \$50,000	\$1,600 Plus 8% of amount over \$15,000
\$50,001 - \$100,000	\$4,400 Plus 5% of amount over \$50,000
\$100,001 - \$1,000,000	\$6,900 Plus 2% of amount over \$100,000

For an adjustment in handling charges from subcontractor deductions.

2. \$27,056.00 for an adjustment in costs associated with a mathematical error (35 Ill. Adm. Code 732.606(ff)).

For an adjustment from a math error in the calculation of cubic yards/tonnage soil excavation.

3. \$3,440.00, for an adjustment in personnel evaluating reimbursement and other tasks together.
4. \$3,000.00, for and adjustment in salvage value of system components.

TAH:JSR:jk\033566.doc

House Bill 4471 is now Public Act 92-0554

Governor George Ryan signed House Bill 4471 into law as Public Act 92-0554 on June 24, 2002. Public Act 92-0554 amends the Environmental Protection Act Sections 57.1, 57.2, 57.5, 57.6, 57.7, 57.8, 57.10, and 57.13 and adds Section 57.14A. The Act includes some significant changes to the handling of underground storage tank releases. Owners or operators who report a release on or after June 24, 2002 will no longer be able to perform Site Classification, pursuant to 35 Ill. Adm. Code 732.307 and 35 Ill. Adm. Code 732.312, and must now perform Site Investigation. However, if a release was reported prior to June 24, 2002, owners or operators may elect to perform Site Investigation.

Public Act 92-0554 also raised the maximum amount that may be reimbursed from the Underground Storage Tank Fund. The Illinois EPA will request that the Illinois Pollution Control Board change the Illinois Administrative Code to reflect Public Act 92-0554. This change is expected to occur in 2003.

Public Act 92-0554 may be viewed at:

<http://www.legis.state.il.us/publicacts/pubact92/acts/92-0554.html>

The effective date of Public Act 92-0554 was June 24, 2002.

For additional information, please call the Illinois EPA, Leaking Underground Storage Tank Section at (217) 782-6762.

7002 2030 0001 1875 3777

**U.S. Postal Service™**  
**CERTIFIED MAIL™ RECEIPT**  
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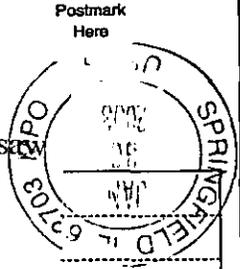
For delivery information visit our website at [www.usps.com](http://www.usps.com)

981987991610 TH/00/3L

Postage \$	
Certified Fee	2.30
Return Receipt Fee (Endorsement Required)	1.75

Restricted (Endorsement)  
 Total Post  
 Sent To  
 Street, Apt. or PO Box  
 City, State,

Howard Warsaw  
 Attention: John Warsaw  
 Route 122  
 Minier, IL 61759



PS Form 3800, June 2002 See Reverse for Instructions

**SENDER: COM** **CERTIFIED MAIL** **ON DELIVERY**

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

1. Article Addressed to:  
 Howard Warsaw  
 Attention: John Warsaw  
 Route 122  
 Minier, IL 61759

2. Article Number (Transfer from service label) 7002-2030-0001-1875-8777 TH/00/3L R

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

A. Signature  Agent  Addressee  
*John Warsaw*

B. Received by (Printed Name)  Yes  No  
*John Warsaw*

C. Date of Delivery  
*1-31-03*

D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No  
*P.O. Box 557*

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1540

981987,991610

UNITED STATES POSTAL SERVICE



First-Class Mail  
Postage & Fees Paid  
USPS  
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

Illinois Environmental Protection Agency

P.O. Box 19276 Mail Code #

Springfield, IL 62794-9276

1790455007-Taxwell  
Warsaw, Howard  
Hurst Tech

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC.  
22200 ILLINOIS ROUTE 9, POST OFFICE BOX 614  
TREMONT, ILLINOIS 61568-0614  
PHONE NO. (309) 925-5551 FAX NO. (309) 925-5606

LETTER OF TRANSMITTAL

TO: Illinois Environmental Protection Agency  
1021 North Grand Avenue East, Box 19276  
Springfield, Illinois 62794-9276

DATE: February 24, 2003  
JOB NO.: 9890  
RE: CA Budget Addendum  
Howard Warsaw - ITCO  
IL Route 122  
Minier, Illinois

ATTENTION: Mr. Jim Ransdell

WE ARE SENDING YOU:

- REPORT             LETTER             CONTRACT & RATE SHEET
- MAPS/DRAWINGS             DOCUMENTS REQUIRING SIGNATURE
- REIMBURSEMENT DOCUMENTATION             OTHER

COPIES	DESCRIPTION
2	Corrective Action Budget Addendum for the above referenced site

THESE ARE TRANSMITTED AS CHECKED BELOW:

- REIMBURSEMENT SUBMITTAL     FOR APPROVAL     AS NEEDED FOR REPORT
- COPY FOR YOUR RECORDS             SIGNATURE REQUIRED     AS REQUESTED

REMARKS:

Mr. Ransdell,

Please find enclosed the above mentioned documentation for your review. As always, please feel free to contact our office with any questions or comments.

RECEIVED  
FEB 26 2003  
EPA/BOL

FROM: Gaye Lynn Green; Office Manager  
Midwest Environmental Consulting & Remediation Services, Inc.

RELEASABLE  
MAR 10 2003  
REVIEWER MD  
R0361

# Midwest Environmental Consulting & Remediation Services Inc.

22200 Illinois Route 9 • P.O. Box 614

Tremont, IL 61568-0614

Phone: (309) 925-5551 • Fax: (309) 925-5606

February 18, 2003

Mr. Jim Ransdell  
Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Re: LPC #1790455007 – Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 981987  
LUST Technical File

RECEIVED  
FEB 26 2003  
IEPA/BOL

Dear Mr. Ransdell:

Attached please find the budget addendum associated with the High Priority Corrective Action Plan (CAP) dated January 28, 2002. The CAP was approved by the IEPA in a letter dated May 24, 2002. The budget associated with the installation of the groundwater treatment system was rejected because the IEPA requested a further breakdown of the costs associated with the installation of the treatment system. Following several telephone conversations between you and Mr. Todd Birky of this office, a budget proposal was submitted for your review.

The budget was approved with modifications in a letter dated January 30, 2003. This correspondence will address the modifications that were made in Attachment A of the IEPA budget approval letter. The following modifications have been made in the attached budget proposal:

1. **\$541.12 for an adjustment in handling charges. Handling charges are eligible for payment only if they are equal to or less than the amount determined by the following table (Section 57.8(g) of the Act and 35 Ill. Adm. Code 723.607): (table omitted).**

**For an adjustment in handling charges from the subcontractor deductions.**

RELEASEABLE

MAR 10 2003

REVIEWER MD

Deductions were made to the subcontractor amount listed under Item 2., below. An explanation justifying the handling charges will be made under Item 2.

**2. \$27,056.00 for an adjustment in costs associated with a mathematical error (35 Ill. Adm. Code 732.606 (ff)).**

**For an adjustment from a math error in the calculation of cubic yards/tonnage soil excavation.**

The Corrective Action Plan, as submitted indicated that the groundwater collection trench would be installed that was ten feet deep and three feet wide, and approximately 365 feet long, however, due to the collapsible soils on the site, significantly more soil will be excavated. As per the telephone conversation between you and Mr. Birky of this office, when calculating the amount of soil that would have to be removed for the installation of the trench, the total amount of soil removed was included. It is estimated that the trench will have to be over seven feet wide at the top to keep the required width towards the bottom of the trench. So the following calculation was used to determine the amount of soil that will be disposed of:

Trench = 365 ft long X 10 ft deep X 7 feet wide = 25,550 cu. ft.  
25,550 cu. ft / 27 cu. ft = 946 cu. yds  
946 cu yds X 1.5 tons / cu yard = 1,419 tons of soil for disposal.

Amount currently approved:	\$21,694.00
Amount that was deducted:	<u>\$27,056.00</u>
Amount needed for disposal of 1,500 tons:	\$48,750.00

The 1,419 tons was rounded up to 1,500 tons for a contingency factor of a little more than 5.5% built in. The amount that was deducted has been proposed in the attached budget section I. Please see the amended Figure 10, attached, for a more detailed cross section of the groundwater collection trench.

**3. \$3,440.00, for an adjustment in personnel evaluating reimbursement and other tasks together.**

MECRS will not, at this time, request that the \$3,440.00 be added back into the personnel budget, however, due to the time spent on the response to the most recent IEPA correspondence, more personnel time is added to cover expenses incurred.

**4. \$3,000.00, for an adjustment in salvage value of system components.**

As per discussions with Mr. Doug Clay of IEPA, the salvage value of the system cannot be established at this time. Approximately six months prior to the site closing, the system will be evaluated and an appropriate salvage value for this specific system will be determined. That amount will be submitted with the final reimbursement package.

As mentioned in the numerous telephone conversations concerning this site, the subcontractor's costs for performing the work required to install the groundwater treatment system have increased. The original plan was dated January 28, 2002, which has been well over a year since the estimate was proposed. Recent conversations with the subcontractor have indicated that the prices for performing the work that previously totaled \$52,400 have increased 4-5 %. Therefore, an amendment is needed to cover the costs for the following:

Excavate approximately 400 lineal feet of trench, 3' wide and 10' deep. Off haul all excavated materials to landfill. Install specified perforated, wrapped PVC piping in trenches and backfill with 3/8" pea gravel to subgrade and top with 8" CA-6 gravel. Install specified sumps with manholes, supply materials and labor for 12'x12' insulated, heated building for system. Supply and install 2-60 gpm Grundfos pumps with controllers. Make all connections to system and clean work area.

An additional \$2,620.00 has been added to the amended budget to cover the costs associated with the subcontractors increase. This will bring the total amount requested for the above mentioned activities to \$55,020.00.

If you have any questions or comments, please contact our office.

Sincerely,

Midwest Environmental Consulting and Remediation Services, Inc.

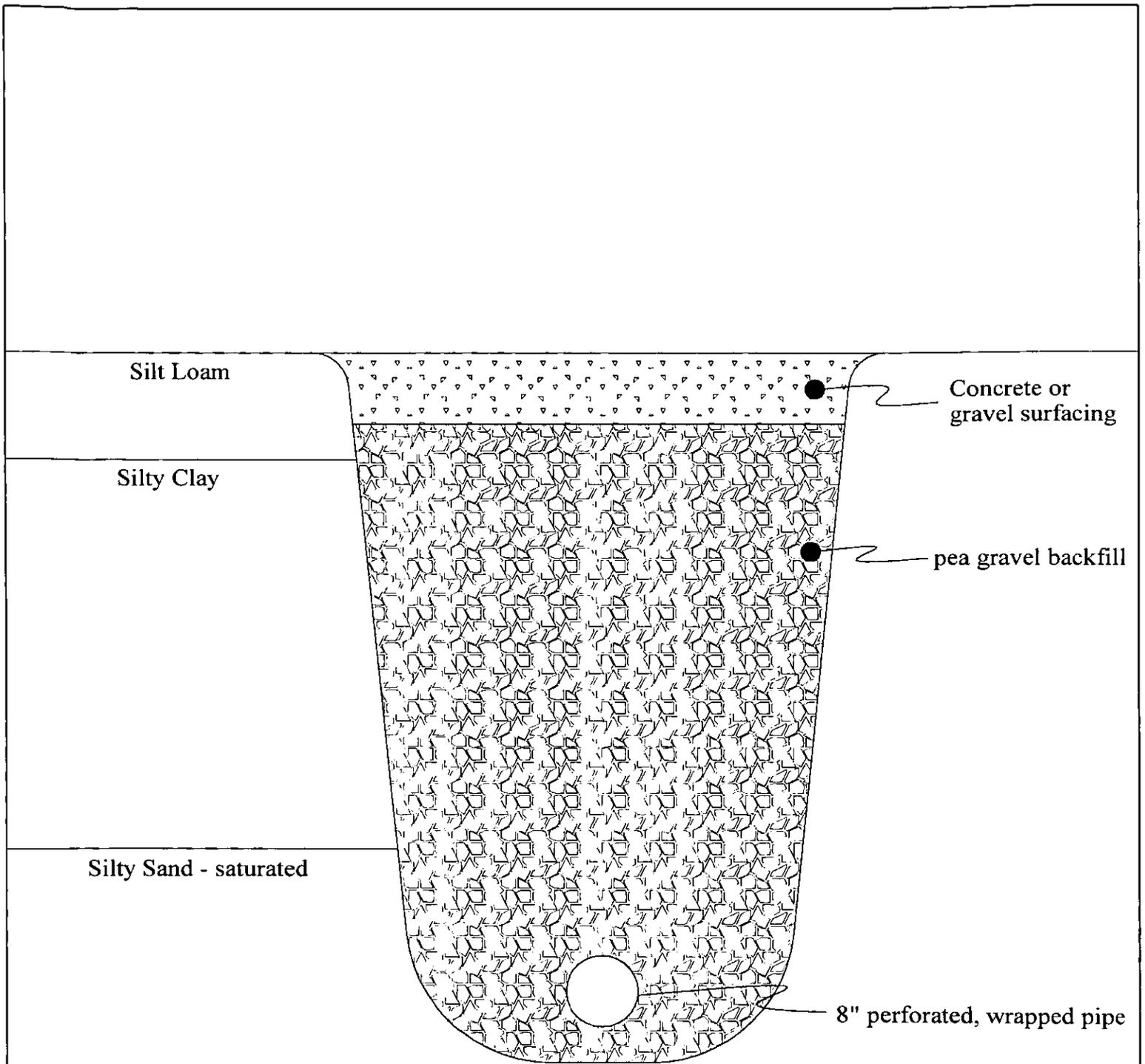


Allan M. Green  
President

TKB/glg  
cc: Mr. Howard Warsaw  
Attachments: Amended Figure 10  
Budget Addendum  
Job No. 9890

**FIGURE 10 – AMENDED**

**PROPOSED GROUNDWATER  
COLLECTION TRENCH CROSS SECTION**



<b>FIGURE 10</b> Proposed GW Collection Trench Cross Section Warsaw ITCO Minier, Illinois	Date: 2/11/03	Drawn by: TKB
	Job No.: 9890	Approved by: AMG
<b>M.E.C.R.S., Inc.</b> R0386		

**APPENDIX H**  
**HIGH PRIORITY CAP BUDGET - AMENDMENT**

**BUDGET AND BILLING FORM FOR  
LEAKING UNDERGROUND STORAGE  
TANK SITES**

**A. SITE INFORMATION**

Site Name: Warsaw, Howard

Site Address: Route 122 City: Minier

Zip: 61759

County: Tazewell IEPA Generator No.: 1790455007

IEMA Incident No: 981987 IEMA Notification Date: May 19, 1999

Date this Form was Prepared: February 6, 2003

This form is being submitted as a:

- Budget Proposal
- Budget Amendment (Budget Amendments must include only the costs over the previous budget)

Amendment Number: 2

Billing Package for costs incurred pursuant to 35 Illinois Administrative Code (IAC), Part 732 ("new program")

Name(s) of report(s) documenting the costs requested: \_\_\_\_\_

Date(s): \_\_\_\_\_

This form is being submitted for the Site Activities indicated below (check one):

- Early Action  Site Classification
- Low Priority Corrective Action  High Priority Corrective Action
- Other (indicate activities): \_\_\_\_\_

**DO NOT SUBMIT "NEW PROGRAM" COSTS AND "OLD PROGRAM"  
COSTS AT THE SAME TIME, ON THE SAME FORMS.**

A-1

IL 532-2263  
LPC 494 Rev. 2/99

This form must be submitted in duplicate.  
The Agency is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder. This form has been approved by the Forms Management Center.

**RECEIVED  
FEB 26 2003  
IEPA/BOL**

R0368

If eligible for reimbursement, where should reimbursement checks be sent? Please note that only owners or operators or USTs may be eligible for reimbursement. Therefore, payment can only be made to an owner or operator.

Pay to the order of: Howard Warsaw

Send in care of: Howard Warsaw

Address: Route 122

City: Minier State: IL Zip: 61759

Number of Petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101: X 101 or more: \_\_\_\_\_

Number of USTs at the site: 7 (Number of USTs included USTs presently at the site and USTs that have been removed.)

Number of incidents reported to IEMA: 2

Incident Numbers assigned to the site due to releases from USTs: 981987, 991610

Please list all tanks which have ever been located at the site and are presently located at the site:

Product Stored	Size (gallons)	Did UST have a release?		Incident No.	Type of Release
<u>gasoline</u>	<u>500</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>gasoline</u>	<u>500</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>gasoline</u>	<u>2,000</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>diesel</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
_____	_____	<u>Yes</u>	<u>No</u>	_____	_____
_____	_____	<u>Yes</u>	<u>No</u>	_____	_____

**B. PROPOSED BUDGET SUMMARY AND BUDGET TOTAL**

1. Investigation Costs:	<u>\$0.00</u>
2. Analysis Costs:	<u>\$0.00</u>
3. Personnel Costs:	<u>\$8,062.00</u>
4. Equipment Costs:	<u>\$0.00</u>
5. Field Purchases and Other Costs:	<u>\$32,676.00</u>
6. Handling Charges:	<u>\$3,014.08</u>
<b>TOTAL PROPOSED BUDGET =</b>	<b><u>\$43,752.08</u></b>

**G. PERSONNEL**

All personnel costs that are not included elsewhere in the budget/billing form must be listed here. Costs must be listed per task, not personnel type. The following are some examples of tasks: Drafting, data collection, plan, report or budget preparation for \_\_\_\_\_ (i.e., site classification work plan, 45 day report, or high priority corrective action budget), sampling, field oversight for \_\_\_\_\_ (i.e. drilling/well installation, corrective action, or early action), of maintenance of \_\_\_\_\_. The above list is not inclusive of all possible tasks.

**FOR CAP PREPARATION:**

Registered P.E. : 2 hours x \$125.00 per hour = \$250.00

Task to be performed for the above hours: CAP preparation; review and certify CAP

Principal : 8 hours x \$120.00 per hour = \$960.00

Task to be performed for the above hours: CAP Preparation, planning

Sr. Environmental Manager : 16 hours x \$110.00 per hour = \$1,760.00

Task to be performed for the above hours: CAP & Budget preparation, bids, planning

Professional Geologist : 2 hours x \$110.00 per hour = \$220.00

Task to be performed for the above hours: GW System research, background data

Sr. Project Manager : 24 hours x \$98.00 per hour = \$2,352.00

Task to be performed for the above hours: CAP Preparation; data acquisition; remedial approach research (enhanced bio)

Sr. Environmental Hydrogeologist : 24 hours x \$98.00 per hour = \$2,352.00

Task to be performed for the above hours: CAP & Budget preparation; system data research, remedial approach research

Admin/Clerical : 4 hours x \$42.00 per hour = \$168.00

Task to be performed for the above hours: CAP & Budget preparation; review, copy, bind and mail

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours: \_\_\_\_\_

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours: \_\_\_\_\_

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours: \_\_\_\_\_

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours: \_\_\_\_\_

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

**TOTAL PERSONNEL COSTS: \$8,062.00**



**Other Costs** - A listing and description of all other costs which will be/were incurred and are not specifically listed on this form should be attached. The listing should include a cost breakdown in a time and materials format.

For the price increases since initial bid was proposed to do the following: **\$2,620.00**  
Excavate 400 lineal feet of trench, 3' wide and 10' deep. Off haul all excavated materials to landfill.  
Install specified perforated, wrapped PVC piping in trenches and backfill with 3/8" pea gravel to subgrade and top with 8" CA-6 gravel. Install specified sumps with manholes, supply materials and labor for 12'x12' insulated, heated building for system. Supply and install 2-60 gpm Grundfos pumps with controllers. Make all connections to system and clean work area.

For Soil Disposal	\$32.50 per ton X	832 tons =	<b>\$27,056.00</b>
For salvage value adjustment:			<b>\$3,000.00</b>

<b>Total Other Costs =</b>	<u><b>\$32,676.00</b></u>
<b>Subtotal I-1 =</b>	<u><b>\$0.00</b></u>
<b>Total pages I-1 and I-2:</b>	<u><b>\$32,676.00</b></u>





**L. HIGH PRIORITY CORRECTIVE ACTION**

Corrective Action at High Priority Sites may involve both and soil and groundwater remediation. Below provide a summary of costs for the remediation type(s) chosen and attach the appropriate sections of the budget/billing forms to support the summary of costs.

**A. Preparation of the Corrective Action Plan**

1. Investigation Costs:	<u>                    </u>	\$0.00
2. Analysis Costs:	<u>                    </u>	\$0.00
3. Personnel Costs:	<u>                    </u>	\$8,062.00
4. Equipment Costs:	<u>                    </u>	\$0.00
5. Field Purchases and Other Costs:	<u>                    </u>	\$0.00
6. Handling Charges:	<u>                    </u>	\$0.00

**B. Groundwater Remediation**

1. Analysis Costs	<u>                    </u>	\$0.00
2. Personnel Costs:	<u>                    </u>	\$0.00
3. Equipment Costs:	<u>                    </u>	\$0.00
4. Field Purchases and Other Costs:	<u>                    </u>	\$3,000.00
5. Handling Charges:	<u>                    </u>	\$276.72

Of the above costs, please provide a break down of costs associated with operation and maintenance (O&M), if applicable, as requested below:

                     Months of O&M x                      per month =                      \$0.00

**C. Excavation and Disposal**

1. Analysis Costs:	<u>                    </u>	\$0.00
2. Personnel Costs:	<u>                    </u>	\$0.00
3. Equipment Costs:	<u>                    </u>	\$0.00
4. Field Purchases and Other Costs:	<u>                    </u>	\$29,676.00
5. Handling Charges:	<u>                    </u>	\$2,737.36

Of the above costs, please provide a break down of the costs associated with excavation, transportation, and disposal as requested below:

Excavation:	<u>                    </u> 1500 yards x	<u>                    </u> \$0.87 per yard =	<u>                    </u> \$1,310.00
Transportation:	<u>                    </u> 1500 yards x	<u>                    </u> \$0.87 per yard =	<u>                    </u> \$1,310.00
Disposal:	<u>                    </u> 832 yards x	<u>                    </u> \$32.50 per yard =	<u>                    </u> \$27,040.00

L-1

This form must be submitted in duplicate.

R0377



**M. JUSTIFICATION FOR BUDGET AMENDMENTS**

If this form is being submitted for an amendment, you must submit a narrative justifying the need for the amendment. If the amendment includes a revision in a corrective action proposal, a new proposal must be submitted.

Please see narrative attached in cover letter.

**RECEIVED**  
**FEB 26 2003**  
**IEPA/BOL**



Office of the Illinois  
**State Fire Marshal**

CERTIFIED MAIL - RECEIPT REQUESTED #Z 082 409 569

September 30, 1999

Howard Warsaw  
Route 122  
Minier, IL 61759

In Re: Facility No. 3-005023  
IEMA Incident No. 98-1987  
Warsaw ITCO  
Route 122  
Minier, Tazewell Co., IL

Dear Applicant:

The Reimbursement Eligibility and Deductible Application received on September 23, 1999 for the above referenced occurrence has been reviewed. The following determinations have been made based upon this review.

It has been determined that you are eligible to seek payment of costs in excess of \$10,000. The costs must be in response to the occurrence referenced above and associated with the following tanks:

Eligible Tanks

- Tank 1 500 gallon Gasoline
- Tank 2 500 gallon Gasoline
- Tank 3 2,000 gallon Gasoline

You must contact the Illinois Environmental Protection Agency to receive a packet of Agency billing forms for submitting your request for payment.

An owner or operator is eligible to access the Underground Storage Tank Fund if the eligibility requirements are satisfied:

1. Neither the owner nor the operator is the United States Government,
2. The tank does not contain fuel that is exempt from the Motor Fuel Tax Law,
3. The costs were incurred as a result of a confirmed release of any of the following substances:

"Fuel", as defined in Section 1.19 of the Motor Fuel Tax Law

Aviation fuel

Heating oil

Kerosene

Used oil, which has been refined from crude oil used in a motor vehicle, as defined in Section 1.3 of the Motor Fuel Tax Law.

4. The owner or operator registered the tank and paid all fees in accordance with the statutory and regulatory requirements of the Gasoline Storage Act.
5. The owner or operator notified the Illinois Emergency Management Agency of a confirmed release, the costs were incurred after the notification and the costs were a result of a release of a substance listed in this Section. Costs of corrective action or indemnification incurred before providing that notification shall not be eligible for payment.
6. The costs have not already been paid to the owner or operator under a private insurance policy, other written agreement, or court order.
7. The costs were associated with "corrective action".

This constitutes the final decision as it relates to your eligibility and deductibility. We reserve the right to change the deductible determination should additional information that would change the determination become available. An underground storage tank owner or operator may appeal the decision to the Illinois Pollution Control Board (Board), pursuant to Section 57.9 (c) (2). An owner or operator who seeks to appeal the decision, shall file a petition for a hearing before the Board within 35 days of the date of mailing of the final decision, (35 Illinois Administrative Code 105.102(a) (2)).

For information regarding the filing of an appeal, please contact:

Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
State of Illinois Center  
100 West Randolph, Suite 11-500  
Chicago, Illinois 60601  
(312) 814-3620

The following tanks are also listed for this site:

Tank 4 2,500 gallon Diesel  
Tank 5 2,500 gallon Gasoline  
Tank 6 2,500 gallon Gasoline  
Tank 7 2,500 gallon Gasoline

Your application indicates that there has not been a release from these tanks under this incident number. You may be eligible to seek payment of corrective action costs associated with these tanks if it is determined that there has been a release from one or more of these tanks. Once it is determined that there has been a release from one or more of these tanks you may submit a separate application for an eligibility determination to seek corrective action costs associated with this/these tanks.

If you have any questions regarding the eligibility or deductibility determinations, please contact our Office at (217) 785-1020 or (217) 785-5878.

Sincerely,

*Melvin H. Smith*

Melvin H. Smith  
Division Director  
Division of Petroleum and Chemical Safety

MHS/dl

cc: IEPA  
Facility File

RECEIVED  
FEB 26 2003  
IEPA/BOL

R0382

Illinois Environmental Protection Agency

Owner/Operator and Professional Engineer Budget Certification Form for Leaking Underground Storage Tanks Sites

In accordance with 415 ILCS 5/57, if an owner or operator intends to seek payment from the UST Fund, an owner or operator must submit to the Agency, for the Agency's approval or modification, a budget which includes an accounting of all costs associated with the implementation of the investigative, monitoring and/or corrective action plans.

I hereby certify that I intend to seek payment from the UST Fund for performing High Priority Corrective Action activities at Warsaw, Howard

LUST site. I further certify that the costs set forth in this budget are necessary activities and are reasonable and accurate to the best of my knowledge and belief. I also certify that the costs included in this budget are not for corrective action in excess of the minimum requirements of 415 ILCS 5/57 and no costs are included in this budget which are not described in the corrective action plan. I further certify that costs ineligible for payment from the Fund pursuant to 35 Illinois Administrative Code Section 732.606 are not included in the budget proposal or amendment. Such ineligible costs include but are not limited to:

- Costs associated with ineligible tanks.
- Costs associated with site restoration (e.g., pump islands, canopies).
- Costs associated with utility replacement (e.g., sewers, electrical, telephone, etc.).
- Costs incurred prior to IEMA notification.
- Costs associated with planned tank pulls.
- Legal defense costs.
- Costs incurred prior to July 28, 1989.
- Costs associated with installation of new USTs or the repair of existing USTs.

RECEIVED  
FEB 26 2003  
IEPA/BOL

Owner/Operator: Howard Warsaw Title: Owner

Signature: [Signature] Date: 2-20-03

Subscribed and sworn to before me the 20th day of February, 2003.  
*(Budget Proposals and Budget Amendments must be notarized when the certification is signed.)*

[Signature]  
(Notary Public)

Seal: **GAYE LYNN GREEN**  
NOTARY PUBLIC, STATE OF ILLINOIS  
MY COMMISSION EXPIRES: 01/27/04

Seal: **DALE BENNINGTON**  
062-035579  
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS  
2/06/2003

P.E.: Dale Bennington Seal:

P.E. Signature: [Signature] Date: 2/06/2003

Subscribed and sworn to before me the 16th day of February, 2003.  
*(Budget Proposals and Budget Amendments must be notarized when the certification is signed.)*

[Signature]  
(Notary Public)

Seal: **GAYE LYNN GREEN**  
NOTARY PUBLIC, STATE OF ILLINOIS  
MY COMMISSION EXPIRES: 04/02/05

Seal: **GAYE LYNN GREEN**  
NOTARY PUBLIC, STATE OF ILLINOIS  
MY COMMISSION EXPIRES: 04/02/05

The Agency is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder. This form has been approved by the Forms Management Center.

LUST TECHNICAL REVIEW NOTES

File Heading:

LP# 1790455007 Tagwell  
 Minier, Warsaw Howard  
 Rt 122  
 Incident 981987, 991610

Reviewed By: J. Ransden  
 Date Reviewed: 3/03  
 Documents Reviewed: AMENDED  
HP-BUD

LUST Information in Division File: 20/45 SCPRA/BUD, SCCR, HPCAP/BUD

Review Notes:

TRENCH Excavation:  $365' \times 10' \times 7' = 946.3cy$   
 $\frac{127}{27}$   
 $946.3cy \times \$55. = \$52,046.-$   
 allowed in previous budget \$21,693.75  
 allowed previous cy: 445cy @ [1.5 tonnage]  
 TONS to cy

\$52,046.-  
 21,693.75  
 30,352.25 allowable: amended works \$29,676.75  
 + \$3,000. salvage of PT system.

PREV BUDGET MOD	Mod AM BUD	Cumulative
mailed 1/30/03	Recd 2/24/03	
Invt. \$ -	-	\$ -
Per. 9,380.-	-	\$ 9,380
Per. 6,916.1-	-	6,916.1-
Eq 1,728.-	-	1,728.-
FPYO 111,514.-	\$ 32,676.-	144,190.-
Handy 7,364.88	3,014.08	10,378.88

Midwest! (MERRS)

Comments/Additional Work Needed: The modified HP-BUD; cut \$8,062.-  
 from Personnel that for some tasks were approved in  
 previous budget  
 Will address salvage value at end of usage

Action Taken by Agency: Modify Amended HP/BUD

RELEASABLE

Response Due: \_\_\_\_\_

MAR 10 2003

REVIEWER MD  
 R0384



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601

ROD R. BLAGOJEVICH, GOVERNOR RENEE CIPRIANO, DIRECTOR

217/782-6762

CERTIFIED MAIL

MAR 12 2003

7001 2510 0002 5277 9192

Howard Warsaw
Route 122
Minier, IL 61759

Re: LPC #1790455007 -- Tazewell County
Minier/Warsaw, Howard
Warsaw Itco/Route 122
LUST Incident No. 981987 and 991610
LUST Technical File

RECEIVED

MAR 21 2003

REVIEWER MD

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Amended High Priority Corrective Action Plan Budget (budget) submitted for the above-referenced incident. This budget, dated February 18, 2003, was received by the Illinois EPA on February 26, 2003. Citations in this letter are from the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code).

In addition, the budget for the High Priority Corrective Action Plan is modified pursuant to Section 57.7(c)(4) of the Act and 35 Ill. Adm. Code 732.405(c). Based on the modifications listed in Section 2 of Attachment A, the amounts listed in Section 1 of Attachment A are approved. Please note that the costs must be incurred in accordance with the approved plan. Be aware that the amount of reimbursement may be limited by Sections 57.8(e), 57.8(g) and 57.8(d) of the Act, as well as 35 Ill. Adm. Code 732.604, 732.606(s), and 732.611.

All future correspondence must be submitted to:

Illinois Environmental Protection Agency
Bureau of Land - #24
Leaking Underground Storage Tank Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

Page 2

An underground storage tank system owner or operator may appeal this decision to the Illinois Pollution Control Board. Appeal rights are attached.

If you have any questions or need further assistance, please contact Jim Ransdell at 217/557-6938.

Sincerely,



Thomas A. Henninger  
Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

TAH:JSR:jk\033006.doc

Attachment: Attachment A  
Appeal Rights

c: Midwest Environmental Consulting & Remediation Services, Inc.  
Division File

R0386

Attachment A

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
Warsaw Itco/Route 122  
LUST Incident No. 981987 and 991610  
LUST Technical File

Citations in this attachment are from the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code).

**SECTION 1**

The budget was previously approved for:

\$0.00	Investigation Costs
\$9,380.00	Analysis Costs
\$69,161.00	Personnel Costs
\$1,728.00	Equipment Costs
\$111,514.00	Field Purchases and Other Costs
\$7,364.88	Handling Charges

As a result of the Illinois EPA's modification(s) in Section 2 of this Attachment A, the following amounts are approved:

\$0.00	Investigation Costs
\$0.00	Analysis Costs
\$0.00	Personnel Costs
\$0.00	Equipment Costs
\$32,676.00	Field Purchases and Other Costs
\$3,014.08	Handling Charges

Therefore, the total cumulative budget is approved for:

\$0.00	Investigation Costs
\$9,380.00	Analysis Costs
\$69,161.00	Personnel Costs
\$1,728.00	Equipment Costs
\$144,190.00	Field Purchases and Other Costs
\$10,378.96	Handling Charges

**SECTION 2**

1. \$8,062.00 for an adjustment in Personnel Costs. The Illinois EPA has determined that these costs are not reasonable as submitted (Section 57.7(c)(4)(C) of the Act and 35 Ill. Adm. Code 732.606(hh)). One of the overall goals of the financial review is to assure that costs associated with materials, activities, and services are reasonable (35 Ill. Adm. Code 732.505(c)). Please note that additional information and/or supporting documentation may be provided to demonstrate the costs are reasonable.

## Appeal Rights

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board pursuant to Sections 40 and 57.7(c)(4)(D) of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the filing of an appeal, please contact:

Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
State of Illinois Center  
100 West Randolph, Suite 11-500  
Chicago, IL 60601  
312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency  
Division of Legal Counsel  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276  
217/782-5544

**U.S. Postal Service**  
**CERTIFIED MAIL RECEIPT**  
*(Domestic Mail Only; No Insurance Coverage Provided)*

7001 2510 0002 5277 9192

981987+991610 TAH/JR	
Postage \$	
#24 Certified Fee	2.30
Return Receipt Fee (Endorsement Required)	1.75
Restricted Delivery Fee (Endorsement Required)	
<b>Total Postage &amp; Fees \$</b>	
Sent To	
Howard Warsaw	
Route 122	
Minier, IL 61759	

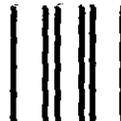
Postmark Here  
 JUN 10 1999  
 10:45 AM

PS Form 3800, January 2001

See Reverse for Instructions

<b>SENDER: COMPLETE THIS SECTION</b>		<b>COMPLETE THIS SECTION ON DELIVERY</b>	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>		A. Received by (Please Print Clearly)	B. Date of Delivery
1. Article Addressed to:		Donald Riegler	3-73-03
Howard Warsaw		C. Signature	<input type="checkbox"/> Agent
Route 122		<input checked="" type="checkbox"/> Addressee	
Minier, IL 61759		D. Is delivery address different from item 1? <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
		If YES, enter delivery address below:	
		P.O. Box 557	
2. Article Number (Copy from service label)		3. Service Type	
7001 2510 0002 5277 9192		<input checked="" type="checkbox"/> Certified Mail	<input type="checkbox"/> Express Mail
981987+991610 TAH/JR		<input type="checkbox"/> Registered	<input type="checkbox"/> Return Receipt for Merchandise
		<input type="checkbox"/> Insured Mail	<input type="checkbox"/> C.O.D.
PS Form 3811, July 1999		4. Restricted Delivery? (Extra Fee)	<input type="checkbox"/> Yes
Domestic Return Receipt			
			102595-99-M-1789

UNITED STATES POSTAL SERVICE



First-Class Mail  
Postage & Fees Paid  
USPS  
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

Illinois Environmental Protection Agency

P.O. Box 19276 Mail Code # *24*

Springfield, IL 62794-9276



1790455007-Tazewell  
Warsaw, Howard  
Trust Tech

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC.  
22200 ILLINOIS ROUTE 9 POST OFFICE BOX 614  
TREMONT, ILLINOIS 61568  
PHONE NO. (309) 925-5551 FAX (309) 925-5606

LETTER OF TRANSMITTAL

TO: Illinois Environmental Protection Agency DATE: November 18, 2003  
1021 North Grand Avenue East, PO Box 19276 JOB NO.: 9890  
Springfield, Illinois 62794-9276 RE: HP CA BUDGET ADDENDUM  
HOWARD WARSAW -MINIER, IL

WE ARE SENDING YOU:

- REPORT       LETTER       CONTRACT & RATE SHEET  
 MAP/DRAWINGS       DOCUMENTS REQUIRING SIGNATURES  
 REIMBURSEMENT DOCUMENTATION       OTHER

COPIES	DESCRIPTION
2	High Priority Corrective Action Budget Addendum for the above referenced site

THESE ARE TRANSMITTED AS CHECKED BELOW:

- REIMBURSEMENT SUBMITTAL     FOR APPROVAL     AS NEEDED FOR REPORT  
 COPY FOR YOUR RECORDS       SIGNATURE REQUIRED     AS REQUESTED

REMARKS:

Mr. Jim Ransdell,

Please find enclosed the above referenced documentation for your review. As always, please feel free to contact our office with any questions or comments. Thank You!

RECEIVED

NOV 20 2003

IEPA/BOL

FROM: Gaye Lynn Green: Office Manager  
Midwest Environmental Consulting & Remediation Services, Inc.

RELEASABLE

MAR 17 2004

REVIEWER MD

R0391

# Midwest Environmental Consulting & Remediation Services Inc.

22200 Illinois Route 9 • P.O. Box 614

Tremont, IL 61568-0614

Phone: (309) 925-5551 • Fax: (309) 925-5606

November 10, 2003

Mr. Jim Ransdell  
Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Re: LPC #1790455007 – Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 981987  
LUST Technical File

RECEIVED

NOV 20 2003

IEPA/BOL

Dear Mr. Ransdell:

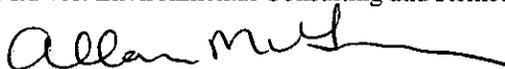
Attached please find the budget addendum associated with the High Priority Corrective Action Plan (CAP) dated January 28, 2002. The CAP was approved by the IEPA in a letter dated May 24, 2002. The most recent total budget associated with the installation of the groundwater treatment system was approved in a letter dated March 12, 2003.

This budget amendment is being submitted to cover unanticipated costs associated with running power to the groundwater treatment system, in addition to the newly instituted permitting fees. Additional personnel time was needed to deal with unexpected meetings, subcontractor delays and meetings, as well as time to fill out the permit applications. Numerous meetings have been held onsite concerning the groundwater treatment system. These meetings were not accounted for in the first budget proposal, however, they were necessary to implement the approved corrective action plan.

If you have any questions or comments, please contact our office.

Sincerely,

Midwest Environmental Consulting and Remediation Services, Inc.



Allan M. Green  
President

TKB/alg  
cc: Mr. Howard Warsaw  
Attachment  
Job No. 9890

RELEASABLE

MAR 17 2004

REVIEWER MD

**APPENDIX H**  
**HIGH PRIORITY CAP BUDGET - AMENDMENT**

**BUDGET AND BILLING FORM FOR  
LEAKING UNDERGROUND STORAGE  
TANK SITES**

**A. SITE INFORMATION**

Site Name: Warsaw, Howard  
Site Address: Route 122 City: Minier  
Zip: 61759  
County: Tazewell IEPA Generator No.: 1790455007  
IEMA Incident No: 981987 IEMA Notification Date: May 19, 1999  
Date this Form was Prepared: August 27, 2003

This form is being submitted as a:

- Budget Proposal  
 Budget Amendment (Budget Amendments must include only the costs over the previous budget)  
Amendment Number: 3  
 Billing Package for costs incurred pursuant to 35 Illinois Administrative Code (IAC), Part 732 ("new program")

Name(s) of report(s) documenting the costs requested: \_\_\_\_\_  
Date(s): \_\_\_\_\_

This form is being submitted for the Site Activities indicated below (check one):

- Early Action  Site Classification  
 Low Priority Corrective Action  High Priority Corrective Action  
 Other (indicate activities): \_\_\_\_\_

**DO NOT SUBMIT "NEW PROGRAM" COSTS AND "OLD PROGRAM"  
COSTS AT THE SAME TIME, ON THE SAME FORMS.**

A-1

IL 532-2263  
LPC 494 Rev. 2/99

This form must be submitted in duplicate.  
The Agency is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder.  
This form has been approved by the Forms Management Center.

**RECEIVED**  
**NOV 20 2003**  
**IEPA/BOL**

R0394

If eligible for reimbursement, where should reimbursement checks be sent? Please note that only owners or operators or USTs may be eligible for reimbursement. Therefore, payment can only be made to an owner or operator.

Pay to the order of: Howard Warsaw

Send in care of: Howard Warsaw

Address: Route 122

City: Minier State: IL Zip: 61759

Number of Petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101: X 101 or more: \_\_\_\_\_

Number of USTs at the site: 7 (Number of USTs included USTs presently at the site and USTs that have been removed.)

Number of incidents reported to IEMA: 2

Incident Numbers assigned to the site due to releases from USTs: 981987, 991610

Please list all tanks which have ever been located at the site and are presently located at the site:

Product Stored	Size (gallons)	Did UST have a release?		Incident No.	Type of Release
<u>gasoline</u>	<u>500</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>gasoline</u>	<u>500</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>gasoline</u>	<u>2,000</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>diesel</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
_____	_____	<u>Yes</u>	<u>No</u>	_____	_____
_____	_____	<u>Yes</u>	<u>No</u>	_____	_____

**B. PROPOSED BUDGET SUMMARY AND BUDGET TOTAL**

1. Investigation Costs:	<u>\$0.00</u>
2. Analysis Costs:	<u>\$0.00</u>
3. Personnel Costs:	<u>\$6,878.00</u>
4. Equipment Costs:	<u>\$0.00</u>
5. Field Purchases and Other Costs:	<u>\$3,425.00</u>
6. Handling Charges:	<u>\$411.00</u>
<b>TOTAL PROPOSED BUDGET =</b>	<b><u>\$10,714.00</u></b>

**G. PERSONNEL**

All personnel costs that are not included elsewhere in the budget/billing form must be listed here. Costs must be listed per task, not personnel type. The following are some examples of tasks: Drafting, data collection, plan, report or budget preparation for \_\_\_\_\_ (i.e., site classification work plan, 45 day report, or high priority corrective action budget), sampling, field oversight for \_\_\_\_\_ (i.e. drilling/well installation, corrective action, or early action), of maintenance of \_\_\_\_\_. The above list is not inclusive of all possible tasks.

**FOR CAP PREPARATION:**

Registered P.E. : 2 hours x \$125.00 per hour = \$250.00

Task to be performed for the above hours: Air Permitting certification

Principal : 3 hours x \$120.00 per hour = \$360.00

Task to be performed for the above hours: System permitting

Sr. Environmental Manager : 2 hours x \$110.00 per hour = \$220.00

Task to be performed for the above hours: CAP & Budget amendment preparation

Sr. Project Manager : 18 hours x \$98.00 per hour = \$1,764.00

Task to be performed for the above hours: Air permitting, system setup; subcontractor meetings, site

Sr. Env. Hydrogeologist : 36 hours x \$98.00 per hour = \$3,528.00

Task to be performed for the above hours: Air permitting, system setup; subcontractor meetings, site

Sr. Environmental Hydrogeologist : 6 hours x \$98.00 per hour = \$588.00

Task to be performed for the above hours: CAP & Budget amendment preparation

Admin/Clerical : 4 hours x \$42.00 per hour = \$168.00

Task to be performed for the above hours: CAP & Budget amendment prep, system permitting prep., copy, bind, mail

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours: \_\_\_\_\_

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours: \_\_\_\_\_

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours: \_\_\_\_\_

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours: \_\_\_\_\_

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

\_\_\_\_\_ : \_\_\_\_\_ hours x \_\_\_\_\_ per hour = \$0.00

Task to be performed for the above hours:

**TOTAL PERSONNEL COSTS: \$6,878.00**



**Other Costs** - A listing and description of all other costs which will be/were incurred and are not specifically listed on this form should be attached. The listing should include a cost breakdown in a time and materials format.

IEPA Air permitting fee:	\$1,000.00
For providing single phase power to the system:	\$1,625.00
For hooking up system to sanitary sewer:	\$800.00

<b>Total Other Costs =</b>	<u>\$3,425.00</u>
<b>Subtotal I-1 =</b>	<u>\$0.00</u>
<b>Total pages I-1 and I-2:</b>	<u>\$3,425.00</u>





**L. HIGH PRIORITY CORRECTIVE ACTION**

Corrective Action at High Priority Sites may involve both and soil and groundwater remediation. Below provide a summary of costs for the remediation type(s) chosen and attach the appropriate sections of the budget/billing forms to support the summary of costs.

**A. Preparation of the Corrective Action Plan**

1. Investigation Costs:	<u>                    </u>	<u>\$0.00</u>
2. Analysis Costs:	<u>                    </u>	<u>\$0.00</u>
3. Personnel Costs:	<u>                    </u>	<u>\$976.00</u>
4. Equipment Costs:	<u>                    </u>	<u>\$0.00</u>
5. Field Purchases and Other Costs:	<u>                    </u>	<u>\$0.00</u>
6. Handling Charges:	<u>                    </u>	<u>\$0.00</u>

**B. Groundwater Remediation**

1. Analysis Costs	<u>                    </u>	<u>\$0.00</u>
2. Personnel Costs:	<u>                    </u>	<u>\$5,902.00</u>
3. Equipment Costs:	<u>                    </u>	<u>\$0.00</u>
4. Field Purchases and Other Costs:	<u>                    </u>	<u>\$3,425.00</u>
5. Handling Charges:	<u>                    </u>	<u>\$411.00</u>

Of the above costs, please provide a break down of costs associated with operation and maintenance (O&M), if applicable, as requested below:

                     Months of O&M x                      per month =                      \$0.00

**C. Excavation and Disposal**

1. Analysis Costs:	<u>                    </u>	<u>\$0.00</u>
2. Personnel Costs:	<u>                    </u>	<u>\$0.00</u>
3. Equipment Costs:	<u>                    </u>	<u>\$0.00</u>
4. Field Purchases and Other Costs:	<u>                    </u>	<u>\$0.00</u>
5. Handling Charges:	<u>                    </u>	<u>\$0.00</u>

Of the above costs, please provide a break down of the costs associated with excavation, transportation, and disposal as requested below:

Excavation:	<u>                    </u> 0 yards x	<u>                    </u> \$0.87 per yard =	<u>                    </u> \$0.00
Transportation:	<u>                    </u> 0 yards x	<u>                    </u> \$0.87 per yard =	<u>                    </u> \$0.00
Disposal:	<u>                    </u> 0 yards x	<u>                    </u> \$32.50 per yard =	<u>                    </u> \$0.00

L-1

This form must be submitted in duplicate.

R0403





Office of the Illinois  
**State Fire Marshal**

CERTIFIED MAIL - RECEIPT REQUESTED #Z 082 409 569

September 30, 1999

Howard Warsaw  
Route 122  
Minier, IL 61759

In Re: Facility No. 3-005023  
IEMA Incident No. 98-1987  
Warsaw ITCO  
Route 122  
Minier, Tazewell Co., IL

Dear Applicant:

The Reimbursement Eligibility and Deductible Application received on September 23, 1999 for the above referenced occurrence has been reviewed. The following determinations have been made based upon this review.

It has been determined that you are eligible to seek payment of costs in excess of \$10,000. The costs must be in response to the occurrence referenced above and associated with the following tanks:

Eligible Tanks

- Tank 1 500 gallon Gasoline
- Tank 2 500 gallon Gasoline
- Tank 3 2,000 gallon Gasoline

You must contact the Illinois Environmental Protection Agency to receive a packet of Agency billing forms for submitting your request for payment.

An owner or operator is eligible to access the Underground Storage Tank Fund if the eligibility requirements are satisfied:

1. Neither the owner nor the operator is the United States Government,
2. The tank does not contain fuel that is exempt from the Motor Fuel Tax Law,
3. The costs were incurred as a result of a confirmed release of any of the following substances:

"Fuel", as defined in Section 1.19 of the Motor Fuel Tax Law

Aviation fuel

Heating oil

Kerosene

Used oil, which has been refined from crude oil used in a motor vehicle, as defined in Section 1.3 of the Motor Fuel Tax Law.

4. The owner or operator registered the tank and paid all fees in accordance with the statutory and regulatory requirements of the Gasoline Storage Act.
5. The owner or operator notified the Illinois Emergency Management Agency of a confirmed release, the costs were incurred after the notification and the costs were a result of a release of a substance listed in this Section. Costs of corrective action or indemnification incurred before providing that notification shall not be eligible for payment.
6. The costs have not already been paid to the owner or operator under a private insurance policy, other written agreement, or court order.
7. The costs were associated with "corrective action".

This constitutes the final decision as it relates to your eligibility and deductibility. We reserve the right to change the deductible determination should additional information that would change the determination become available. An underground storage tank owner or operator may appeal the decision to the Illinois Pollution Control Board (Board), pursuant to Section 57.9 (c) (2). An owner or operator who seeks to appeal the decision, shall file a petition for a hearing before the Board within 35 days of the date of mailing of the final decision, (35 Illinois Administrative Code 105.102(a) (2)).

For information regarding the filing of an appeal, please contact:

Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
State of Illinois Center  
100 West Randolph, Suite 11-500  
Chicago, Illinois 60601  
(312) 814-3620

The following tanks are also listed for this site:

Tank 4 2,500 gallon Diesel  
Tank 5 2,500 gallon Gasoline  
Tank 6 2,500 gallon Gasoline  
Tank 7 2,500 gallon Gasoline

Your application indicates that there has not been a release from these tanks under this incident number. You may be eligible to seek payment of corrective action costs associated with these tanks if it is determined that there has been a release from one or more of these tanks. Once it is determined that there has been a release from one or more of these tanks you may submit a separate application for an eligibility determination to seek corrective action costs associated with this/these tanks.

If you have any questions regarding the eligibility or deductibility determinations, please contact our Office at (217) 785-1020 or (217) 785-5878.

Sincerely,

*Melvin H. Smith*

Melvin H. Smith  
Division Director  
Division of Petroleum and Chemical Safety

MHS/dl

cc: IEPA  
Facility File

R0407

Owner/Operator and Professional Engineer Budget Certification Form for Leaking Underground Storage Tanks Sites

In accordance with 415 ILCS 5/57, if an owner or operator intends to seek payment from the UST Fund, an owner or operator must submit to the Agency, for the Agency's approval or modification, a budget which includes an accounting of all costs associated with the implementation of the investigative, monitoring and/or corrective action plans.

I hereby certify that I intend to seek payment from the UST Fund for performing High Priority Corrective Action Warsaw, Howard activities at Warsaw, Howard

LUST site. I further certify that the costs set forth in this budget are necessary activities and are reasonable and accurate to the best of my knowledge and belief. I also certify that the costs included in this budget are not for corrective action in excess of the minimum requirements of 415 ILCS 5/57 and no costs are included in this budget which are not described in the corrective action plan. I further certify that costs ineligible for payment from the Fund pursuant to 35 Illinois Administrative Code Section 732.606 are not included in the budget proposal or amendment. Such ineligible costs include but are not limited to:

- Costs associated with ineligible tanks.
- Costs associated with site restoration (e.g., pump islands, canopies).
- Costs associated with utility replacement (e.g., sewers, electrical, telephone, etc.)
- Costs incurred prior to IEMA notification.
- Costs associated with planned tank pulls.
- Legal defense costs.
- Costs incurred prior to July 28, 1989.
- Costs associated with installation of new USTs or the repair of existing USTs.

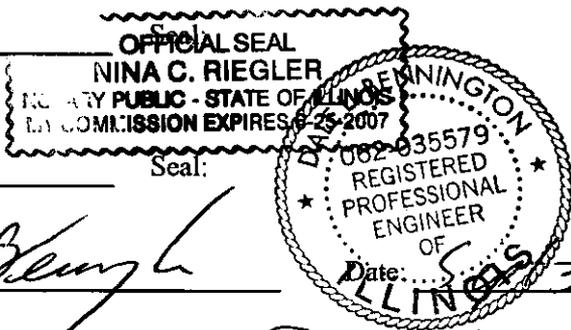
RECEIVED  
NOV 20 2003  
IEPA/BOL

Owner/Operator: Howard Warsaw Title: Owner

Signature: [Signature] Date: 11-15-03

Subscribed and sworn to before me the 15<sup>th</sup> day of November, 2003.  
*(Budget Proposals and Budget Amendments must be notarized when the certification is signed.)*

[Signature]  
(Notary Public)



P.E.: Dale Bennington Seal:

P.E. Signature: [Signature] Date: September 30, 2003

Subscribed and sworn to before me the 30<sup>th</sup> day of September, 2003.  
*(Budget Proposals and Budget Amendments must be notarized when the certification is signed.)*

[Signature]  
(Notary Public) Seal:



The Agency is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder. This form has been approved by the Forms Management Center.

File Heading:

LPC 1796438 007 TAYLOR  
 Minion Worsell Lt  
 Worsell HCO/RT 122  
 # 981987

Reviewed By: J. Worsell  
 Date Reviewed: 3/16/07  
 Documents Reviewed: HP/BUD AM

LUST Information in Division File: \_\_\_\_\_

Review Notes: Previous Budgets approved (mod)

Rec'd Date	12/8/00	11/12/02	2/26/03
Jan. \$	6,999.51		
Anal	2,712.50	9,380.-	
Pers	16,013.-	69,161.-	
Eq	276.-	1,728.-	
FP&O	453.-	11,514.-	32,676.-
Trnd	1,071.20	7,364.88	3,014.08

11/20/03	Cumul. to date	
Jan.	\$ 6,999.51	RELEASABLE
Anal	12,092.50	SEP 21 2005
Pers	85,174.-	REVIEWER MD
Eq	2,004.-	
FP&O	3,425.-	
Trnd	411.-	

approved operating system for Contractor Elk Elec & all permitting fees.

Comments/Additional Work Needed: Personnel has accumulated \$85,174.- to date ~ 30% of total budget. Personnel cost in 11/20/03 Budget. Because when O&W treatment system approved it was implied that costs associated would have been in prior plan for Personnel

Action Taken by Agency: HP BUD AM MODIFIED:

Response Due: \_\_\_\_\_



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276, 217-782-3397  
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601, 312-814-6026

ROD R. BLAGOJEVICH, GOVERNOR

RENEE CIPRIANO, DIRECTOR

217/782-6762

**CERTIFIED MAIL**

7002 3150 0000 1255 7679

**MAR 18 2004**

Howard Warsaw  
Route 122  
Minier, IL 61759

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
Warsaw Itco/Route 122  
LUST Incident No. 981987  
LUST Technical File

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the High Priority Corrective Action Plan Budget (budget) submitted for the above-referenced incident. This budget, dated November 10, 2003, was received by the Illinois EPA on November 20, 2003. Citations in this letter are from the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code).

The budget is modified pursuant to Section 57.7(c)(4) of the Act and 35 Ill. Adm. Code 732.405(c). Based on the modifications listed in Section 2 of Attachment A, the amounts listed in Section 1 of Attachment A are approved. Please note that the costs must be incurred in accordance with the approved plan. Be aware that the amount of reimbursement may be limited by Sections 57.8(e), 57.8(g) and 57.8(d) of the Act, as well as 35 Ill. Adm. Code 732.604, 732.606(s), and 732.611.

All future correspondence must be submitted to:

Illinois Environmental Protection Agency  
Bureau of Land - #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

ROCKFORD - 4302 North Main Street, Rockford, IL 61103 - (815) 987-7760 • DES PLAINES - 9511 W. Harrison St., Des Plaines, IL 60018 - (708) 477-4000  
ELGIN - 595 South State, Elgin, IL 60123 - (847) 608-3131 • PEORIA - 5415 N. University St., Peoria, IL 61614 - (309) 693-5463  
BUREAU OF LAND - PEORIA - 7620 N. University St., Peoria, IL 61614 - (309) 693-5462 • CHAMPAIGN - 2125 South First Street, Champaign, IL 61820 - (217) 278-5800  
SPRINGFIELD - 4500 S. Sixth Street Rd., Springfield, IL 62706 - (217) 786-6892 • COLLINSVILLE - 2009 Mall Street, Collinsville, IL 62234 - (618) 346-5120  
MARION - 2309 W. Main St., Suite 116, Marion, IL 62959 - (618) 993-7200

**RELEASABLE**

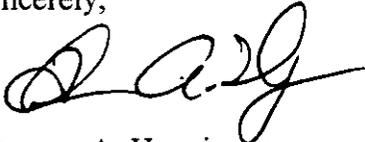
**MAR 23 2004**  
**REVIEWER MB**

Page 2

An underground storage tank system owner or operator may appeal this decision to the Illinois Pollution Control Board. Appeal rights are attached.

If you have any questions or need further assistance, please contact Jim Ransdell at 217/557-6938.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Henninger', written in a cursive style.

Thomas A. Henninger  
Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

TAH:JSR:jk\042913.doc

Attachment: Attachment A  
Appeal Rights

c: Midwest Environmental Consulting & Remediation Services, Inc.  
Division File

**R0411**

## Appeal Rights

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board pursuant to Sections 40 and 57.7(c)(4)(D) of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the filing of an appeal, please contact:

Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
State of Illinois Center  
100 West Randolph, Suite 11-500  
Chicago, IL 60601  
312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency  
Division of Legal Counsel  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276  
217/782-5544

Attachment A

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
Warsaw Itco/Route 122  
LUST Incident No. 981987  
LUST Technical File

Citations in this attachment are from the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code).

**SECTION 1**

The budget was previously approved for:

\$6,999.51	Investigation Costs
\$12,092.50	Analysis Costs
\$85,174.00	Personnel Costs
\$2,004.00	Equipment Costs
\$144,643.00	Field Purchases and Other Costs
\$11,450.16	Handling Charges

As a result of the Illinois EPA's modification(s) in Section 2 of this Attachment A, the following amounts are approved:

\$0.00	Investigation Costs
\$0.00	Analysis Costs
\$0.00	Personnel Costs
\$0.00	Equipment Costs
\$3,425.00	Field Purchases and Other Costs
\$411.00	Handling Charges

Therefore, the total cumulative budget is approved for:

\$6,999.51	Investigation Costs
\$12,092.50	Analysis Costs
\$85,174.00	Personnel Costs
\$2,004.00	Equipment Costs
\$148,068.00	Field Purchases and Other Costs
\$11,861.16	Handling Charges

**SECTION 2**

1. \$6,878.00 for an adjustment in Personnel Costs. The Illinois EPA has determined that these costs are not reasonable as submitted (Section 57.7(c)(4)(C) of the Act and 35 Ill. Adm. Code 732.606(hh)). One of the overall goals of the financial review is to assure that costs associated with materials, activities, and services are reasonable (35 Ill. Adm. Code 732.505(c)). Please note that additional information and/or supporting documentation may be provided to demonstrate the costs are reasonable.

7002 3150 0000 1255 7679

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Route 122  
Minier, IL 61759

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Howard Warsaw  
Route 122  
Minier, IL 61759

2. Article Number  
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**COMPLETE THIS SECTION ON DELIVERY**

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*[Signature]*  
B. Received by (Printed Name)  Received by *HOWARD WARSAW*  
C. Date of Delivery 3-19-04

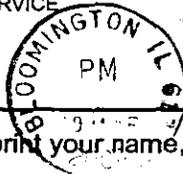
D. Is delivery address different from item 1?  Yes  
If YES, enter delivery address below:  No  
  
PO Box 557

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4. Restricted Delivery? (Extra Fee)  Yes

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# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 - (217) 782-3397

JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 - (312) 814-6026

ROD R. BLAGOJEVICH, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/782-6762

**CERTIFIED MAIL**

7004 2510 0001 8655 1922

**DEC 14 2005**

Howard Warsaw  
Attention: John Warsaw  
Post Office Box 557  
Minier Illinois 61759

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw Howard  
Warsaw Itco/Rt. 122  
LUST Incident No. 981987  
LUST Technical File

**RELEASABLE**

**DEC 28 2005**

**REVIEWER MD**

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the High Priority Corrective Action Plan (plan) submitted for the above-referenced incident. This information, dated August 17, 2005, was received by the Illinois EPA on August 25, 2005. Citations in this letter are from the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code).

Pursuant to Section 57.7(c)(4)(D) of the Act and 35 Ill. Adm. Code 732.405(c), the plan is rejected for the following reason(s):

1. It is difficult to ascertain if the recovery well system proposed in the Plan is appropriate for remediation of groundwater at this time. Soil exceedences still exist and are the source of contamination in groundwater. You must eliminate the source of contamination before remediation of groundwater can be implemented.
2. The Plan fails to provide which oxygen releasing agents would be considered.
3. Appendix G has been omitted from the Plan.
4. Soil sampling locations T-1 through T-10 were not provided on the site base map.
5. The Agency is requesting a list of sites which have had success with your proposed groundwater treatment system.

ROCKFORD - 4302 North Main Street, Rockford, IL 61103 - (815) 987-7760 • DES PLAINES - 9511 W. Harrison St., Des Plaines, IL 60016 - (847) 294-4000  
 ELGIN - 595 South State, Elgin, IL 60123 - (847) 608-3131 • PEORIA - 5415 N. University St., Peoria, IL 61614 - (309) 693-5463  
 BUREAU OF LAND - PEORIA - 7620 N. University St., Peoria, IL 61614 - (309) 693-5462 • CHAMPAIGN - 2125 South First Street, Champaign, IL 61820 - (217) 278-5800  
 SPRINGFIELD - 4500 S. Sixth Street Rd., Springfield, IL 62706 - (217) 786-6892 • COLLINSVILLE - 2009 Mall Street, Collinsville, IL 62234 - (618) 346-5120  
 MARION - 2309 W. Main St., Suite 116, Marion, IL 62959 - (618) 993-7200

**R0416**

6. It appears the last sampling event occurred February 14, 2002. The Agency is requesting a re-sampling of MW-4 the only exceedence of Tier 1 groundwater remediation objectives for BTEX.

Pursuant to Sections 57.7(a)(1) and 57.7(c)(4)(D) of the Act and 35 Ill. Adm. Code 732.405(e) and 732.503(b), the associated budget is rejected for the reasons listed in Attachment A.

Pursuant to 35 Ill. Adm. Code 732.401, the Illinois EPA requires submittal of a revised plan, and budget if applicable, within 90 days of the date of this letter to:

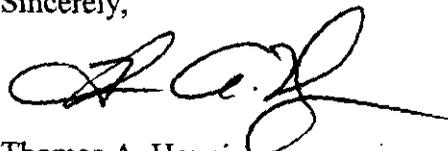
Illinois Environmental Protection Agency  
Bureau of Land - #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

An underground storage tank system owner or operator may appeal this decision to the Illinois Pollution Control Board. Appeal rights are attached.

If you have any questions or need further information, please contact Jim Ransdell at 217/557-6938.

Sincerely,



Thomas A. Henninger  
Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

TAH:JSR

Attachment: Attachment A

c: Midwest Environmental Consulting & Remediation Services Inc.  
Division File

Attachment A

Re: LPC # 1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
Warsaw Itco/Rt. 122  
LUST Incident No. 981987  
LUST Technical File

Citations in this attachment are from the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code).

Pursuant to Sections 57.7(a) and 57.7(c)(4) of the Act and 35 Ill. Adm. Code 732.405 and 732.503(b), the associated budget is rejected for the following reason:

A full financial review shall consist of a detailed review of the costs associated with each element necessary to accomplish the goals of the plan as required pursuant to the Act and regulations. Items to be reviewed shall include, but not be limited to, costs associated with any materials, activities, or services that are included in the budget plan. The overall goal of the financial review shall be to assure that costs associated with materials, activities, and services shall be reasonable, shall be consistent with the associated technical plan, shall be incurred in the performance of corrective action activities, and shall not be used for corrective action activities in excess of those necessary to meet the minimum requirements of the Act and regulations (Section 57.7(c)(4)(C) of the Act and 35 Ill. Adm. Code 732.505(c)).

Without an approvable plan, the proposed budget cannot be fully reviewed.

TAH:JSR

R0418

## Appeal Rights

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board pursuant to Sections 40 and 57.7(c)(4)(D) of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the filing of an appeal, please contact:

Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
State of Illinois Center  
100 West Randolph, Suite 11-500  
Chicago, IL 60601  
312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency  
Division of Legal Counsel  
1021 North Grand Avenue East  
Post Office Box 19276  
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217/782-5544

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Mr. Howard Warsaw  
 Attn: John Warsaw  
 Post Office Box 557  
 Minier, IL 61759

PS Form 3800, June 2002      See Reverse for Instructions

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<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece or on the front if space permits.</li> </ul>	<p>A. Signature <i>John Warsaw</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) <i>John Warsaw</i></p> <p>C. Date of Delivery <i>12-15-05</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes        If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to:</p> <p>Howard Warsaw          Attn: John Warsaw          Post Office Box 557          Minier, IL 61759</p>	<p>3. Service Type</p> <p><input checked="" type="checkbox"/> Certified Mail    <input type="checkbox"/> Express Mail</p> <p><input type="checkbox"/> Registered        <input type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Insured Mail      <input type="checkbox"/> C.O.D.</p>
<p>2. Article Number          (Transfer from service label)</p> <p><i>981987 TAHLOR</i></p>	<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>7004 2510 0001 8055 1922 <b>R04</b></p>	

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Springfield, IL 62794-9276

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8030



R04

**LEAKING UST TECHNICAL REVIEW NOTES**

Reviewed by: Ransdell J  
County  
Date Reviewed: <sup>10/18/10</sup> ~~1/2/05~~  
Cap/Bu Rec'd 6/18/10

File Heading: LPC #1790455007 -- Tazewell  
Minier/Warsaw, Howard  
Warsaw Itco/Rt. 122  
Leaking UST Incident No. 981987  
LUST Technical File

**Document(s) Reviewed:**

High Priority Corrective Action Plan/Budget (Amended) Rec'd 8/25/05 and Rejected

**General Site Information:**

**MECRS**

Site subject to: 732

IEMA date(s): 8/11/98	Reimbursement (Y/N/unknown): Y
UST System removed (Y/N): Y	OSFM Fac. ID #:
Encountered Groundwater (Y/N/unknown): Y	SWAP mapping and evaluation completion date: 10/13/10
Free Product (Y/N/unknown): N	Site placement correct in SWAP (Y/N): Y
Current/Past Land Use: Gas Station	MTBE > 40 ppb in groundwater (Y/N/unknown): UNK
Size & Product of Tanks: (1) 2000 and (2) 550 Gas	

**Division File Information:(optional) (Arranged chronologically)**

20/45 SC II SCCOM HPCAP Site Notes Val Davis-JSR hand and computer and Docuware

**Corrective Action Plan/Budget Review Notes: Rec'd 8/25/05**

Current soil BTEX exceedences are B-2,3,4,5,7; MW-4 and T-6,7

Current groundwater exceedences is at MW-4 @ 1.1mg/L MW-1,2,3,5,6,7 remain clean

Since 2002 sampling and MW-4 might be clean since the January 24, 2005 event was

Not sampled

Are stating that the technology that will be used is Conventional and not Alternative, that is Using a horizontal pipe gallery and injecting it with some sort of Oxygen release compound for both soil and groundwater remediation. They need to remove source of contamination

A collection trench was approved previously approved Oct. 2003 when groundwater Contamination existed in MW-1, MW-4, MW-5, and MW-7 but now seems to have dissipated and soil may be the only issue. The Pipe Gallery proposed is at a cost of \$39,750.00.

Requesting successful sites, T-1 through T-10 sampling locations, Appendix G, and Oxy agents.

**RELEASABLE**

OCT 14 2010

**REVIEWER MD  
R0422**

**Corrective Action Plan/Bu Rec'd 6/18/10**

- A. CAP appears to be a repeat of the CAP denied 12/14/05. They wanted to place horizontal recovery wells across the site for soil and groundwater contamination with a recovery trench downgradient for collection and bio-remediation.**
- B. With the onset of the new Regulations O/O needs to re-evaluate site soil and groundwater contamination and prepare a CAP/BU that will allow the use of Institutional Controls, Engineered Barriers, and Ordinances and Tier II**
- C. Denial points from CAP/BU letter dated 12/14/05:**
  - 1. Appendix G was not provided in the Plan which was to include equations, variables, and site specific CUO's (TACO Calculation and Results). The present CAP/BU dated 1/25/10 does not include them either.**
  - 2. Soil sampling T-1 thru T-10 locations were not provided onto the site base map.**
- D. Site is not in a setback of a well**
- E. The City of Minier does not have a Groundwater Ordinance**
- F. Soil and groundwater exceedences can be addressed thru Insitutional Controls, Ordinances, Engineered barriers, HAA, and a Tier II evaluation for closure.**

**Illinois EPA Recommendation/Comments:**

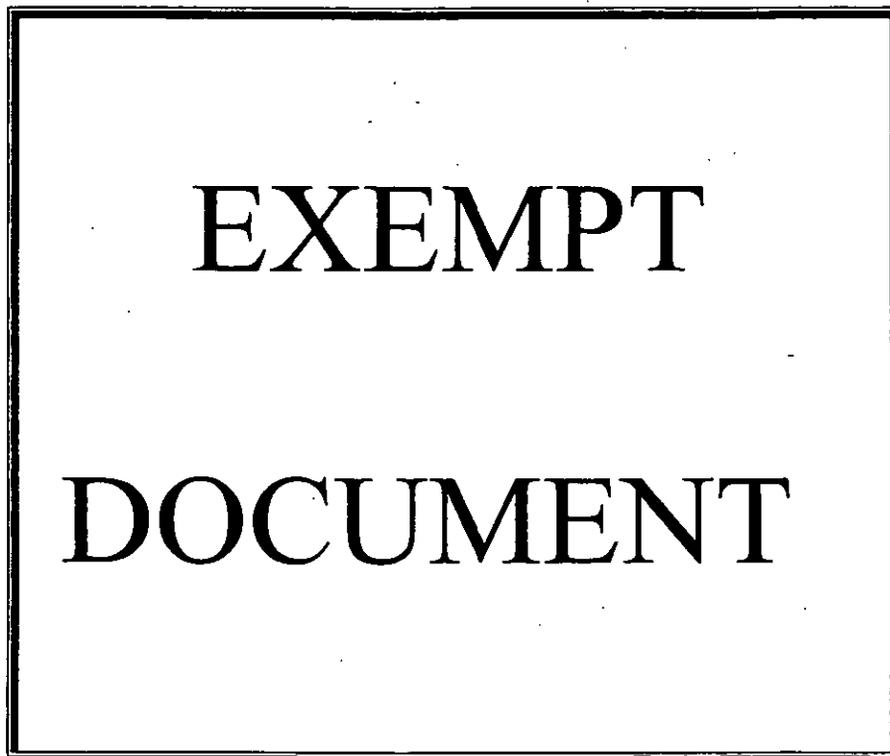
Will Reject CAP/BU with citations from previous letter of 12/14/05. They will have to follow the new Regulations set forth on or after June 8, 2010. Attachment will be provided with letter

TAH:JSR

FILE NO. L 1790455007

EXEMPT DOCUMENT NO. 002

**THE AGENCY HAS DETERMINED THIS DOCUMENT  
IS EXEMPT FROM PUBLIC DISCLOSURE**



FILE CATEGORY LIST/TECH

DOCUMENT DATE 06-18-2010



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829  
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/782-6762

CERTIFIED MAIL

OCT 18 2010

7009 2820 0001 7491 6862

Howard Warsaw  
Rt. 122  
Minier, Illinois 61759

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
Warsaw Itco/Rt.122  
Leaking UST Incident No. 981987  
Leaking UST Technical File

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the High Priority Corrective Action Plan (plan) submitted for the above-referenced incident. This information, dated January 25, 2010, was received by the Illinois EPA on June 18, 2010. Citations in this letter are from the Environmental Protection Act (Act) in effect prior to June 24, 2002, and 35 Illinois Administrative Code (35 Ill. Adm. Code).

Pursuant to Section 57.7(c)(4) of the Act and 35 Ill. Adm. Code 732.405(c), the plan is rejected for the following reason(s):

1. Appendix G was not provided in the Plan which was to include equations, variables, and site specific CUO's.
2. Soil sampling locations T-1 through T-10 were not provided on the site base map
3. The Corrective Action Plan must comply with the requirements of Title XVI of the Act, as amended by Public Act 92-0554 on June 24, 2002 and Public Act 96-0908 on June 8, 2010.

Pursuant to Sections 57.7(a)(1) and 57.7(c)(4) of the Act and 35 Ill. Adm. Code 732.405(e) and 732.503(b), the associated budget is rejected for the reasons listed in Attachment A.

Pursuant to 35 Ill. Adm. Code 732.401, the Illinois EPA requires submittal of a revised plan, and budget if applicable, within 120 days of the date of this letter to:

  
OCT 22 2010

Page 2

Illinois Environmental Protection Agency  
Bureau of Land - #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

An underground storage tank system owner or operator may appeal this decision to the Illinois Pollution Control Board. Appeal rights are attached.

If you have any questions or need further information, please contact Jim Ransdell at 217/557-6938.

Sincerely,



Thomas A. Henninger  
Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

TAH:JSR

Attachment: Attachment A and Attachment B

c: Midwest Environmental Consulting & Remediation Services, Inc.  
BOL File

R0426

Attachment A

Re: LPC # 1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
Warsaw Itco/Rt. 122  
LUST Incident No. 981987  
LUST Technical File

Citations in this attachment are from the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code).

Pursuant to Sections 57.7(a) and 57.7(c)(4) of the Act and 35 Ill. Adm. Code 732.405 and 732.503(b), the associated budget is rejected for the following reason:

A full financial review shall consist of a detailed review of the costs associated with each element necessary to accomplish the goals of the plan as required pursuant to the Act and regulations. Items to be reviewed shall include, but not be limited to, costs associated with any materials, activities, or services that are included in the budget plan. The overall goal of the financial review shall be to assure that costs associated with materials, activities, and services shall be reasonable, shall be consistent with the associated technical plan, shall be incurred in the performance of corrective action activities, and shall not be used for corrective action activities in excess of those necessary to meet the minimum requirements of the Act and regulations (Section 57.7(c)(4)(C) of the Act and 35 Ill. Adm. Code 732.505(c)).

Without an approvable plan, the proposed budget cannot be fully reviewed.

TAH:JSR

Attachment B  
Technical Review

Re: LPC # 1790455007-- Tazewell County  
Minier/Warsaw, Howard  
Warsaw Itco/Rt. 122  
Leaking UST Incident No. 981987  
Leaking UST Technical File

Citations in this attachment are from the Environmental Protection Act (Act), as amended by Public Act 92-0554 on June 24, 2002, and 35 Illinois Administrative Code (35 Ill. Adm. Code).

1. In approving any plan submitted pursuant to Section 57.7(a) or (b) of the Act, the Illinois EPA shall determine, by a procedure promulgated by the Illinois Pollution Control Board (Board) under Section 57.14 of the Act, that the Costs associated with the plan are reasonable, will be incurred in the performance of site investigation or corrective action, and will not be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act.

For purposes of payment from the Fund, corrective action activities required to meet the Minimum requirements of Title XVI of the Act shall include, but not limited to, the following use of the Board's Tiered Approach to Corrective Action Objectives rules adopted under Title XVI of the Act:

- a. For the site where the release occurred, the use of Tier 2 remediation objective that Are no more stringent than Tier 1 remediation objectives.
- b. The use of industrial/commercial property remediation objectives, unless the owner or operator demonstrates that the property being remediated is residential property or being developed into residential property.
- c. The use of groundwater ordinances as institutional controls in accordance with Board rules.
- d. The use of on-site groundwater use restrictions as institutional controls in accordance with Board rules.

(Section 57.7(c)(3)(A) of the Act)

2. In accordance with Section 57.13 of the Act, corrective action activities for leaking UST incidents for which a No Further Remediation Letter is issued on or after June 8, 2010, must comply with Title XVI of the Act, as amended by Public Act 92-0554 on June 24, 2002, and Public Act 96-0908 on June 8, 2010. As such, then, pursuant to Section 57.7(c)(3)(A) of the Act, corrective action activities to achieve soil remediation objectives lower than the Tier 2 industrial/commercial soil remediation objectives or Tier 2 construction worker soil remediation objectives, whichever are most restrictive, are not eligible for payment from the Fund.

## Appeal Rights

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board pursuant to Sections 40 and 57.7(c)(4) of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the filing of an appeal, please contact:

Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
State of Illinois Center  
100 West Randolph, Suite 11-500  
Chicago, IL 60601  
312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency  
Division of Legal Counsel  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276  
217/782-5544

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Howard Warsaw  
 Rt. 122  
 Minier, IL 61759

PS Form 3800, August 2006 See Reverse for Instructions

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is required.
- Print your name and address on the reverse so that we can return this card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Howard Warsaw  
 Rt. 122  
 Minier, IL 61759

2. Article Number

(Transfer from service label)

7009 2820 0001 7491 6862 R04

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

*Rose Warsaw*

Agent

Addressee

B. Received by (Printed Name)

*Rose Warsaw*

C. Date of Delivery

*10-26-2010*

D. Is delivery address different from item 1?  Yes

If YES, enter delivery address below:  No

*TAH/JR 981987*

3. Service Type

Certified Mail

Express Mail

Registered

Return Receipt for Merchandise

Insured Mail

C.O.D.

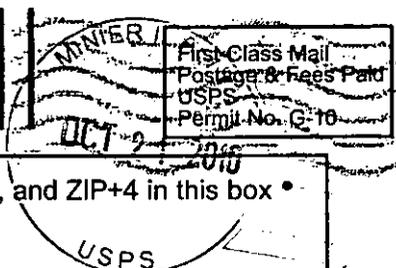
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**Illinois Environmental  
Protection Agency**  
P.O. BOX 19276 MAIL CODE #  
SPRINGFIELD, IL 62794-9276

24

*Kansdell*

*1790455007-Tazewell  
Warsaw, Howard  
Kuesteck*

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC.  
22200 ILLINOIS ROUTE 9 POST OFFICE BOX 614  
TREMONT, ILLINOIS 61568  
PHONE NO. (309) 925-5551 FAX (309) 925-5606

LETTER OF TRANSMITTAL

TO: Illinois Environmental Protection Agency DATE: November 16, 2010  
1021 North Grand Avenue East, PO Box 19276 JOB NO.: 9890  
Springfield, Illinois 62794-9276 RE: Corrective Action Completion Report  
Attn: ~~Jason Durnally~~ Warsat ITCO  
Route 122  
Minier, IL

WE ARE SENDING YOU:

- REPORT       LETTER       CONTRACT & RATE SHEET
- MAP/DRAWINGS       DOCUMENTS REQUIRING SIGNATURES
- REIMBURSEMENT DOCUMENTATION       OTHER

COPIES	DESCRIPTION
2	Corrective Action Budget Amendment

THESE ARE TRANSMITTED AS CHECKED BELOW:

- REIMBURSEMENT SUBMITTAL     FOR APPROVAL     AS NEEDED FOR REPORT
- COPY FOR YOUR RECORDS       SIGNATURE REQUIRED     AS REQUESTED

REMARKS:

Please find enclosed the above referenced documentation for your review.  
Thank You.

FROM: Gaye Lynn Green: Office Manager  
Midwest Environmental Consulting & Remediation Services, Inc.

**RECEIVED**

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**RELEASABLE**

JUL 20 2011

**IEPA/BOL**

**REVIEWER MD**

# Midwest Environmental Consulting & Remediation Services Inc.

22200 Illinois Route 9 • P.O. Box 614

Tremont, IL 61568-0614

Phone: (309) 925-5551 • Fax: (309) 925-5606

November 8, 2010

Mr. Jim Ransdell  
Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Re: LPC #1790455007 – Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 981987  
LUST Technical File

Dear Mr. Ransdell:

Attached please find the Corrective Action Plan and Budget Amendment for the subject site.

If you have any questions or comments, please contact our office.

Sincerely,

Midwest Environmental Consulting and Remediation Services, Inc.



Allan M. Green  
President

PLS/alg  
cc: Mr. Howard Warsaw  
Attachments  
Job No. 9890

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**IEPA/BOL**

R0434

Leaking Underground Storage Tank Program  
High Priority Corrective Action Plan Amendment

**Incident Location:** Warsaw - ITCO  
Route 122  
Minier, Illinois – Tazewell Co.

**Prepared for:** John Warsaw  
PO Box 886  
Minier, Illinois 61759

**Prepared by:** Midwest Environmental Consulting  
and Remediation Services, Inc.  
22200 Illinois Route 9  
Post Office Box 614  
Tremont, Illinois 61568-0614  
Contact: Allan Green – President

**For Review by:** Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
Contact: Mr. Jim Ransdell

# High Priority Corrective Action Plan Amendment

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IEPA Corrective Action Plan Form

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Section D. Background/Corrective Action Implementation Report  
Section E. Technical Information – Corrective Action Plan

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**IEPA CORRECTIVE ACTION PLAN FORM**

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

## Illinois Environmental Protection Agency Leaking Underground Storage Tank Program Corrective Action Plan

### A. Site Identification

IEMA Incident # (6- or 8-digit): 981987 IEPA LPC# (10-digit): 1790455007

Site Name: Warsaw, Howard

Site Address (Not a P.O. Box): IL Rt 122

City: Minier County: Tazewell ZIP Code: 61759

Leaking UST Technical File

### B. Site Information

1. Will the owner or operator seek reimbursement from the Underground Storage Tank Fund? Yes  No

2. If yes, is the budget attached? Yes  No

3. Is this an amended plan? Yes  No

4. Identify the material(s) released: gasoline

5. This Corrective Action Plan is submitted pursuant to:

a. 35 Ill. Adm. Code 731.166

The material released was:

-petroleum

-hazardous substance (see Environmental Protection Act Section 3.215)

b. 35 Ill. Adm. Code 732.404

c. 35 Ill. Adm. Code 734.335

### C. Proposed Methods of Remediation

1. Soil TACO, evaluation of exposure pathways

2. Groundwater TACO, evaluation of exposure pathways

### D. Soil and Groundwater Investigation Results (for incidents subject to 35 Ill. Adm. Code 731 only or 732 that were classified using Method One or Two, if not previously provided)

Provide the following:

1. Description of investigation activities performed to define the extents of soil and/or groundwater contamination;

2. Analytical results, chain-of-custody forms, and laboratory certifications;

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**IEPA/BOL**

3. Tables comparing analytical results to applicable remediation objectives;
4. Boring logs;
5. Monitoring well logs; and
6. Site maps meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440 and showing:
  - a. Soil sample locations;
  - b. Monitoring well locations; and
  - c. Plumes of soil and groundwater contamination.

## **E. Technical Information - Corrective Action Plan**

Provide the following:

1. Executive summary identifying the objectives of the corrective action plan and the technical approach to be utilized to meet such objectives;
  - a. The major components (e.g., treatment, containment, removal) of the corrective action plan;
  - b. The scope of the problems to be addressed by the proposed corrective action; and
  - c. A schedule for implementation and completion of the plan;
2. Identification of the remediation objectives proposed for the site;
3. A description of the remedial technologies selected:
  - a. The feasibility of implementing the remedial technologies;
  - b. Whether the remedial technologies will perform satisfactorily and reliably until the remediation objectives are achieved; and
  - c. A schedule of when the technologies are expected to achieve the applicable remediation objectives;
4. A confirmation sampling plan that describes how the effectiveness of the corrective action activities will be monitored during their implementation and after their completion;
5. A description of the current and projected future uses of the site;
6. A description of engineered barriers or institutional controls that will be relied upon to achieve remediation objectives:
  - a. an assessment of their long-term reliability;
  - b. operating and maintenance plans; and
  - c. maps showing area covered by barriers and institutional controls;
7. The water supply well survey:
  - a. Map(s) showing locations of community water supply wells and other potable wells and the setback zone for each well;
  - b. Map(s) showing regulated recharge areas and wellhead protection areas;
  - c. Map(s) showing the current extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
  - d. Map(s) showing the modeled extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
  - e. Tables listing the setback zone for each community water supply well and other potable water supply wells;
  - f. A narrative identifying each entity contacted to identify potable water supply wells, the name and title of each person contacted, and any field observations associated with any wells identified; and
  - g. A certification from a Licensed Professional Engineer or Licensed Professional Geologist that the survey was conducted in accordance with the requirements and that documentation submitted includes information obtained as a result of the survey (certification of this plan satisfies this requirement);

8. Appendices:
  - a. References and data sources report that are organized; and
  - b. Field logs, well logs, and reports of laboratory analyses;
9. Site map(s) meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440;
10. Engineering design specifications, diagrams, schematics, calculations, manufacturer's specifications, etc.;
11. A description of bench/pilot studies;
12. Cost comparison between proposed method of remediation and other methods of remediation;
13. For the proposed Tier 2 or 3 remediation objectives, provide the following:
  - a. The equations used;
  - b. A discussion of how input variables were determined;
  - c. Map(s) depicting distances used in equations; and
  - d. Calculations;
14. Provide documentation to demonstrate the following for alternative technologies:
  - a. The proposed alternative technology has a substantial likelihood of successfully achieving compliance with all applicable regulations and remediation objectives;
  - b. The proposed alternative technology will not adversely affect human health and safety or the environment;
  - c. The owner or operator will obtain all Illinois EPA permits necessary to legally authorize use of the alternative technology;
  - d. The owner or operator will implement a program to monitor whether the requirements of subsection (14)(a) have been met;
  - e. Within one year from the date of Illinois EPA approval, the owner or operator will provide to the Illinois EPA monitoring program results establishing whether the proposed alternative technology will successfully achieve compliance with the requirements of subsection (14)(a); and
  - f. Demonstration that the cost of alternative technology will not exceed the cost of conventional technology and is not substantially higher than at least two other alternative technologies, if available and technically feasible.
15. Property Owner Summary form.

## **F. Exposure Pathway Exclusion**

Provide the following:

1. A description of the tests to be performed in determining whether the following requirements will be met:
  - a. Attenuation capacity of the soil will not be exceeded for any of the organic contaminants;
  - b. Soil saturation limit will not be exceeded for any of the organic contaminants;
  - c. Contaminated soils do not exhibit any of the reactivity characteristics of hazardous waste per 35 Ill. Adm. Code 721.123;
  - d. Contaminated soils do not exhibit a pH  $\leq 2.0$  or  $\geq 12.5$ ; and
  - e. Contaminated soils which contain arsenic, barium, cadmium, chromium, lead, mercury, or selenium (or their associated salts) do not exhibit any of the toxicity characteristics of hazardous waste per 35 Ill. Adm. Code 721.124.
2. A discussion of how any exposure pathways are to be excluded.

**G. Signatures**

All plans, budgets, and reports must be signed by the owner or operator and list the owner's or operator's full name, address, and telephone number.

**UST Owner or Operator**

Name: Howard Warsaw  
Contact: John Warsaw  
Address: PO Box 886  
City: Minier  
State: IL  
ZIP Code: 61759  
Phone: (309) 648-3397  
Signature: *Howard Warsaw*  
Date: 11/18/10

**Consultant**

Company: Midwest Environmental Consulting  
Contact: Mr. Allan Green  
Address: 22200 IL Route 9, P.O. Box 614  
City: Tremont  
State: Illinois  
ZIP Code: 61568  
Phone: (309) 925-5551  
Signature: *Allan Green*  
Date: 11/18/10

I certify under penalty of law that all activities that are the subject of this plan were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in this plan has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 Ill. Adm. Code 731, 732 or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

**Licensed Professional Engineer or Geologist L.P.E. or L.P.G. Seal**

Name: Penny Silzer  
Company: Midwest Environmental  
Address: 22200 IL Route 9, P.O. Box 614  
City: Tremont  
State: Illinois  
ZIP Code: 61568  
Phone: (309) 925-5551  
Ill. Registration No: 196-000256  
License Expiration Date: 03/31/11  
Signature: *Penny Silzer*  
Date: 11/18/10



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**IEPA/BOL**

**SECTION D**

**BACKGROUND/CORRECTIVE ACTION IMPLEMENTATION REPORT**

This portion of the report follows the Illinois Environmental Protection Agency (IEPA) Corrective Action Plan Form (IL 532 2287; LPC 513) dated March 2006.

## **Section D. Soil and Groundwater Investigation Results**

### **1. Description of investigation activities performed to define the extents of soil and/or groundwater contamination.**

The subject site is currently a gasoline service station located on Route 122 in Minier, Illinois. The area is developed for commercial, residential and agricultural use. An area map is provided in Figure 1.

Three underground storage tanks (USTs) were removed from the site on July 6, 1999. The three tanks (1-2,000 gallon, 2-500 gallon) were used for gasoline. Details of the UST removal/free product removal activities can be found in the Report of Early Action/ Amended 45-Day Report dated August 31, 1999 and the Free Product Removal Report dated August 26, 1999, previously submitted to IEPA.

Between May 2000 and August 2001, Midwest Environmental Consulting and Remediation Services, Inc. (MECRS) installed seven groundwater monitoring wells (MW-1 through MW-7) and drilled seven soil borings (B-1 through B-7). Additional soil samples were collected from a recovery trench installed in October 2003 (T-1 through T-10).

### **2. Analytical results, chain-of-custody forms and laboratory certifications.**

All analytical laboratory reports, chain of custody forms and laboratory certifications for data collected have been submitted to the IPEA in previous reports.

### **3. Tables comparing results to applicable remediation objectives.**

Please see Tables 1 and 2.

### **4. Boring Logs**

All boring logs have been submitted to the IPEA in previous reports.

### **5. Monitoring Well Logs**

All monitoring well logs have been submitted to the IEPA in previous reports.

### **6. Site maps meeting the requirements of 35 Ill. Admin. Code 732.110(a) or 734.440 and showing:**

- a. Soil Sample Locations**
- b. Monitoring Well Locations**
- c. Plumes of soil and groundwater contamination**

Please see Figures 1 through 4.

**SECTION E**

**TECHNICAL INFORMATION – CORRECTIVE ACTION PLAN**

## Section E. Technical Information – Corrective Action Plan

Provide the following:

1. **Executive summary identifying the objectives of the corrective action plan and the technical approach to be utilized to meet such objectives:**
  - a. **The major components (e.g., treatment, containment, removal) of the corrective action plan**
  - b. **The scope of the problems to be addressed by the proposed corrective action; and**
  - c. **A schedule for implementation and completion of the plan.**

Installation of a groundwater recovery trench and aeration treatment took place in October 2003. Site visits have been conducted on a monthly basis for the purpose of monitoring the system progress, conduct routine operation and maintenance, and to take influent and effluent samples (if applicable). Since installation of the groundwater treatment system, groundwater has passed through the treatment system only during years of above average rainfall. The groundwater treatment system operated from 2003 until October of 2007 when the system was hit by a car and rendered inoperable. The system was repaired and restarted in March of 2009. The system operated from March of 2009 until July 2009 when the blower motor burned out. The system is currently down while the blower motor is being rebuilt.

MECRS presented alternatives to the IEPA to enhance the system in 2005 and 2010. The IEPA has yet to approve any of the plans.

Corrective action activities began at this site in August of 2000. Since that time, the IEPA's overall approach to corrective action has changed, relying more on the Tiered Approach to Cleanup Objectives (TACO) regulations and the use of engineered barriers and institutional controls. It appears that the site may meet the criteria for "No Further Action" by invoking engineered barriers and by establishing engineered barriers.

The following engineered barriers and institutional controls are proposed for the site to address all residual contamination by limiting human exposure to contaminants in excess of Tier 1 CUOs:

1. MECRS will propose to the Village of Minier that the Village adopt a groundwater use restriction ordinance which meets the criteria for approval as an institutional control. If the Village adopts the ordinance, in accordance with 742.1015, groundwater models will be calculated to identify the properties under which groundwater may potentially be located which exceeds the applicable groundwater remediation objectives. Collection of additional site specific parameters will be necessary to calculate the groundwater models. A copy of the request sent to the Village of Minier for a groundwater use restriction ordinance is provided in Appendix A. A draft copy of the property owner notification letter is presented in Appendix D.
2. MECRS will request a Highway Authority Agreement (HAA) with the Illinois Department of Transportation (IDOT) to address the potential for contamination under Ill. Rt. 122 adjacent to the site. A copy of the HAA request is included in Appendix B.

3. The concrete at the site will be designated as an engineered barrier to eliminate inhalation and ingestion exposure pathways.
4. The site will be limited to industrial/commercial use.
5. A environmental land use control (ELUC) will be required with the property located to the east of the site. A draft copy of the ELUC is provided in Appendix C.
6. A construction worker precautionary statement is requested to be included in the "No Further Remediation" letter.

The time required for the Village of Minier to adopt a groundwater use restriction ordinance is undetermined. Collection of the required site specific data required to calculate the groundwater models can be completed immediately upon receipt of approval of this plan. Groundwater models will be calculated once the data has been received. Letters to property owners will be sent after the Village adopts a groundwater use restriction ordinance and the models have been calculated. Based on previous experiences with IDOT, it will take 12 to 18 months for IDOT to review and approve the HAA. An ELUC will be requested from neighboring property owner where soil contamination in excess of Tier 1 CUOs is present. With the exception of the HAA, the tasks listed above will be completed within 60 days of receipt of approval of this plan.

## **2. Identification of the remediation objectives proposed for the site.**

All exposure routes can be eliminated on-site. Remediation objectives need not be calculated.

Tier 1 Cleanup objectives apply to all off-site soil and groundwater.

3. **A description of the remedial technologies selected:**
  - a. **The feasibility of implementing the remedial technologies**
  - b. **Whether the remedial technologies will perform satisfactorily and reliably until the remediation objectives are achieved, and**
  - c. **A schedule of when the technologies are expected to achieve the applicable remediation objectives.**

Does Not Apply.

4. **A confirmation sampling plan that describes how the effectiveness of the corrective action activities will be monitored during their implementation and after their completion.**

Other than collection of site specific TACO parameters, no additional sampling is necessary.

5. **A description of the current and projected future uses of the site.**

The site is an active gas station. There are no current plans for a change in use of the property.

6. **A description of engineered barriers or institutional controls that will be relied upon to achieve remediation objectives.**
  - a. **an assessment of their long-term reliability**
  - b. **operating and maintenance plans, and**
  - c. **maps showing area covered by barriers and institutional controls**

The following institutional controls are proposed for the site:

1. Village of Minier Groundwater Use Restriction Ordinance
2. Highway Authority Agreement with IDOT
3. ELUC with the property owner to the east of the site.
4. Industrial/Commercial Land Use Restriction
5. A Construction Worker Precautionary statement in the NFR letter

The following engineered barriers are proposed for the site:

1. The Building
2. The pavement

The areas covered by engineered barriers and institutional controls are shown in Figures 5 and 6, respectively.

A copy of the request for the Village Of Minier to consider a groundwater use restriction ordinance is provided in Appendix A. A copy of the HAA request sent to IDOT is provided in Appendix B. A draft copy of the ELUC is presented in Appendix C.

7. **The Water Supply Well Survey**
  - a. **Map(s) showing locations of community water supply wells and other potable wells and the setback zone for each well;**
  - b. **Map(s) showing regulated recharge areas and wellhead protection areas;**
  - c. **Map(s) showing the current extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;**
  - d. **Map(s) showing the modeled extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;**
  - e. **Tables listing the setback zone for each community water supply well and other potable water supply wells;**
  - f. **A narrative identifying each entity contacted to identify potable water supply wells, the name and title of each person contacted, and any field observations associated with any wells identified;**
  - g. **A certification form a Licensed Professional Engineer of Licensed Professional Geologist that the survey was conducted in accordance with the requirements and that documentation submitted includes information obtained as a result of the survey (certification of this plan satisfies the requirement).**

The water supply well survey was presented to the IEPA in the Site Classification Completion Report dated July 14, 2000 as provided below:

The population of Minier, Illinois is estimated to be 1,155. The area surrounding the subject site has been developed for light industrial, commercial and residential use. Water for the area is supplied by the municipal supply. Water quality is reported as good. No reports of petroleum contamination of the area water supply have been recorded.

Research completed by MECRS indicates that the former UST system is not located within 2,500 feet of any community water supply wells. Communication between MECRS, the Illinois State Water Survey (ISWS), the Illinois Environmental Protection Agency-Division of Public Water Supply (IEPA), the Village of Minier, and the Illinois State Geological Survey (ISGS) confirms that the former UST system located at the subject site does not pose a threat to community or potable water supply wells (see attached documents in Appendix E).

Research by the ISWS of the Public-Industrial-Commercial (PICS) Database indicates that there are no industrial/commercial water supply wells located within 2,500 feet of the site. Information from the IEPA-Division of Public Water Supply (DPWS) confirms that the site is located outside 2,500 feet radius of any community water supply well. Information from the IEPA-DPWS also confirms that there have not been any regulated recharge areas established pursuant to Section 17.3 of the Illinois Environmental Protection Act. The IEPA-DPWS also confirms that no Class III Groundwater has been designated in the vicinity of the site.

Mr. Robert Cremeens of the Village of Minier was contacted. Mr. Creemens indicated the water supply for the city comes from two wells located greater than 2,500 feet from the subject site. The setback zones for these wells are 200 feet. Minier has a local ordinance against the use of private wells within the village limits. All water for city residents must be purchased from the municipal supply.

A detailed well survey including well chart and map can be found in Appendix E.

- 8. Appendices;**
- a. References and data sources report that are organized, and;**
  - b. Field logs, well logs and reports of laboratory analyses:**

Please see Appendices A through G.

- 9. Site map(s) meeting the requirements of 35 Ill. Admin. Code 732.110(a) or 734.440;**

Please see Figures 1 through 6.

- 10. Engineering design specifications, diagrams, schematics, calculations, manufacturer's specification, etc.;**

Does not apply.

- 11. A description of bench/pilot studies;**

Does not apply.

**12. Cost comparison between proposed method of remediation and other methods of remediation;**

Does not apply.

**13. For the proposed Tier 2 or 3 remediation objectives, provide the following:**

- a. The equations used;
- b. A discussion of how input parameters were determined
- c. Map(s) depicting distances used in equations; and
- d. Calculations

Groundwater models will be calculated for soil sample locations where concentrations of COCs exceed the Tier 1 CUOs for the soil component of the groundwater ingestion route using equations R14 and R26 and for groundwater samples where concentrations of COCs exceed the Tier 1 CUOs for the groundwater component of the groundwater ingestion route using equation R26.

The following data is needed to complete calculation of the groundwater model:

The groundwater monitoring wells where benzene is present have not been sampled since February 2, 2002. MECRS proposes to resample monitoring wells MW-4 and MW-7 to gather current groundwater chemical data. The samples will be analyzed for BTEX. Depth to groundwater levels will be measured in all wells at the same time monitoring wells MW-4 and MW-7 are sampled for determination of groundwater flow direction and gradient.

In-site hydraulic conductivity testing will be conducted by means of a slug test to more accurately determine hydraulic conductivity.

The following subsurface soil data is needed to complete calculation of the groundwater model:

Parameter	Value	Source
pH	No Value	To be determined
organic carbon content of soil ( $f_{oc}$ )	2.55%	Lab 8/23/01
Hydraulic Conductivity (K)	No Value	To be determined
Gradient (i)	No Value	To be determined
Soil bulk density ( $\rho_s$ )	1.77 g/cm <sup>3</sup>	Lab 9/4/01
soil particle density	No Value	To be determined
Moisture content	17.1%	Lab 9/4/01

A soil sample will be collected from a hand auger boring from three feet below ground surface (bgs) and will be analyzed for pH, soil particle density and moisture content. A slug test for determining hydraulic conductivity will be conducted in monitoring well MW-1 where the sandy water bearing zone is the thickest. Groundwater levels will be measured to determine the gradient. The proposed hand auger boring location is shown in Figure 7. Copies of the laboratory reports for the TACO parameters previously collected are provided in Appendix F. The costs associated with the data collection is presented in the budget amendment in Appendix G.

All input parameters, equations used and calculations will be presented to the IEPA in the next report.

- 14. Provide documentation to demonstrate the following for alternative technologies:**
- a. The proposed alternative technology has a substantial likelihood of successfully achieving compliance with all applicable regulations and remediation objectives;**
  - b. The proposed alternative technology will not adversely affect human health and safety or the environment;**
  - c. The owner or operator will obtain all Illinois EPA permits necessary to legally authorize use of the alternative technology;**
  - d. The owner or operator will implement a program to monitor whether the requirements of subsection (14)(a) have been met;**
  - e. Within one year from the date of Illinois EPA approval, the owner or operator will provide to the Illinois EPA monitoring program results establishing whether the proposed alternative technology will successfully achieve compliance with the requirements of subsection (14)(a); and**
  - f. Demonstration that the cost of alternative technology will not exceed the cost of conventional technology and is not substantially higher than at least two other alternative technologies, if available and technically feasible;**

Does Not Apply.

**15. Property Owner Summary form.**

The Owner Summary form will be included in the forms section of the Corrective Action Completion Report.

**SECTION F**  
**EXPOSURE PATHWAY EXCLUSION**

**F. Exposure Pathway Exclusion**

**Provide the following:**

**1. A description of the test to be performed in determining whether the following requirements will be met:**

- a. **Attenuation capacity of the soil will not be exceeded for any of the organic contaminants;**

The attenuation capacity of the soil is 2550 ppm based on the natural organic carbon content (foc) determined by lab and reported to the IEPA in the Corrective Action Plan dated January 29, 2002. The maximum sum of the organic contaminant concentrations in one sample is 299 ppm found in soil sample B-2, 8 to 10 ft bgs.

- b. **Soil saturation limit will not be exceeded for any of the organic contaminants**

<b>COC</b>	<b>Max Concentration</b>	<b>C<sub>sat</sub></b>
Benzene	11.6 ppm	870 ppm
Toluene	42.7 ppm	650 ppm
Ethylbenzene	47 ppm	400 ppm
Xylenes	190 ppm	320 ppm

Soil saturation limits have not been exceeded.

- c. **Contaminated soils do not exhibit any of the reactivity characteristics of hazardous waste per 35 Ill. Admn. Code 721.123;**
- d. **Contaminated soils do not exhibit a pH  $\leq 2.0$  or  $\geq 12.5$ ; and**
- e. **Contaminated soils which contain arsenic, barium, cadmium, chromium, lead, mercury, or selenium (or their associated salts) do no exhibit any of the toxicity characteristics of hazardous water per 35 Ill. Adm. Code 721.124.**

The soil does not exhibit any of the characteristics of reactivity for hazardous waste. The contaminants of concern are petroleum hydrocarbon related. Metals are not contaminants of concern for this site. Concentrations of petroleum hydrocarbons in soil at the site are considered non-hazardous. Soil from the site was accepted at Tazewell RDF as declassified special waste under profile number SM3229.

**2. A discussion of how nay exposure pathways are to be excluded.**

All residential exposure scenarios can be eliminated by limiting the site to industrial/commercial use in the "No Further Remediation" (NFR) letter.

The industrial/commercial soil inhalation and ingestion exposure pathways can be eliminated by designating the pavement and the building as engineered barriers. The location of the engineered barrier is shown in Figure 5.

The groundwater ingestion pathway will be eliminated if the Village of Minier adopts the proposed groundwater use restriction ordinance.

The construction work soil inhalation and ingestion exposure pathways can be eliminated by including a construction worker precautionary statement in the NFR letter.

**SECTION G**

**BUDGET SUMMARY**

## **G. Budget Summary**

The attached budget includes anticipated costs associated with the work proposed in this CAP and for personnel time associated with the following complete tasks:

1. Costs associated with obtaining an air permit.
2. Costs associated with obtaining a sewer discharge permit.
3. Costs associate with researching alternatives for enhancing the treatment system due to the slow of groundwater recovery.

**TABLE 1**  
**SOIL ANALYTICAL DATA**

**TABLE 1.**  
**Soil Analytical Results**  
**Warsaw-ITCO**  
**Minier, IL**

Sample ID:	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
B-2, 4-6'	5/3/2000	810	1,300	1,700	6,500	10,310
B-2, 6-8'	5/3/2000	600	220	420	1,900	3,140
B-2, 8-10'	5/3/2000	21,000	41,000	47,000	190,000	299,000
B-3, 6-8'	5/3/2000	400	120	210	460	1,190
B-3, 8-10'	5/3/2000	2,300	2,100	31,000	110,000	145,400
MW-1, 6-8'	5/4/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-2, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-3, 8-10'	5/3/2000	<2.0	<2.0	6	<5.0	<14.7
MW-4, 4-6'	5/4/2000	230	220	870	2,500	3,820
MW-4, 6-8'	5/4/2000	300	1,200	5,400	20,000	26,900
B-4, 0.5-2.5'	8/23/2001	8.1 M	19.0 M	44.7 M	77.2 M	149 M
B-4, 4-6'	8/23/2001	11,600 ME	42,700 ME	9,720 ME	38,000 ME	102,020 ME
B-5, 6-8'	8/23/2001	49	186 E	38	130	403
B-6, 4-6'	8/23/2001	19.5	53.4	31.3	89.8	194.0
B-6, 8-10'	8/23/2001	7.1	12.3	<2.4	10.9	<32.3
B-7, 8-10'	8/23/2001	16.7 M	61.5 M	13.9 M	39.5 M	131.6 M
B-7, 12-14'	8/23/2001	754.0	<61.3	<61.3	<153	<1,029.6
MW-5, 8-10'	8/23/2001	494 M	4,750 M	5,890 M	7,570 M	18,704 M
MW-6, 6-8'	8/23/2001	6.5	12.4	6.3	11.3	36.5
MW-7, 4-6'	8/23/2001	11.7	25.1	10.8	20.0	67.6
MW-7, 8-10	8/23/2001	15.5 M	20.2 M	6.8	11.8	54.3
T-1	10/20/2003	<2.6	3.2	<2.6	<6.5	<14.9
T-2	10/20/2003	<2.6	<2.6	<2.6	<6.5	<14.3
T-3	10/20/2003	<2.4	5.1	5.1	14.2	<26.8
T-4	10/20/2003	<2.4	<2.4	<2.4	<5.9	<13.1
T-5	10/20/2003	3.4	40.8	360.0	947.0	1,351.2
T-6	10/20/2003	85.3	635.0	1,840.0	7,140.0	9,700.3
T-7	10/20/2003	85.5	43.8	1,120.0	2,460.0	3,709.3
T-8	10/20/2003	<2.5	6.6	18.9	56.8	<84.8
T-9	10/20/2003	<2.4	<2.4	<2.4	<6.1	<13.3
T-10	10/20/2003	<2.5	<2.5	<2.5	<6.2	<13.7

Notes:

1. All results in parts per billion (ppb).
2. IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
30	12,000	13,000	5,600

3. All bolded values are above Tier 1 Residential Cleanup Objectives
4. M = Matrix interferences identified
5. E = Estimated

**TABLE 2**  
**GROUNDWATER ANALYTICAL DATA**

**Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois**

Sample #	Date	DTW	GWE	Benzene	Toluene	E-benzene	Xylenes	Total BTEX	
<b>MW-1</b>		Elevation Top of Casing = 99.62							
SC	5/12/2000	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3	
1	10/24/2000	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4	
2	8/23/2001	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E	
3	11/13/2001	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.41	94.21	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.65	94.97	NS	NS	NS	NS	NS	
<b>MW-2</b>		Elevation Top of Casing = 99.28							
SC	5/9/2000	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/2000	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/2001	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7	
3	11/13/2001	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.12	94.16	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.38	94.90	NS	NS	NS	NS	NS	
<b>MW-3</b>		Elevation Top of Casing = 100							
SC	5/9/2000	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/2000	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/2001	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
3	11/13/2001	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.37	94.63	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.34	95.66	NS	NS	NS	NS	NS	
<b>MW-4</b>		Elevation Top of Casing = 99.84							
SC	5/9/2000	5.90	93.94	2,600	12,000	4,500	18,000	37,100	
1	10/24/2000	7.80	92.04	2,300	5,200	4,000	13,000	24,500	
2	8/23/2001	6.67	93.17	2,290 M	2,380 M	8,150	23,600 E	36,420 E	
3	11/13/2001	6.11	93.73	1,910	3,960	3,360	10,000	19,230	
4	2/14/2002	5.00	94.84	1,100	1,200	2,900	5,500	10,700	
5	1/24/2005	4.47	95.37	NS	NS	NS	NS	NS	
<b>MW-5</b>		Elevation Top of Casing = 99.57							
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9	
3	11/13/2001	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	4.71	94.86	1.4	2.2	1.5	4.5	9.6	
5	1/24/2005	3.89	95.68	NS	NS	NS	NS	NS	
<b>MW-6</b>		Elevation Top of Casing = 99.37							
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5	
3	11/13/2001	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	4.71	94.66	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	WELL ICED OVER		NS	NS	NS	NS	NS	
<b>MW-7</b>		Elevation Top of Casing = 100.07			WELL DESTROYED AT TIME OF 1/25/05 DTW MEASUREMENT				
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	7.28	92.79	<2.0	<2.0	<2.0	5.9	<11.9	
3	11/13/2001	6.23	93.84	117 E	<2.0	<2.0	<5.0	<126 E	
4	2/14/2002	5.52	94.55	7	<1.0	<1.0	<3.0	<12.0	
5	1/24/2005	--	--	NS	NS	NS	NS	NS	

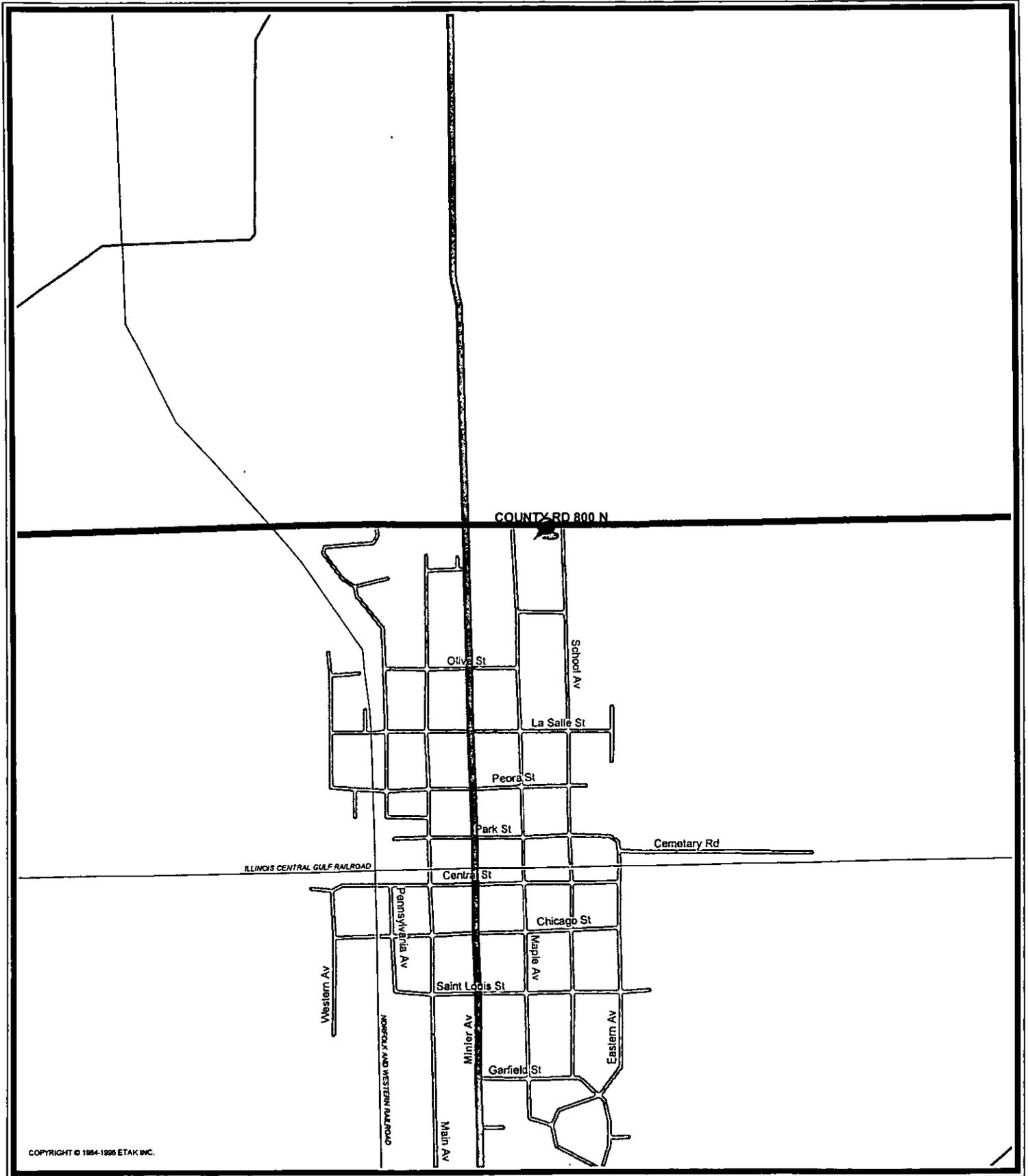
1. All results reported in ug/kg (i.e. parts per billion, ppb)
2. IEPA Tier I Cleanup Objectives (ug/kg):

Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

3. -- = No data available
4. MDL = Method Detection Limit
5. DTW = Depth to Water
6. GWE = Groundwater Elevation referenced to datum point
7. NA/NS = Not analyzed/not sampled this event
8. E = Estimated - value outside linear range
9. M = Matrix interferences identified.

**FIGURE 1**  
**AREA MAP**

Figure 1. Area Map, Warsaw ITCO, Minier, Illinois



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**FIGURE 2**

**MONITORING WELL AND SOIL BORING LOCATION MAP**

Agricultural

Route 122

Sump (cleanout)

Sump (cleanout)

Sump (pump)

Agricultural

Maple Street

School Ave



- MW-3  
+ = Existing Monitoring Well Location
- B-2  
• = Existing Boring Location

**FIGURE 2**  
Sample Locations

Warsaw ITCO  
Minier, IL

Date: 10/19/10

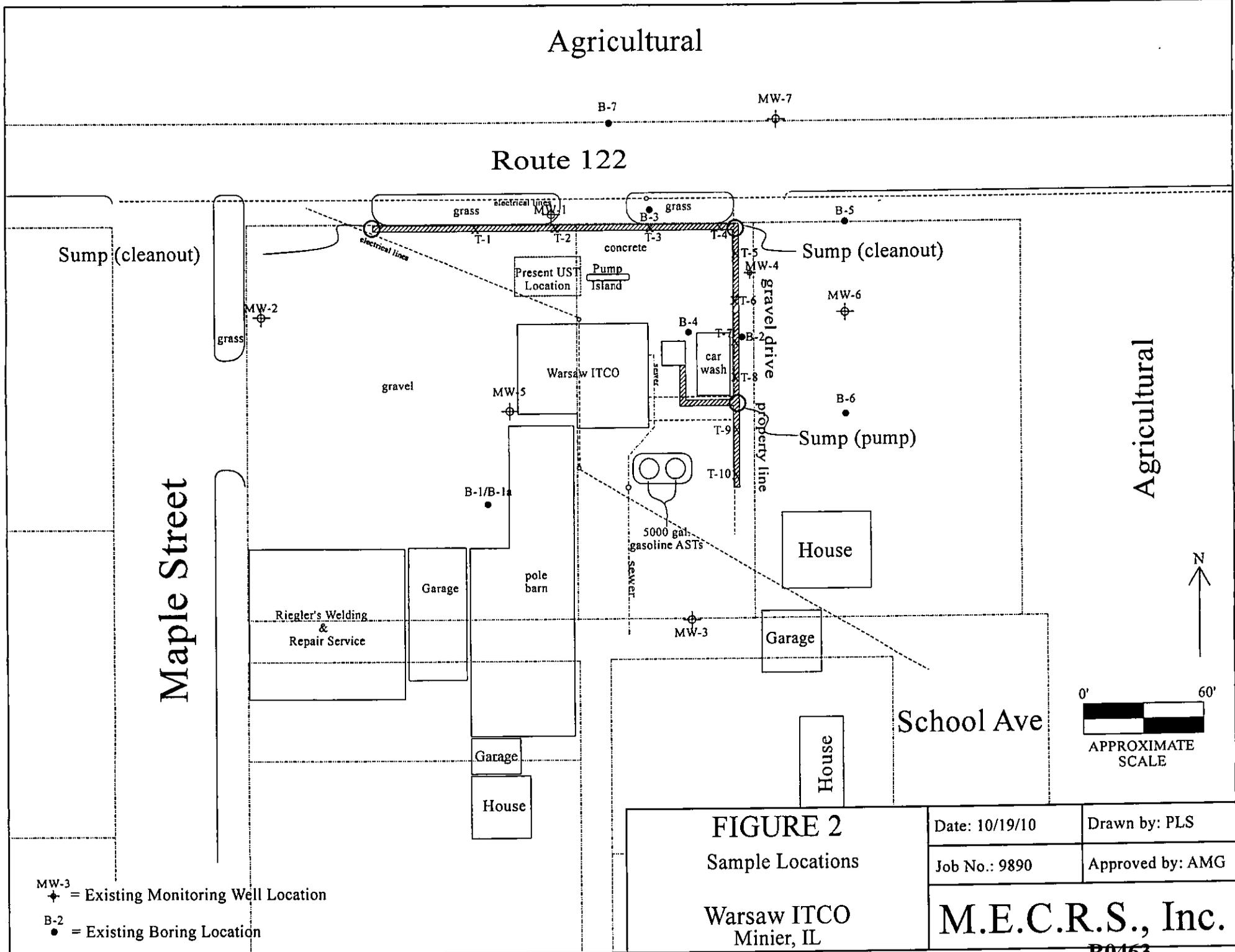
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Job No.: 9890

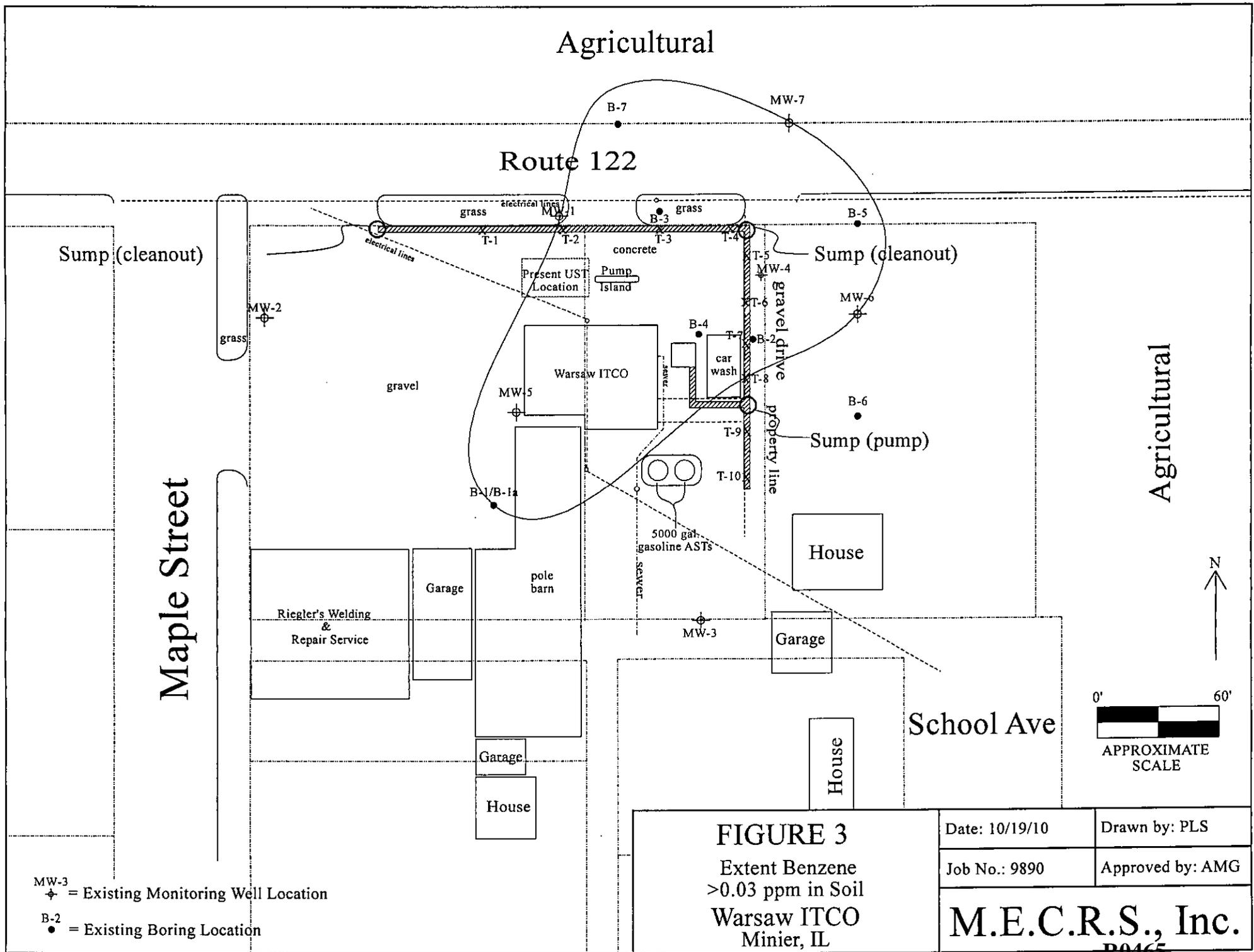
Approved by: AMG

**M.E.C.R.S., Inc.**

R0463



**FIGURE 3**  
**EXTENT SOIL CONTAMINATION**



Agricultural

Route 122

Sump (cleanout)

Sump (cleanout)

Present US Location

Pump Island

Warsaw ITCO

car wash

5000 gal gasoline ASTs

Sump (pump)

House

Riegler's Welding & Repair Service

Garage

pole barn

Garage

School Ave

Garage

House

House

**FIGURE 3**

Extent Benzene  
>0.03 ppm in Soil  
Warsaw ITCO  
Minier, IL

Date: 10/19/10

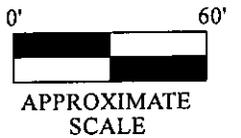
Drawn by: PLS

Job No.: 9890

Approved by: AMG

**M.E.C.R.S., Inc.**  
R0465

Agricultural



- MW-3  
⊕ = Existing Monitoring Well Location
- B-2  
● = Existing Boring Location

**FIGURE 4**  
**EXTENT GROUNDWATER CONTAMINATION**

Agricultural

Route 122

Extent Benzene in GW > 0.005 ppm

Sump (cleanout)

Sump (cleanout)

Sump (pump)

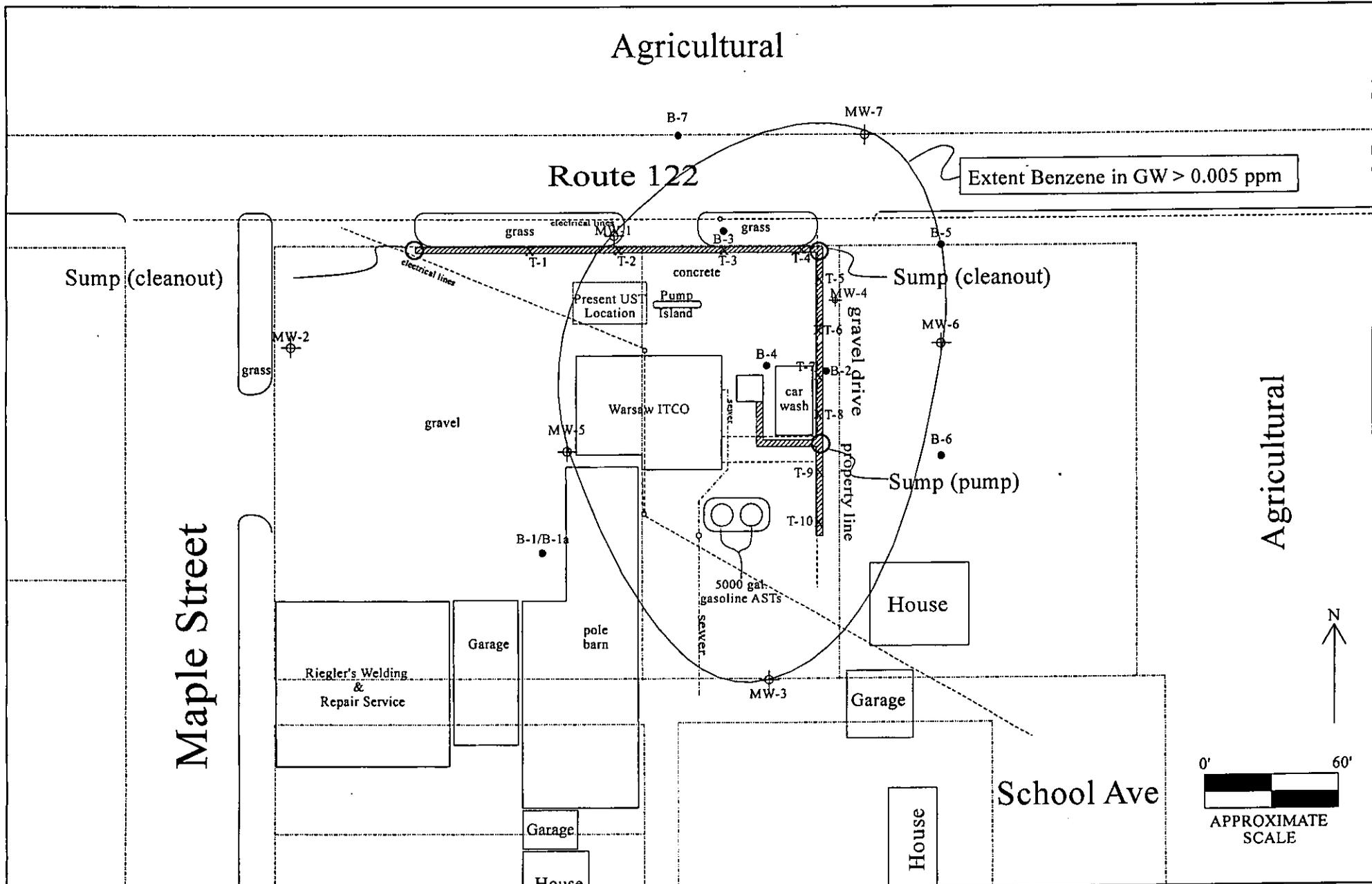
Maple Street

Agricultural



MW-3  
+ = Existing Monitoring Well Location  
B-2  
• = Existing Boring Location

<p><b>FIGURE 4</b> Extent Benzene Contamination In Groundwater Warsaw ITCO Minier, IL</p>	Date: 10/19/10	Drawn by: PLS
	Job No.: 9890	Approved by: AMG
<p><b>M.E.C.R.S., Inc.</b> R0467</p>		



**FIGURE 5**  
**ENGINEERED BARRIER**

Agricultural

Route 122

Extent Benzene in GW > 0.005 ppm

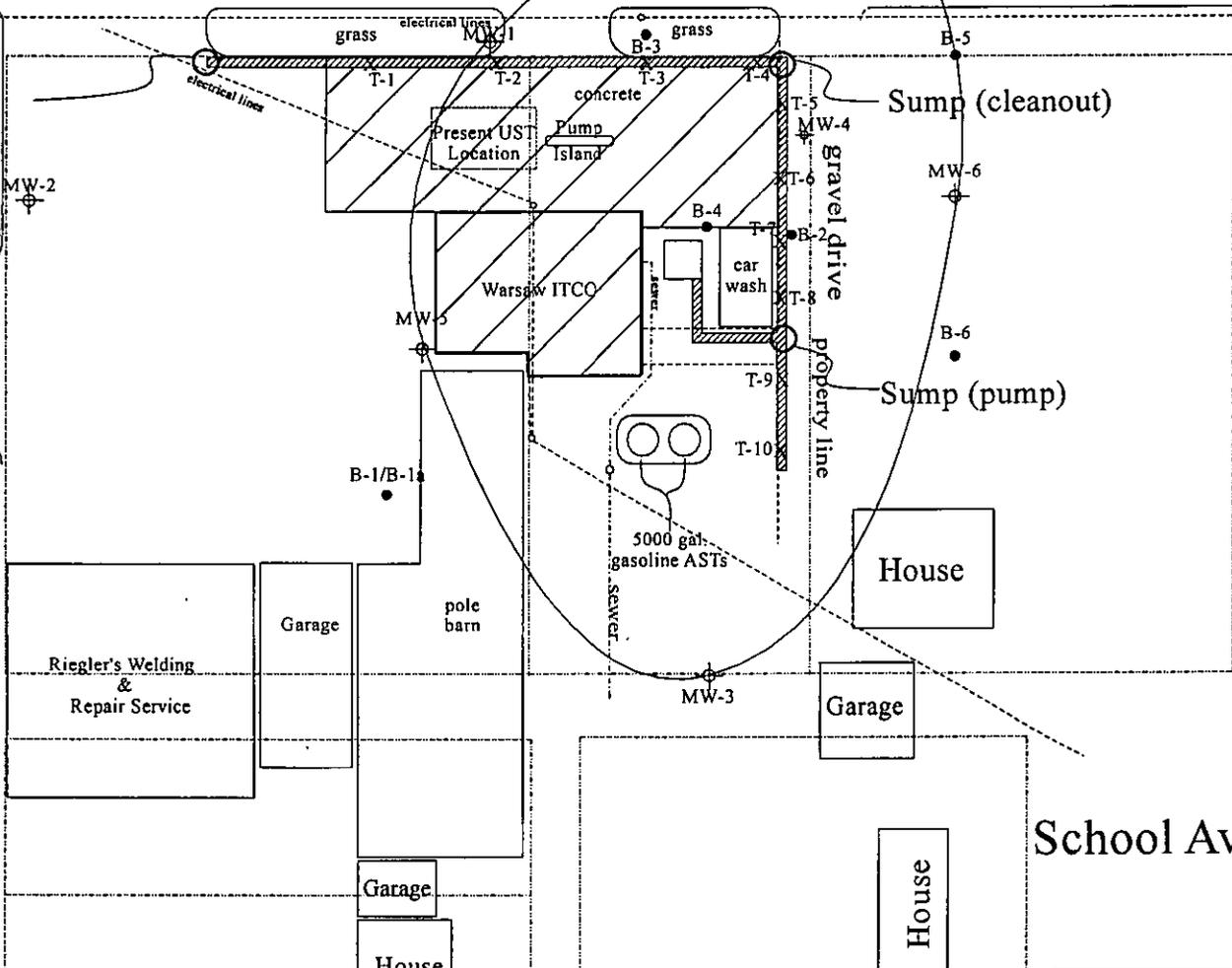
Sump (cleanout)

Sump (cleanout)

Sump (pump)

Maple Street

Agricultural



MW-3  
+ = Existing Monitoring Well Location  
B-2  
• = Existing Boring Location

FIGURE 5

Engineered Barrier  
Warsaw ITCO  
Minier, IL

Date: 10/19/10

Drawn by: PLS

Job No.: 9890

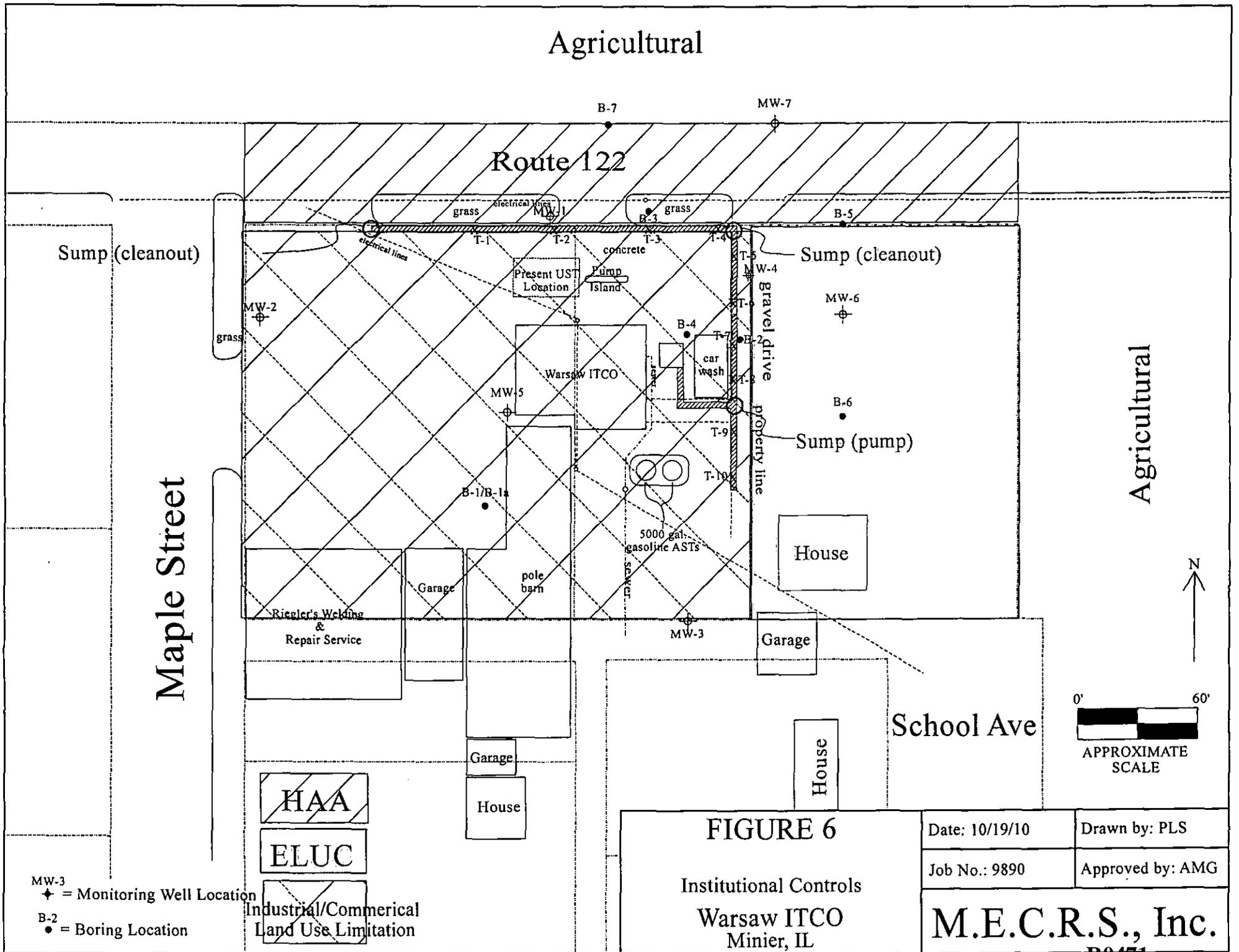
Approved by: AMG

M.E.C.R.S., Inc.  
R0469

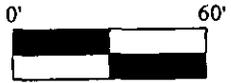
**FIGURE 6**

**INSTITUTIONAL CONTROLS**

# Agricultural



Agricultural



APPROXIMATE SCALE

- MW-3  
◆ = Monitoring Well Location
- B-2  
● = Boring Location

Industrial/Commerical  
Land Use Limitation

## FIGURE 6

Institutional Controls  
Warsaw ITCO  
Minier, IL

Date: 10/19/10	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**  
R0471

**FIGURE 7**

**PROPOSED SOIL BORINGS**

Agricultural

Route 122

Sump (cleanout)

Sump (cleanout)

Sump (pump)

Agricultural

Maple Street

School Ave



-  = Proposed Hand Auger Boring
-  = Existing Monitoring Well Location
-  = Existing Boring Location

### FIGURE 7

Proposed Boring Location  
For TACO Parameters

Warsaw ITCO  
Minier, IL

Date: 10/19/10

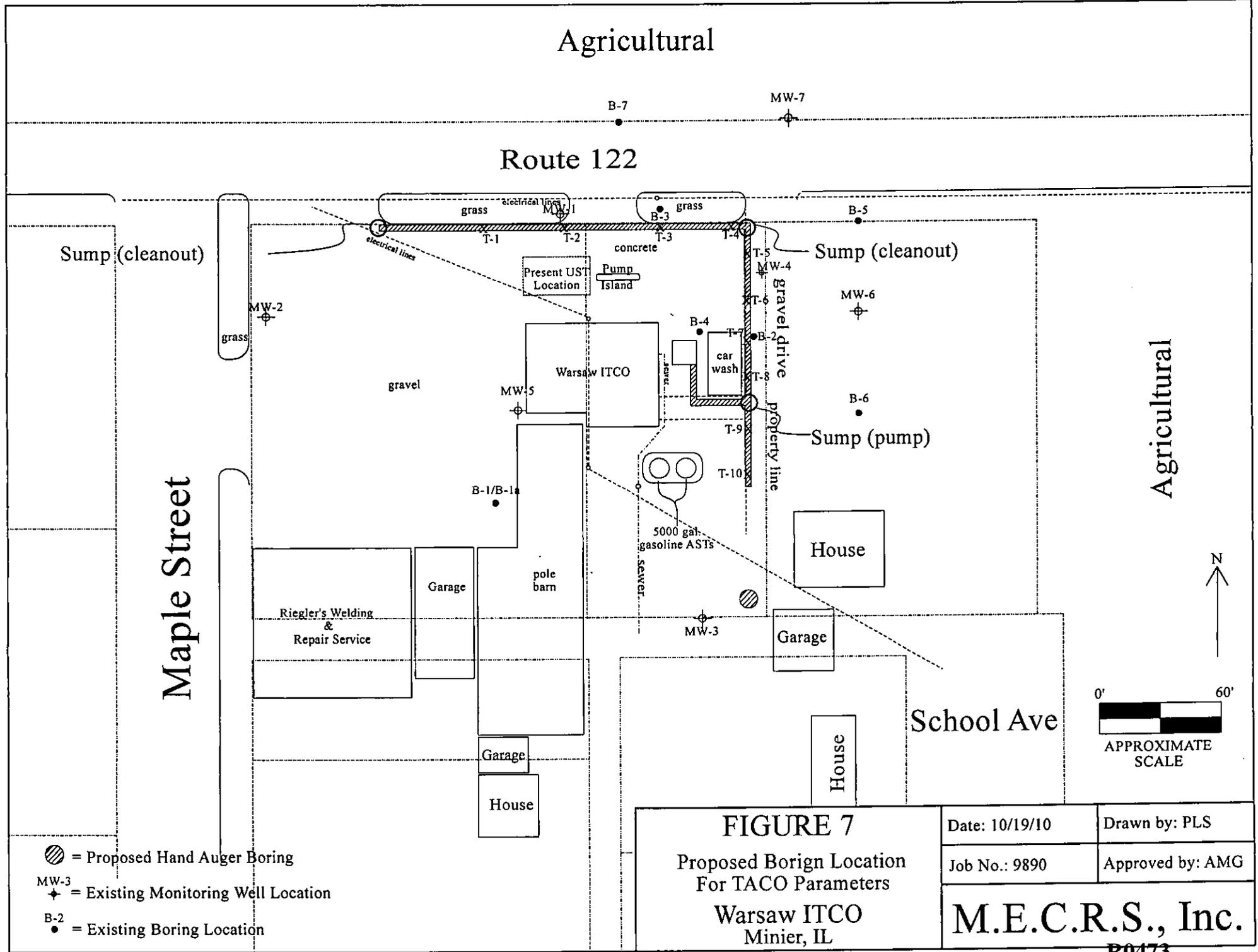
Drawn by: PLS

Job No.: 9890

Approved by: AMG

## M.E.C.R.S., Inc.

R0473



**APPENDIX A**

**VILLAGE OF MINIER ORDINANCE #**

# Midwest Environmental Consulting & Remediation Services Inc.

22200 Illinois Route 9 • P.O. Box 614

Tremont, IL 61568-0614

Phone: (309) 925-5551 • Fax: (309) 925-5606

November 5, 2010

Sandy Lancaster  
Village of Minier  
PO Box 350  
Minier, IL 61759

RE: Request for Village Ordinance  
Warsaw ITCO  
IL Rt. 122  
Minier, Illinois

Dear Ms. Lancaster:

On behalf of our client, John Warsaw, owner of Warsaw ITCO in Minier, we are requesting that the Village of Minier consider adopting an ordinance which expressly prohibits the use of groundwater as a potable water supply by installation of a well or any other means for purposes of closing Illinois Emergency Management Agency (IEMA) incident #981987 located in Minier (Warsaw ITCO). The requested actions are necessary to satisfy Illinois Administration Code 742, Subpart J, which allows for the use of institutional controls when other methods of remediation are impractical or prohibitively expensive.

There are two options for a groundwater use restriction ordinance that are acceptable by the Illinois Environmental Protection Agency (IEPA): 1) a Groundwater Use Restriction Ordinance that prohibits installation of well for potable use by all including the Village; and 2) a Memorandum of Understanding and Groundwater Use Restriction Ordinance that does not include the Village. Copies of the model documents from the IEPA are attached.

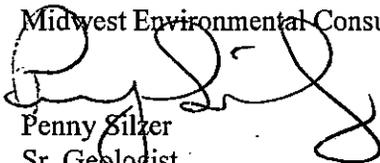
MECRS has obtained similar Groundwater Use Restriction Ordinances from municipalities for former gas station sites with similar petroleum contamination situations. Copies of example ordinances from other municipalities are attached.

If you have any questions, please don't hesitate to call me at the number listed above.

Thank you.

Sincerely,

Midwest Environmental Consulting & Remediation Service, Inc.



Penny Silzer  
Sr. Geologist  
Attachments

R0475

**APPENDIX B**

**IDOT HIGHWAY AUTHORITY AGREEMENT**

# Midwest Environmental Consulting & Remediation Services Inc.

22200 Illinois Route 9 • P.O. Box 614

Tremont, IL 61568-0614

Phone: (309) 925-5551 • Fax: (309) 925-5606

November 2, 2010

Special Assistant Chief Counsel  
Illinois Department of Transportation, Room 311  
2300 South Dirksen Parkway  
Springfield, IL 62764

RE: Highway Authority Agreement  
LPC #1790455007- Tazewell County  
Minier / Warsaw, Howard  
Il Rt 122  
Incident #981987

Dear Sirs:

Enclosed please find the Illinois Department of Transportation (IDOT) highway authority agreement initial information form for leaking underground storage tank sites for the subject site. Petroleum hydrocarbon contaminated soil may be present on IDOT right of way adjacent to the subject site. Please consider the area for a Highway Authority Agreement.

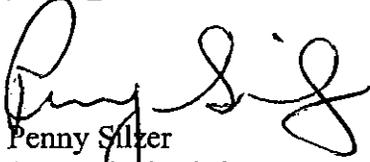
The site is adjacent to Illinois State Route 122 in Minier, Illinois.

If you have any questions, comments or concerns, please don't hesitate to call me at the above number.

Thank you.

Sincerely,

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC.

  
Penny Silter  
Sr. Geologist, PG

R0477

IDOT- UST OWNER/OPERATOR  
HIGHWAY AUTHORITY AGREEMENT  
INITIAL INFORMATION FORM  
FOR LEAKING UNDERGROUND  
STORAGE TANK SITES

OVERVIEW

The purpose of this document is to notify the Illinois Department of Transportation of the extent of hydrocarbon impact within soil and/or groundwater and to provide the necessary initial information needed to enter into a highway authority agreement, pursuant to 35 IAC 742.1020.

Applicant Information

UST Owner: John Warsaw Operator (if different):  
Address: PO Box 886  
Minier, IL 61759 Address:

Telephone No: (309) 648-3397

Fax No: \_\_\_\_\_

Name and Title of Person Authorized to Sign for Owner: John Warsaw, Owner

Name and Title of Person Authorized to Sign for Operator (if different):

Applicant's Attorney

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone No: 309-388-2111

Environmental Consultant

Name: Midwest Environmental Consulting

Address: PO Box 614, Tremont, IL 61568

Telephone No: (309) 925-5551

Property Adjacent to Right-of-Way

Address: Warsaw ITCO, IL Rt 122, Minier, Illinois

Right-of-Way(s) requiring Highway Agreement

Highway Number(s): Ill. Rt. 122 (Check one or both)  
Street Name (if any): \_\_\_\_\_  Soil Impact  Groundwater Impact  
in Right-of-Way in Right-of-Way

Regulatory Information

IEMA Incident Number: 981987

IEPA Project Manager: Jim Ransdell (Check one)

IEPA Status:  Conditional Approval  Approval Pending  
 Other \_\_\_\_\_

Sampling in the Right-of-Way

(Check one)

Right-of-Way sampled

Right-of-Way impractical to sample  
(Sampling as done adjacent to  
Right-of-Way)

Person(s) to be Notified in Agreement

Name:

Address:

Nature and Extent of Hydrocarbon Impact Information – For Exhibit A

The Closure Report/Closure Response Letter documents the nature and extent of hydrocarbon impact in the right-of-way.

Soil: Refer to Figure 1 – Estimated Soil Impact in the Right-of-Way Map  
Using Tier One Residential Corrective Action Objectives  
Groundwater: Refer to Figure 2 - Estimated Groundwater Impact in the ROW Map  
Using Tier One Residential Corrective Action Objectives

Tables showing soil sampling results in the right-of-way (if sampled) and/or adjacent to it need to be submitted and keyed to Figure 1. Samples above Tier 1 One Residential Corrective Action Objectives need to be highlighted.

Area Covered by Highway Authority Agreement – For Exhibit B

(Check One)

Refer to Figure 3 – Proposed Highway Authority Agreement Location Map

Attachments:

- Figure 1 Estimated Soil Impact Map
- Figure 2 Estimated Groundwater Impact
- Table 1 Soil Analytical Data
- Table 2 Groundwater Analytical Data
- Figure 3 Proposed Highway Agreement Location Map

## **Attachments**

## **Exhibit A**

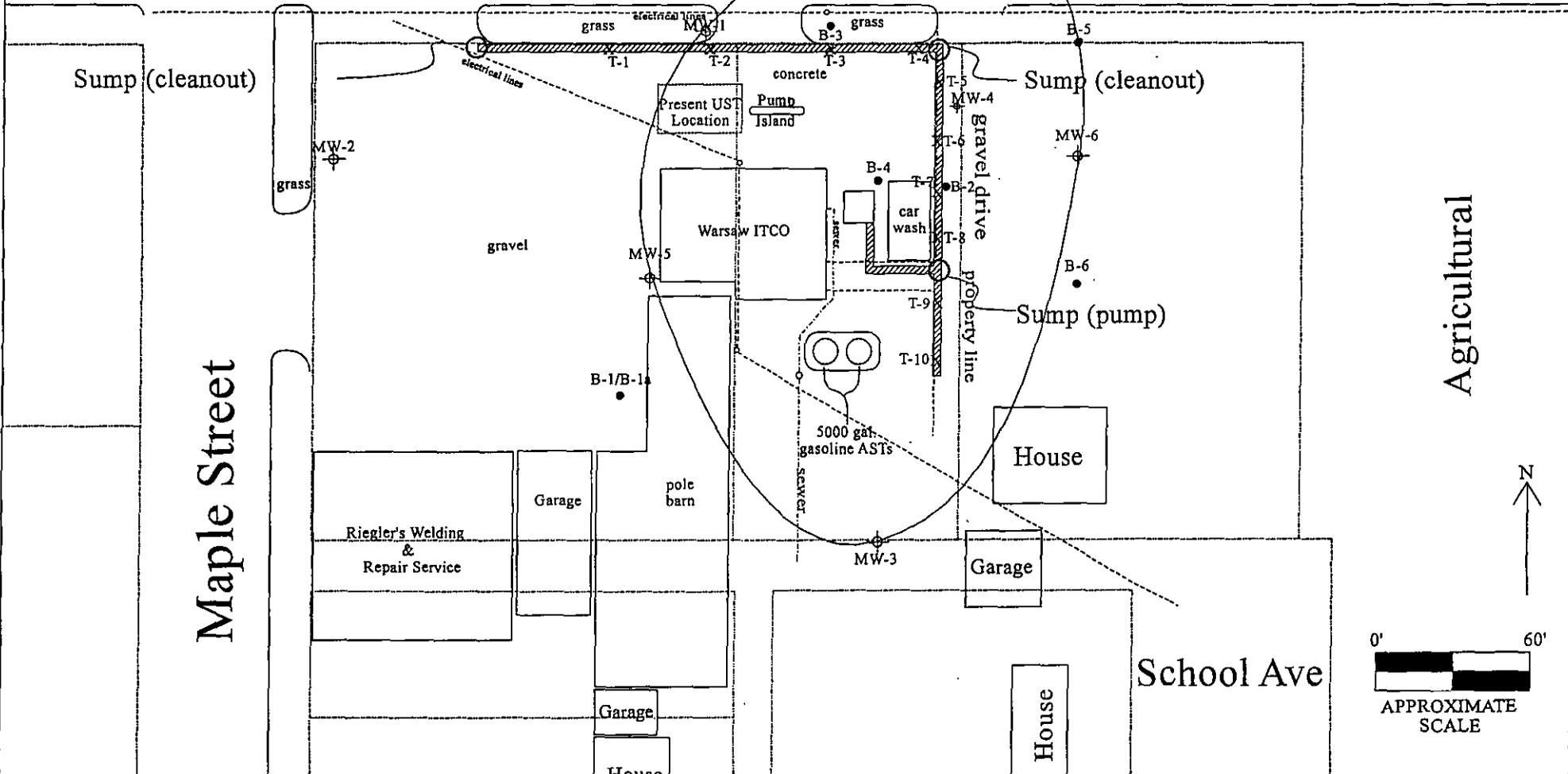
- Figure 1 Estimated Soil Impact Map
- Figure 2 Estimated Groundwater Impact
- Table 1 Soil Analytical Data
- Table 2 Groundwater Analytical Data



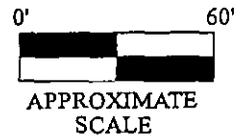
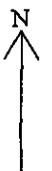
Agricultural

Route 122

Extent Benzene in GW > 0.005 ppm



Agricultural



MW-3  
 + = Existing Monitoring Well Location  
 B-2  
 • = Existing Boring Location

<b>FIGURE 2</b> Extent Benzene Contamination In Groundwater Warsaw ITCO Minier, IL	Date: 10/19/10	Drawn by: PLS
	Job No.: 9890	Approved by: AMG
<b>M.E.C.R.S. Inc.</b> <small>R0483</small>		

**TABLE 1.**  
**Soil Analytical Results**  
**Warsaw-ITCO**  
**Minier, IL**

Sample ID:	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/2000	<0.002	<0.002	<0.002	<0.005	<0.011
B-2, 4-6'	5/3/2000	<b>0.810</b>	1.300	1.700	<b>6.500</b>	10.310
B-2, 6-8'	5/3/2000	<b>0.600</b>	0.220	0.420	1.900	3.140
B-2, 8-10'	5/3/2000	<b>21.0</b>	<b>41.0</b>	<b>47.0</b>	<b>190.0</b>	<b>299.0</b>
B-3, 6-8'	5/3/2000	<b>0.400</b>	0.120	0.210	0.460	1.190
B-3, 8-10'	5/3/2000	<b>2.300</b>	2.100	<b>21</b>	<b>110</b>	135.400
MW-1, 6-8'	5/4/2000	<0.002	<0.002	<0.002	<0.005	<0.011
MW-2, 8-10'	5/3/2000	<0.002	<0.002	<0.002	<0.005	<0.011
MW-3, 8-10'	5/3/2000	<0.002	<0.002	0.006	<0.005	<0.0147
MW-4, 4-6'	5/4/2000	<b>0.230</b>	0.220	0.870	2.500	3.820
MW-4, 6-8'	5/4/2000	<b>0.300</b>	1.200	5.400	<b>20.000</b>	26.900
B-4, 0.5-2.5'	8/23/2001	0.0081 M	0.019 M	0.0447 M	0.0772 M	0.149 M
B-4, 4-6'	8/23/2001	<b>11.6 ME</b>	<b>42.7 ME</b>	<b>9.72 ME</b>	<b>38.0 ME</b>	<b>102.02 ME</b>
B-5, 6-8'	8/23/2001	<b>0.049</b>	0.186 E	0.038	0.130	0.403
B-6, 4-6'	8/23/2001	0.020	0.053	0.031	0.090	0.194
B-6, 8-10'	8/23/2001	0.007	0.012	<0.0024	0.011	<0.0323
B-7, 8-10'	8/23/2001	0.0167 M	0.0615 M	0.0139 M	0.0395 M	0.1316 M
B-7, 12-14'	8/23/2001	<b>0.754</b>	<0.0613	<0.0613	<0.153	<1.0296
MW-5, 8-10'	8/23/2001	<b>0.494 M</b>	4.75 M	5.89 M	<b>7.57 M</b>	18.704 M
MW-6, 6-8'	8/23/2001	0.007	0.012	0.006	0.011	0.037
MW-7, 4-6'	8/23/2001	0.012	0.025	0.011	0.020	0.068
MW-7, 8-10	8/23/2001	0.0155 M	0.0202 M	0.007	0.012	0.054
T-1	10/20/2003	<0.0026	0.0032	<0.0026	<0.0065	<0.0149
T-2	10/20/2003	<0.0026	<0.0026	<0.0026	<0.0065	<0.0143
T-3	10/20/2003	<0.0024	0.0051	0.0051	0.0142	<0.0268
T-4	10/20/2003	<0.0024	<0.0024	<0.0024	<0.0059	<0.0131
T-5	10/20/2003	0.0034	0.0408	0.3600	0.9470	1.3512
T-6	10/20/2003	<b>0.0853</b>	0.6350	1.8400	<b>7.1400</b>	9.7003
T-7	10/20/2003	<b>0.0855</b>	0.0438	1.1200	2.4600	3.7093
T-8	10/20/2003	<0.0025	0.0066	0.0189	0.0568	<0.0848
T-9	10/20/2003	<0.0024	<0.0024	<0.0024	<0.0061	<0.0133
T-10	10/20/2003	<0.0025	<0.0025	<0.0025	<0.0062	<0.0137

Notes:

1. All results in mg/kg (parts per million, ppm).
2. IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
0.03	12	13	150

3. All bolded values are above Tier 1 Residential Cleanup Objectives
4. M = Matrix interferences identified.
5. E = Estimated - Value outside linear calibration curve.

**Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois**

Sample #	Date	DTW	GWE	Benzene	Toluene	E-benzene	Xylenes	Total BTEX	
<b>MW-1</b>		Elevation Top of Casing = 99.62							
SC	5/12/2000	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3	
1	10/24/2000	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4	
2	8/23/2001	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E	
3	11/13/2001	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.41	94.21	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.65	94.97	NS	NS	NS	NS	NS	
<b>MW-2</b>		Elevation Top of Casing = 99.28							
SC	5/9/2000	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/2000	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/2001	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7	
3	11/13/2001	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.12	94.16	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.38	94.90	NS	NS	NS	NS	NS	
<b>MW-3</b>		Elevation Top of Casing = 100							
SC	5/9/2000	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/2000	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/2001	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
3	11/13/2001	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.37	94.63	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.34	95.66	NS	NS	NS	NS	NS	
<b>MW-4</b>		Elevation Top of Casing = 99.84							
SC	5/9/2000	5.90	93.94	2,600	12,000	4,500	18,000	37,100	
1	10/24/2000	7.80	92.04	2,300	5,200	4,000	13,000	24,500	
2	8/23/2001	6.67	93.17	2,290 M	2,380 M	8,150	23,600 E	36,420 E	
3	11/13/2001	6.11	93.73	1,910	3,960	3,360	10,000	19,230	
4	2/14/2002	5.00	94.84	1,100	1,200	2,900	5,500	10,700	
5	1/24/2005	4.47	95.37	NS	NS	NS	NS	NS	
<b>MW-5</b>		Elevation Top of Casing = 99.57							
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9	
3	11/13/2001	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	4.71	94.86	1.4	2.2	1.5	4.5	9.6	
5	1/24/2005	3.89	95.68	NS	NS	NS	NS	NS	
<b>MW-6</b>		Elevation Top of Casing = 99.37							
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5	
3	11/13/2001	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	4.71	94.66	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	WELL ICED OVER		NS	NS	NS	NS	NS	
<b>MW-7</b>		Elevation Top of Casing = 100.07			WELL DESTROYED AT TIME OF 1/25/05 DTW MEASUREMENT				
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	7.28	92.79	<2.0	<2.0	<2.0	5.9	<11.9	
3	11/13/2001	6.23	93.84	117 E	<2.0	<2.0	<5.0	<126 E	
4	2/14/2002	5.52	94.55	7	<1.0	<1.0	<3.0	<12.0	
5	1/24/2005	--	--	NS	NS	NS	NS	NS	

- All results reported in ug/kg (i.e. parts per billion, ppb)
- IEPA Tier 1 Cleanup Objectives (ug/kg):
- = No data available
- MDL = Method Detection Limit
- DTW = Depth to Water
- GWE = Groundwater Elevation referenced to datum point
- NA/NS = Not analyzed/not sampled this event
- E = Estimated - value outside linear range
- M = Matrix interferences identified.

Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

Date	Average DTW
5/9/2000	5.85
10/24/2000	7.78
8/23/2001	6.09
11/13/2001	6.01
2/14/2002	5.12
1/24/2005	4.35
Cumulative DTW Average:	
	5.87

**Exhibit B**

**Figure 3**

**Proposed Highway Agreement Location Map**



**APPENDIX C**

**PROPOSED ENVIRONMENTAL LAND USE CONTROL**

# Midwest Environmental Consulting & Remediation Services Inc.

22200 Illinois Route 9 • P.O. Box 614  
Tremont, IL 61568-0614  
Phone: (309) 925-5551 • Fax: (309) 925-5606

November 8, 2010

Jeff Heumann  
212 IL RTE 122  
Minier, IL 61759

RE: Environmental Land Use Control  
Warsaw ITCO  
IL RT 122  
Minier, IL 61759

Dear Mr. Heumann:

On behalf of our client, Warsaw ITCO of Minier, Illinois, we are requesting that you consider the enclosed Environmental Land Use Control (ELUC). The ELUC has been proposed to the IEPA as an institutional control to allow for alternative cleanup objectives based on 35 Ill. Admin. Code 742 Tiered Approach to Cleanup Objectives (TACO) for the subject site. The TACO regulations allow an underground storage tank owner to develop cleanup objectives based on actual risk to human health or the environment.

The subsurface investigation has been completed at the gas station site owned by Mr. John Warsaw located at IL RTE 122. It appears that contaminants of concern (COCs) have most likely migrated from the location of the underground storage tanks and dispenser islands to the northeast towards your property at 212 IL RTE 122 in Minier. The COCs appear to be migrating through the soil at depths between 6 and 8 feet below ground surface. Because of the depth to contamination and the presence of 6 feet of clean soil above the contaminated zone, the contaminants pose little to no threat to human health.

Please review the ELUC enclosed. If you have any questions, please call me at the number listed above. If agreeable to you, please sign the ELUC and return it to our office for further processing. If you choose not to sign the ELUC, please respond with your written denial.

Your time and attention to this matter is greatly appreciated. Please don't hesitate to call me if you have any questions.

Sincerely,

Midwest Environmental Consulting & Remediation Services, Inc.



Allan M. Green  
President

R0489

**PREPARED BY:**

Name: Midwest Environmental Consulting  
& Remediation Services, Inc. (MECRS)

Address: 22200 IL Rt. 9, P.O. Box 614  
Tremont, IL 61568

**RETURN TO:**

Name: MECRS

Address: 22200 IL Rt. 9, P.O. Box 614  
Tremont, IL 61568

THE ABOVE SPACE FOR RECORDERS OFFICE

**ENVIRONMENTAL LAND USE CONTROL**

THIS ENVIRONMENTAL LAND USE CONTROL ("ELUC"), is made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_, by Jeff Heumann, ("Property Owner") of the real property located at the common address 212 IL RTE 122, Minier, IL 61759 ("Property").

WHEREAS, 415 ILCS 5/58.17 and 35 Ill. Adm. Code 742 provide for the use of an ELUC as an institutional control in order to impose land use limitations or requirements related to environmental contamination so that persons conducting remediation can obtain a No Further Remediation determination from the Illinois Environmental Protection Agency ("IEPA"). The reason for an ELUC is to ensure protection of human health and the environment. The limitations and requirements contained herein are necessary in order to protect against exposure to contaminated soil or groundwater, or both, that may be present on the property as a result of underground petroleum storage activities. Under 35 Ill Adm. Code 742, the use of risk-based, site specific remediation objectives may require the use of an ELUC on real property, and the ELUC may apply to certain physical features (e.g., engineered barriers, monitoring wells, caps, etc.).

WHEREAS, John Warsaw intends to request risk-based, site specific soil and groundwater remediation objectives from IEPA under 35 Ill. Adm. Code 742 to obtain risk-based closure of the site, identified by Bureau of Land LPC #981987, utilizing an ELUC.

NOW, THEREFORE, the recitals set forth above are incorporated by reference as if fully set forth herein, and the Property Owner agrees as follows:

Section One. Property Owner does hereby establish an ELUC on the real estate, situated in the County of Tazewell, State of Illinois and further described in Exhibit A attached hereto and incorporated herein by reference (the "Property").

Attached as Exhibit B are site maps that show the legal boundary of the Property, any physical features to which the ELUC applies, the horizontal and vertical extent of the contaminants of concern above the applicable remediation objectives for soil or groundwater or both, and the nature, location of the source, and direction of movement of the contaminants of concern, as required under 35 Ill. Adm. Code 742.

Section Two. Property Owner represents and warrants he/she is the current owner of the Property and has the authority to record this ELUC on the chain of title for the Property with the Office of the Recorder or Registrar of Titles in Tazewell County, Illinois.

Section Three. The property Owner hereby agrees for himself/herself, and his/her heirs, grantees, successors, assigns, transferees and any other owner, occupant, lessee, possessor or user of the Property or the holder of any portion thereof or interest therein, that the groundwater under the Property shall not be used as a potable supply of water, and any contaminated groundwater or soil that is removed, excavated, or disturbed from the Property described in Exhibit A herein must be handled in accordance with all applicable laws and regulations.

Section Four. This ELUC is binding on the Property Owner, his/her heirs, grantees, successors, assigns, transferees and any other owner, occupant, lessee, possessor or user of the Property or the holder of any portion thereof or interest therein. This ELUC shall apply in perpetuity against the Property and shall not be released until the IEPA determines there is no longer a need for this ELUC as an institutional control; until the IEPA, upon written request, issues a new no further remediation determination approving modification or removal of the limitation(s) or requirement(s); and until a release or modification of the land use limitation or requirement is filed on the chain of title for the Property.

Section Five. Information regarding the remediation performed on the Property may be obtained from the IEPA through a request under the Freedom of Information Act (5 ILCS 140) and rules promulgated thereunder by providing the IEPA with the [10 digit LPC or identification number] listed above.

Section Six. The effective date of this ELUC shall be the date that it is officially recorded in the chain of title for the Property to which the ELUC applies.

WITNESS the following signatures:

Property Owner(s)

By: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

STATE OF ILLINOIS        )  
  ) SS:  
COUNTY OF Tazewell     )

I, \_\_\_\_\_ the undersigned, a Notary Public for said County and State, DO HEREBY CERTIFY, that Jeff Heumann, personally known to me to be the Property Owner(s) of 212 IL RTE 122, Minier, Illinois, and personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that in said capacities they signed and delivered the said instrument as their free and voluntary at for the uses and purposes therein set forth.

Given under my hand and official seal, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Notary Public

**PIN NO. 19-19-22-201-014**

**Exhibit A**

212 IL RTE 122  
Minier, IL 61759

Legal Description:  
Sec 22 T23N R2W PT OF LOT 17 OF NE 1/4

**R0493**

Exhibit B

IN ACCORDANCE WITH SECTION 742.1010 (D)(8)(A)-(D), PROVIDE ALL THE FOLLOWING ELEMENTS. ATTACH SEPARATE SHEETS, LABELED AS EXHIBIT B, WHERE NECESSARY.

- (A) **Table 1.** Soil Analytical Data
- (B) **Table 2.** Groundwater Analytical Data
- (B) **Figures 1.** A scaled map showing the legal boundary of the property to which the ELUC applies.
- (C) **Figures 2 and 3.** Scaled maps showing the horizontal and vertical extent of contaminants of concern above the applicable remediation objectives for soil to which the ELUC applies.
- (D) Scaled maps showing the physical features to which an ELUC applies (e.g., engineered barriers, monitoring wells, caps, etc.).  
  
**No engineered barriers are proposed.**
- (E) **Figure 4.** Scaled maps showing the nature, location of the source, and direction of movement of the contaminants of concern.

**TABLE 1.**  
**Soil Analytical Results**  
**Warsaw-ITCO**  
**Minier, IL**

Sample ID:	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
B-2, 4-6'	5/3/2000	810	1,300	1,700	6,500	10,310
B-2, 6-8'	5/3/2000	600	220	420	1,900	3,140
B-2, 8-10'	5/3/2000	21,000	41,000	47,000	190,000	299,000
B-3, 6-8'	5/3/2000	400	120	210	460	1,190
B-3, 8-10'	5/3/2000	2,300	2,100	31,000	110,000	145,400
MW-1, 6-8'	5/4/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-2, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-3, 8-10'	5/3/2000	<2.0	<2.0	6	<5.0	<14.7
MW-4, 4-6'	5/4/2000	230	220	870	2,500	3,820
MW-4, 6-8'	5/4/2000	300	1,200	5,400	20,000	26,900
B-4, 0.5-2.5'	8/23/2001	8.1 M	19.0 M	44.7 M	77.2 M	149 M
B-4, 4-6'	8/23/2001	11,600 ME	42,700 ME	9,720 ME	38,000 ME	102,020 ME
B-5, 6-8'	8/23/2001	49	186 E	38	130	403
B-6, 4-6'	8/23/2001	19.5	53.4	31.3	89.8	194.0
B-6, 8-10'	8/23/2001	7.1	12.3	<2.4	10.9	<32.3
B-7, 8-10'	8/23/2001	16.7 M	61.5 M	13.9 M	39.5 M	131.6 M
B-7, 12-14'	8/23/2001	754.0	<61.3	<61.3	<153	<1,029.6
MW-5, 8-10'	8/23/2001	494 M	4,750 M	5,890 M	7,570 M	18,704 M
MW-6, 6-8'	8/23/2001	6.5	12.4	6.3	11.3	36.5
MW-7, 4-6'	8/23/2001	11.7	25.1	10.8	20.0	67.6
MW-7, 8-10	8/23/2001	15.5 M	20.2 M	6.8	11.8	54.3
T-1	10/20/2003	<2.6	3.2	<2.6	<6.5	<14.9
T-2	10/20/2003	<2.6	<2.6	<2.6	<6.5	<14.3
T-3	10/20/2003	<2.4	5.1	5.1	14.2	<26.8
T-4	10/20/2003	<2.4	<2.4	<2.4	<5.9	<13.1
T-5	10/20/2003	3.4	40.8	360.0	947.0	1,351.2
T-6	10/20/2003	85.3	635.0	1,840.0	7,140.0	9,700.3
T-7	10/20/2003	85.5	43.8	1,120.0	2,460.0	3,709.3
T-8	10/20/2003	<2.5	6.6	18.9	56.8	<84.8
T-9	10/20/2003	<2.4	<2.4	<2.4	<6.1	<13.3
T-10	10/20/2003	<2.5	<2.5	<2.5	<6.2	<13.7

Notes:

1. All results in parts per billion (ppb).
2. IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
30	12,000	13,000	5,600

3. All bolded values are above Tier 1 Residential Cleanup Objectives
4. M = Matrix interferences identified
5. E = Estimated

**Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois**

Sample #	Date	DTW	GWE	Benzene	Toluene	E-benzene	Xylenes	Total BTEX
<b>MW-1</b>		Elevation Top of Casing = 99.62						
SC	5/12/2000	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3
1	10/24/2000	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4
2	8/23/2001	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E
3	11/13/2001	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.41	94.21	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.65	94.97	NS	NS	NS	NS	NS
<b>MW-2</b>		Elevation Top of Casing = 99.28						
SC	5/9/2000	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7
3	11/13/2001	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.12	94.16	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.38	94.90	NS	NS	NS	NS	NS
<b>MW-3</b>		Elevation Top of Casing = 100						
SC	5/9/2000	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
3	11/13/2001	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.37	94.63	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.34	95.66	NS	NS	NS	NS	NS
<b>MW-4</b>		Elevation Top of Casing = 99.84						
SC	5/9/2000	5.90	93.94	2,600	12,000	4,500	18,000	37,100
1	10/24/2000	7.80	92.04	2,300	5,200	4,000	13,000	24,500
2	8/23/2001	6.67	93.17	2,290 M	2,380 M	8,150	23,600 E	36,420 E
3	11/13/2001	6.11	93.73	1,910	3,960	3,360	10,000	19,230
4	2/14/2002	5.00	94.84	1,100	1,200	2,900	5,500	10,700
5	1/24/2005	4.47	95.37	NS	NS	NS	NS	NS
<b>MW-5</b>		Elevation Top of Casing = 99.57						
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9
3	11/13/2001	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.86	1.4	2.2	1.5	4.5	9.6
5	1/24/2005	3.89	95.68	NS	NS	NS	NS	NS
<b>MW-6</b>		Elevation Top of Casing = 99.37						
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5
3	11/13/2001	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.66	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	WELL ICED OVER		NS	NS	NS	NS	NS
<b>MW-7</b>		Elevation Top of Casing = 100.07		WELL DESTROYED AT TIME OF 1/25/05 DTW MEASUREMENT				
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	7.28	92.79	<2.0	<2.0	<2.0	5.9	<11.9
3	11/13/2001	6.23	93.84	117 E	<2.0	<2.0	<5.0	<126 E
4	2/14/2002	5.52	94.55	7	<1.0	<1.0	<3.0	<12.0
5	1/24/2005	--	--	NS	NS	NS	NS	NS

- All results reported in ug/kg (i.e. parts per billion, ppb)
- IEPA Tier 1 Cleanup Objectives (ug/kg):
- = No data available
- MDL = Method Detection Limit
- DTW = Depth to Water
- GWE = Groundwater Elevation referenced to datum point
- NA/NS = Not analyzed/not sampled this event
- E = Estimated - value outside linear range
- M = Matrix interferences identified.

Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

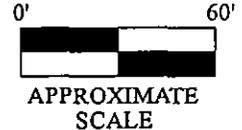
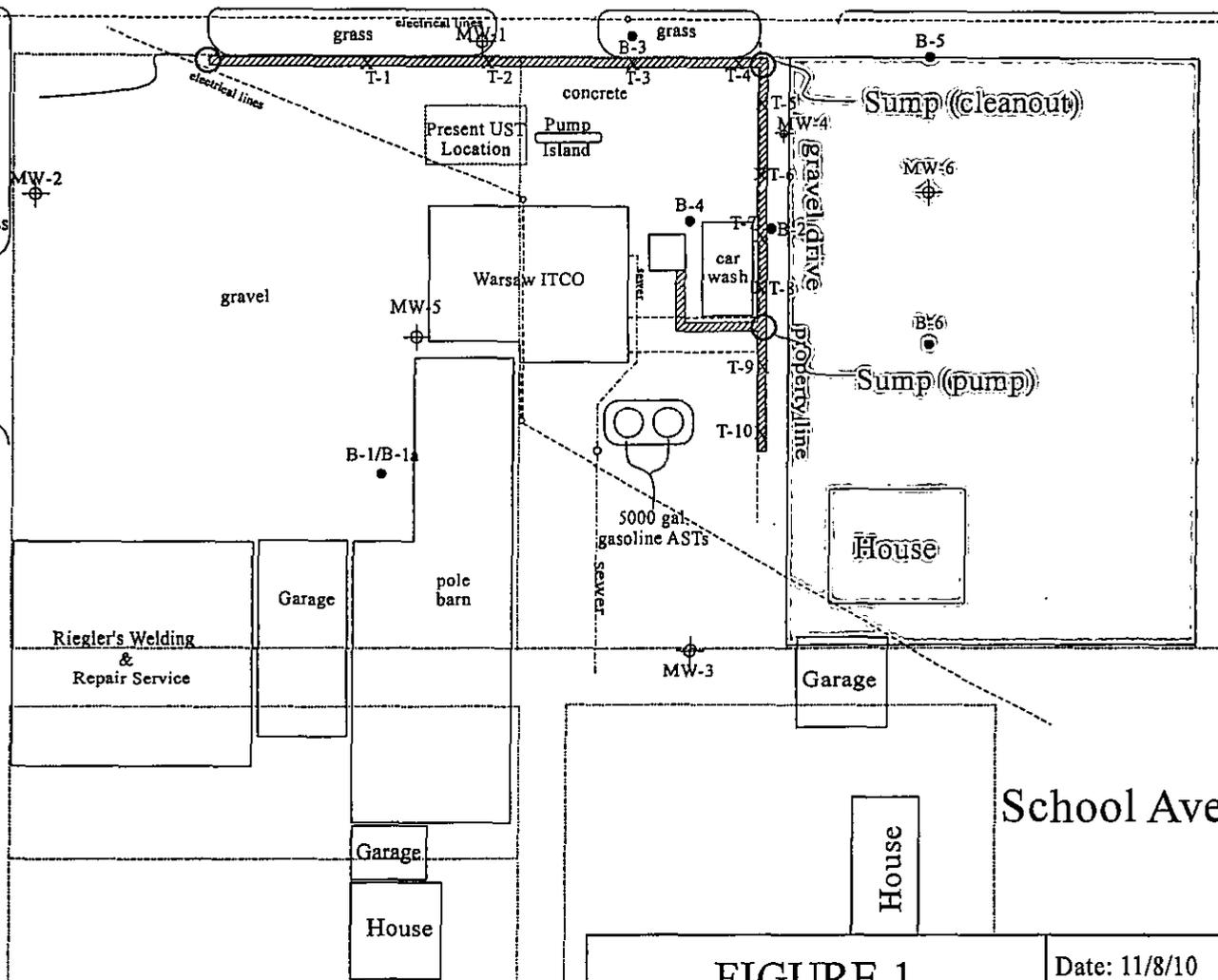
# Agricultural

## Route 122

Sump (cleanout)

Maple Street

Agricultural



**Legend**

MW-3  
 + = Existing Monitoring Well Location

B-2  
 • = Existing Boring Location

**FIGURE 1**  
 ELUC Property  
 Warsaw ITCO  
 Minier, IL

Date: 11/8/10	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**





Agricultural

Route 122

Sump (cleanout)

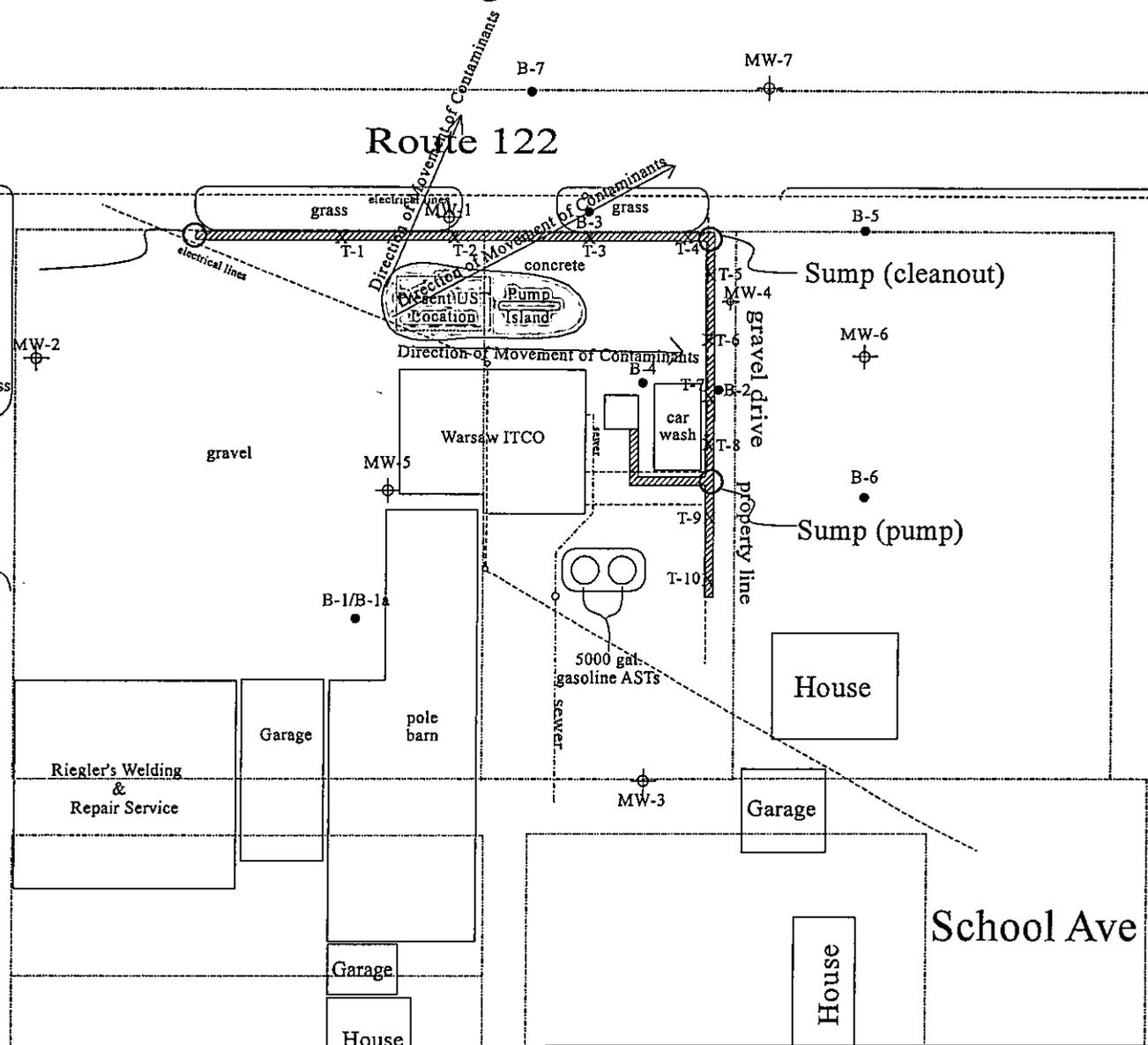
Sump (cleanout)

Maple Street

Agricultural

School Ave

- MW-3  
+ = Existing Monitoring Well Location
- B-2  
• = Existing Boring Location



**FIGURE 4**  
Source Area  
Direction of Movement  
of Contaminants  
Warsaw ITCO  
Minier, IL

Date: 11/08/10	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S. Inc.**  
R0500

**APPENDIX D**

**GROUNDWATER ORDINANCE NOTIFICATION LETTER**

**DRAFT of Property Owner Notification Letter**

**A request has been sent to the Village of Minier for a Groundwater Use Restriction Ordinance**

November 8, 2010

«Owners\_Name»

«Address»

«City», «St» «ZIP»

RE: Village of Minier  
Groundwater Use Restriction Ordinance #XXXXXX  
And  
Warsaw ITCO  
IL Rte 122  
Minier, IL

Dear «Owners\_Name»

The purpose of this letter is to inform the owner of the property located at «Property\_Address» in Minier, Illinois, that groundwater remediation objectives have been approved by the IEPA for the Warsaw ITCO Station (Incident No. 981987) located at IL RTE 122, Minier, Illinois.

A release of petroleum hydrocarbon fuel products has occurred at the Warsaw ITCO (Incident No. 981987) located at IL RT 122, Minier, Illinois. The release was reported to the Illinois Emergency Management Agency (IEMA) and assigned incident number 981987. The extent of petroleum hydrocarbon contamination in the subsurface has been investigated as required by the Illinois Environmental Protection Agency (IEPA) Leaking Underground Storage Tank (LUST) Section.

Illinois Administrative Code 35, Part 742, Tiered Approach to Cleanup Objectives (TACO) allows for determination of alternative remediation objectives based on risk. Soil and groundwater remediation objectives based on risk to human health and the environment have been determined for this site through a TACO evaluation. Based on groundwater models generated during the TACO process, it appears that petroleum hydrocarbon concentrations in groundwater, above Tier 1 CUOs may potentially migrate off-site.

To address the potential for off-site groundwater contamination, Village of Minier Ordinance #XXXX, which prohibits the use of groundwater as a potable water supply by installation of wells or any other means, has been used by the Illinois Environmental Protection Agency to

approve alternative groundwater cleanup objectives. A copy of Village of Minier Ordinance #XXXX can be obtained from the Village of Minier, 110 West Central, Box 350, Minier, IL, 61759, (309) 392-2442.

The legal description for your potentially affected property is:

«PIN»

«Legal\_Description»

The attached map shows the location of the property, the defined extent of groundwater contamination, the modeled groundwater plume and the areas covered by engineered barriers and institutional controls.

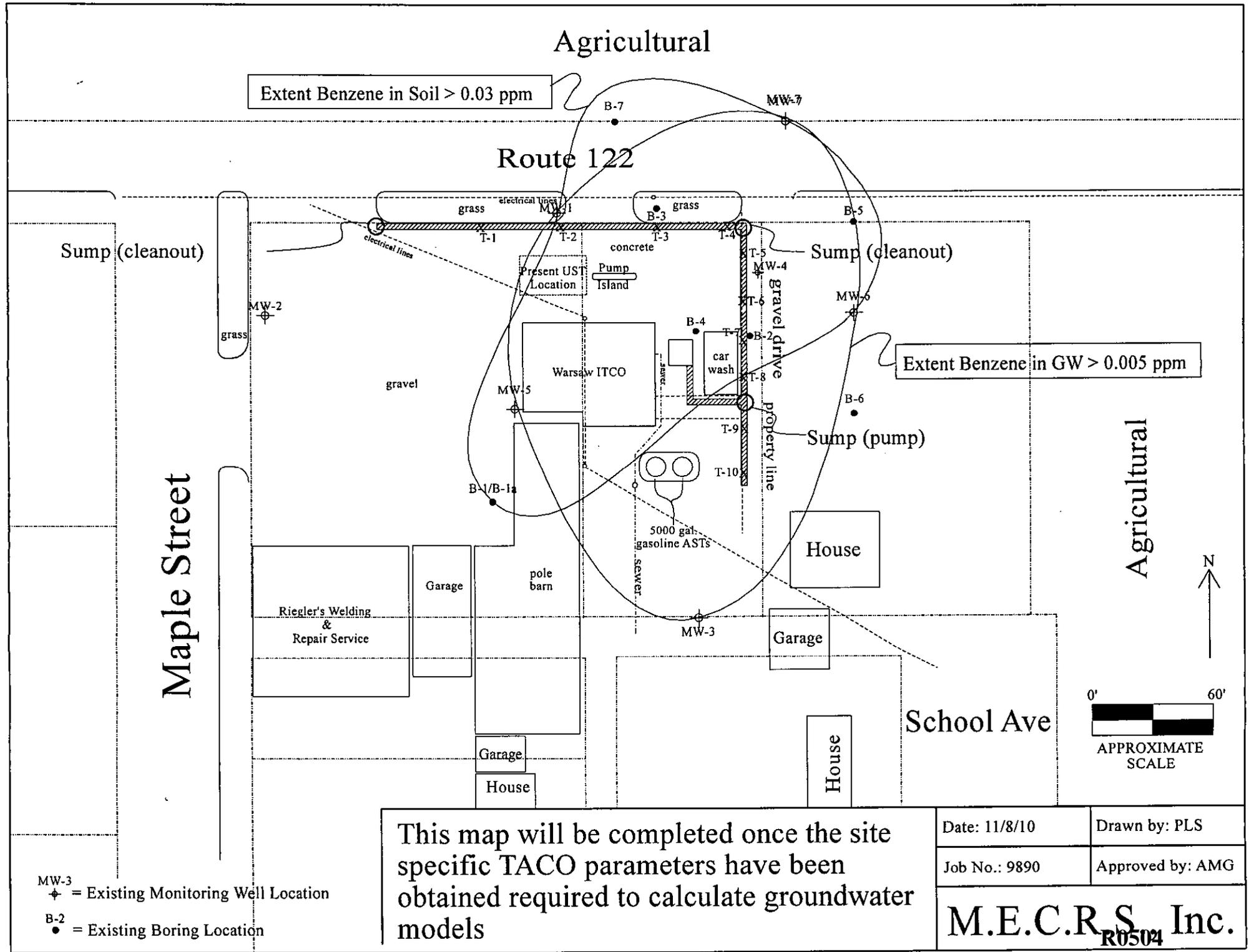
If you have any questions, please contact our office at your earliest convenience.

Sincerely,

Midwest Environmental Consulting and Remediation Services, Inc.

Allan M. Green  
President

cc: James Ransdell, IEPA  
John Warsaw



Extent Benzene in Soil > 0.03 ppm

Extent Benzene in GW > 0.005 ppm

This map will be completed once the site specific TACO parameters have been obtained required to calculate groundwater models

Date: 11/8/10	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S. Inc.**  
R0504

MW-3  
 + = Existing Monitoring Well Location  
 B-2  
 • = Existing Boring Location

**APPENDIX E**

**WATER SUPPLY WELL SURVEY**



# Illinois State Water Survey

Main Office • 2204 Griffith Drive • Champaign, IL 61820-7495 • Tel (217) 333-2210 • Fax (217) 333-6540  
Peoria Office • P.O. Box 697 • Peoria, IL 61652-0697 • Tel (309) 671-3196 • Fax (309) 671-3106



Ground-Water Section • Tel (217) 333-4300 • Fax (217) 244-0777

September 14, 1998

Mr. Greg Heuer  
Midwest Environmental, Inc.  
22200 Illinois Route 9  
P.O. Box 614  
Tremont, IL 61568-0614

Dear Mr. Heuer:

As you requested by your telefax letter dated September 4, we are enclosing printouts from our Private Well and Public, Industrial, Commercial Survey (PICS) Database for Sections 14, 15, 22 and 23 of Township 23N., Range 2W., in Tazewell County.

No available information is indicated on the printout by the statement "0 records were found for the specified locations." Also enclosed are explanations of the Illinois State Water Survey Private Well and PICS Database.

The data included in the Private Well Database are those non-municipal wells which are known to the Illinois State Water Survey, and the PICS Database is an inventory of municipal well information and large industrial ground-water users. We may not have a copy of well records for these ground-water users.

The invoice accompanying this request covers the \$20.00 query fee for private well information, \$20.00 query fee for PICS information and a \$0.10 per page charge for 4 pages, plus a \$5.00 shipping and handling fee, totaling \$45.40.

If you have any questions or if we can be of further assistance, please call.

Sincerely,

A handwritten signature in cursive script that reads "Susie Dodd".

Susie Dodd  
Assistant Supportive Scientist  
Office of Ground-Water Information  
Phone: (217) 333-9043

Enclosures

Query the Private Well Database through the World Wide Web  
<http://gwinfo.sws.uiuc.edu/gwdb-query.html>

County: Tazewell

Township Code: 23N  
Range Code: 2W  
Section Codes: 14, 15, 22, 23

12 records were found for the specified locations.

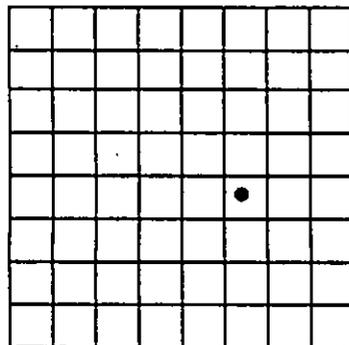
Questions : Contact the Illinois State Water Survey's  
Ground Water Division @ (217)333-9043  
Publication: Please cite the Illinois State Water Survey's  
Private-Well Database in all publications  
based wholly or partially on this information.

Please Note:

The data in the Private Well Inventory Database is a listing of those non-municipal wells which are known to the Illinois State Water Survey (ISWS). This information has been entered verbatim from well logs submitted by the driller, chemical analysis reports, well sealing forms, well inventory forms from the 1930-1934 well survey, and other special projects. The accuracy of this data is controlled by those who submitted the form. Information in the private well database has not been verified.

This data cannot be resold or redistributed. The Illinois State Water Survey must be acknowledged in any use of this material.

Location of 10-acre-plot within a Section



h The origin can be found at the  
g lower-right-hand corner of an  
f 8 x 8 grid. In this example,  
e the well is in 10-acre plot 3d.

8 7 6 5 4 3 2 1

Query the PICS Database through the World Wide Web  
<http://gwinfo.sws.uiuc.edu/gwdb-query.html>

County: Tazewell

Township Code: 23N

Range Code: 2W

Section Codes: 14, 15, 22, 23

4 records were found for the specified locations.

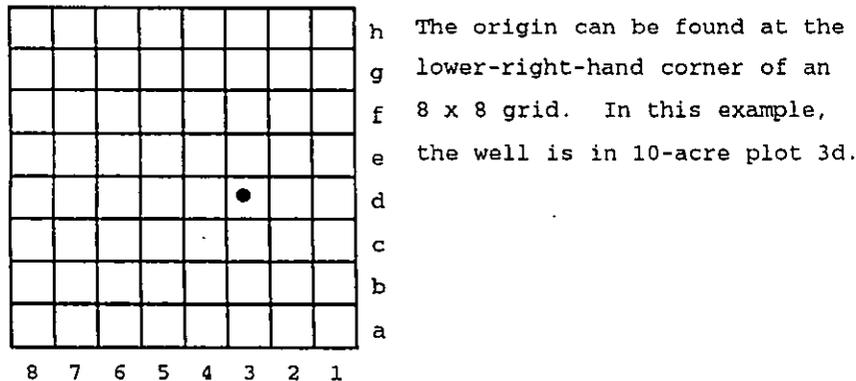
Questions : Contact the Illinois State Water Survey's  
Ground Water Division @ (217)333-7223  
Publication: Please cite the Illinois State Water Survey's  
PICS (Public-Industrial-Commercial) Database  
in all publications based wholly or partially  
on this information.

Please Note:

The data in the PICS Database is a listing of municipal and large industrial and commercial wells which are known to the Illinois State Water Survey (ISWS). The information was initially entered from public water supply data and supplemented with the Illinois Water Inventory Project data. This database is updated as additional information is received and verified.

This data cannot be resold or redistributed. The Illinois State Water Survey must be acknowledged in any publication of this material.

Location of 10-acre-plot within a Section





# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 Mary A. Gade, Director

217/782-1020

October 8, 1998

Mr. Greg Heuer  
Midwest Environmental Services, Inc.  
22200 Illinois Route 9, P.O. Box 614  
Tremont, Illinois 61568-0614

Re: Request Regarding the location of Community Water Supply Wells in Tazewell County, Illinois. (FOIA #98P0440)

Dear Mr. Heuer:

This letter responds to your written inquiry dated September 4, 1998 regarding your project area located in Section 14, 15, 22 and 23, T23N, R2W.

You requested information pertaining to the nearest community water supply well. Based upon the information provided, the project area appears to be located outside 2,500 feet from a community water supply well.

Currently, there have not been any regulated recharge areas established pursuant to section 17.3 of the Illinois Environmental Protection Act (Act). Further, there have not been any Class III Groundwaters designed pursuant to 35 Illinois Administrative Code 620.

The Illinois Department of Public Health should be contacted at (217)782-5830 in regard to the location of private, semi-private or non-community public water supply wells. I trust that this meets your needs. Should you require any further information, please feel free to contact me at the above referenced number.

Sincerely,

Janet Christer  
FOIA Coordinator, Manager's Office  
Division of Public Water Supply  
Bureau of Water

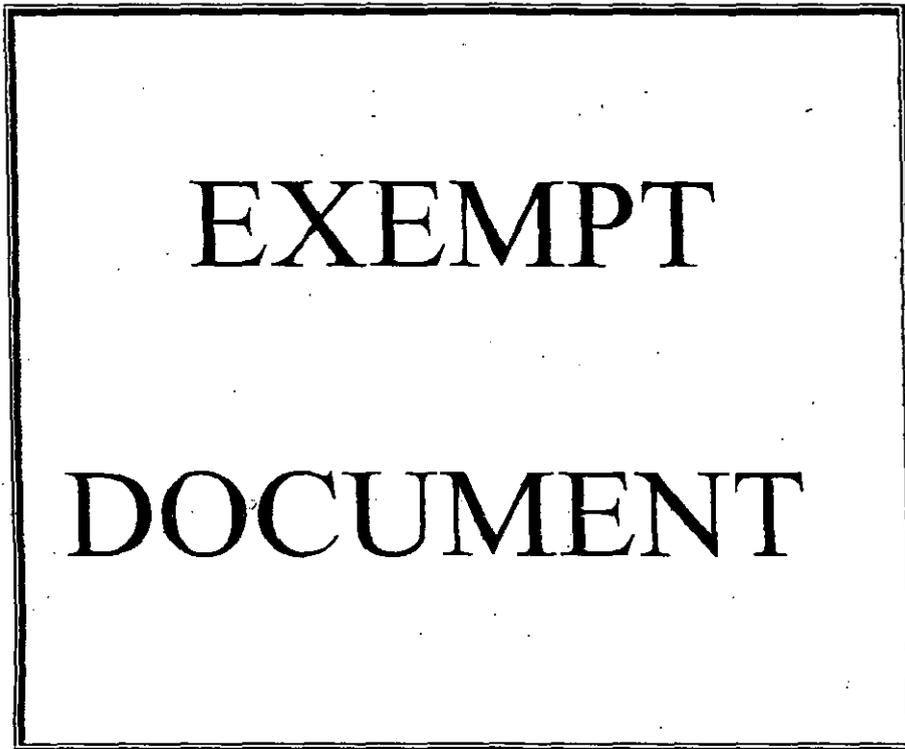
cc: File

R0509

FILE NO. L 1790455007

EXEMPT DOCUMENT NO. 003

THE AGENCY HAS DETERMINED THIS DOCUMENT  
IS EXEMPT FROM PUBLIC DISCLOSURE



FILE CATEGORY LOST/TECH

DOCUMENT DATE 11-19-2010  
(RECDATE)

**APPENDIX F**

**TACO PARAMETER LABORATORY DATA  
(PREVIOUSLY PROVIDED TO THE IEPA IN THE CAP DATED 1/08/02)**

**TELEPHONE**

309-673-2131

TESTS \* INVESTIGATIONS  
ANALYSIS \* DESIGN \* EVALUATIONS  
CONSULTATION \* REPORTS \* INSPECTIONS  
ARBITRATION \* EXPERT WITNESS TESTIMONY

\*\*\*\*\*  
SOILS \* PORTLAND CEMENT CONCRETE  
BITUMINOUS CONCRETE \* STEEL  
ASPHALT \* AGGREGATES \* EMULSIONS  
POZZOLANIC MATERIALS \* LIME

**CLIENT:**

Mr. Todd Birky  
Midwest Environmental Consulting  
And Remediation Services, Inc.  
P. O. Box 614  
Tremont, Illinois 61568-0614



**WHITNEY & ASSOCIATES**

INCORPORATED  
2406 West Nebraska Avenue  
PEORIA, ILLINOIS 61604-3193

**TELEFAX**

309-673-3050

GEOTECHNICAL ENGINEERING  
CONSTRUCTION QUALITY CONTROL  
SUBSURFACE EXPLORATIONS  
ENVIRONMENTAL INVESTIGATIONS  
\*\*\*\*\*  
MONITORING WELL INSTALLATIONS  
BUILT-UP ROOF INVESTIGATIONS  
WELDER CERTIFICATIONS  
INSURANCE INVESTIGATIONS

W&A FILE NO. 1897001

DATE: 09-04-01

**PROJECT:**

Warsaw ITCO Site Investigation  
Minier, Illinois

**SUMMARY OF SOIL INVESTIGATION**

BORING NUMBER	SAMPLE DEPTH FEET	NATURAL MOIST DENSITY-PCF	NATURAL DRY DENSITY-PCF	NATURAL MOISTURE CONTENT - %	MATERIAL CLASSIFICATION
B-4	0.5 - 2.5	125.3 <i>2.01 g/cm<sup>3</sup></i>	112.1 <i>1.80</i>	11.8	Brown, SILTY CLAYEY SAND - SC-SM; Medium- To Coarse-Grained Sand And Fine-Grained Gravel (REMOLDED)
B-4	4.0 - 6.0	129.2 <i>2.07 g/cm<sup>3</sup></i>	110.2 <i>1.79 g/cm<sup>3</sup></i>	17.1	Gray-Brown, Olive-Green And Orange-Brown SANDY LEAN CLAY - CL (Clay Loam)

Should you have any questions or comments whatsoever in regard to these test results, or any additional information is desired, please do not hesitate to contact me personally at your convenience.

Respectfully submitted,  
WHITNEY & ASSOCIATES

(By)

Richard R. Whitney, P.E.



RRW:rma

**TMI Analytical Services, LLC**  
**3430 Constitution Drive, Suite 116**  
**Springfield, Illinois 62707**  
**217-698-0642**

**Delivery Group ID: 2001:0000549**  
 Customer: Midwest Environmental Services  
 Contact Name: Birky, Todd  
 P.O. Box 614  
 Tremont, IL 61568-0614

Date Received: 8/24/01  
 Date Sampled: 8/23/01

Project Name: 9890 Warsaw-ITCO

18 Sample(s) are included in this Delivery

**Sample ID: 2001:0000549-8**      **Client's Sample ID: B-4 0.5-2.5**  
**Program: ENVIRO**      **Matrix: Solid**

Test Name	Method	MDL	Units	Result
% Moisture	160.3		%	13.3
Fraction of Organic Carbon	SM 209 D		%	2.45
Solids, %	160.3		%	86.7
BTEX, 5035 lo level		Method: 8020/5035	Units: µg/kg	
Analyte		MDL		Result
Benzene		2.3		8.1 M
Ethylbenzene		2.3		44.7 M
Toluene		2.3		19.0 M
Xylenes		5.8		77.2 M

**Sample ID: 2001:0000549-9**      **Client's Sample ID: B-4 4-6**  
**Program: ENVIRO**      **Matrix: Soil**

Test Name	Method	MDL	Units	Result
% Moisture			%	18.3
Fraction of Organic Carbon	SM 209 D		%	2.55
Solids, %	160.3		%	81.7
BTEX, 5035 lo level		Method: 8020/5035	Units: µg/kg	
Analyte		MDL		Result
Benzene		122		11600 ME
Ethylbenzene		122		9720 ME
Toluene		122		42700 ME
Xylenes		306		38000 ME

**Sample ID: 2001:0000549-10**      **Client's Sample ID: B-5 6-8**  
**Program: ENVIRO**      **Matrix: Soil**

Test Name	Method	MDL	Units	Result
Solids, %	160.3		%	88.9
BTEX, 5035 lo level		Method: 8020/5035	Units: µg/kg	
Analyte		MDL		Result
Benzene		2.2		49.0
Ethylbenzene		2.2		38.0
Toluene		2.2		186 E

**R0513**



The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 5/17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Laboratory Certification for Chemical Analysis**

**A. Site Identification**

IEMA Incident # (6 digit): 981987 IEPA Generator # (10 digit): 1790455007  
Site Name: Warsaw, Howard  
Site Address (Not a P.O. Box): Rt. 122  
City: Minier County: Tazewell

**B. Sample Collector**

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
2. Chain of custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

ADF  
(initial)

ADF  
(initial)

ADF  
(initial)

ADF  
(initial)

**C. Laboratory Representative**

I certify that:

1. Proper chain of custody procedures were followed as documented on the chain of custody forms.
2. Sample integrity was maintained by proper preservation.
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

SAL  
(initial)

SAL  
(initial)

SAL  
(initial)

SAL  
(initial)

5. Sample holding times were not exceeded.

SAL  
(initial)

6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses.

SAL  
(initial)

**D. Signatures**

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Sample Collector**

**Laboratory Representative**

Name: Andrew Fetterolf

Name: Scott A. Reeves

Title: Environmental Technician

Title: Laboratory Manager

Company: MECRS

Company: TMI Analytical Services

Address: 22200 IL Rt. 9 Box 614

Address: 3430 Constitution Dr.

Tremont, IL 61568

Springfield, IL 62707

Phone: (309) 925-5551

Phone: 217-~~486~~ 698-0642

Signature: Andrew Fetterolf

Signature: Scott A. Reeves

Date: 8/29/01

Date: 9-10-01

**APPENDIX G**  
**BUDGET AMENDMENT**

**BUDGET AND BILLING FORM FOR  
LEAKING UNDERGROUND STORAGE  
TANK SITES**

**A. SITE INFORMATION**

Site Name: Warsaw, Howard  
Site Address: Route 122 City: Minier  
Zip: 61759  
County: Tazewell IEPA Generator No.: 1790455007  
IEMA Incident No: 981987 IEMA Notification Date: May 19, 1999  
Date this Form was Prepared: November 5, 2010

This form is being submitted as a:

Budget Proposal

Budget Amendment (Budget Amendments must include only the costs over the previous budget)

Amendment Number: 4

Billing Package for costs incurred pursuant to 35 Illinois Administrative Code (IAC), Part 732 ("new program")

Name(s) of report(s) documenting the costs requested: \_\_\_\_\_

Date(s): \_\_\_\_\_

This form is being submitted for the Site Activities indicated below (check one):

Early Action

Site Classification

Low Priority Corrective Action

High Priority Corrective Action

Other (indicate activities): \_\_\_\_\_

**DO NOT SUBMIT "NEW PROGRAM" COSTS AND "OLD PROGRAM"  
COSTS AT THE SAME TIME, ON THE SAME FORMS.**

**RECEIVED**

A-1

NOV 19 2010

IL 532-2263  
LPC 494 Rev. 2/99

This form must be submitted in duplicate.

The Agency is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment request to be returned. This form has been approved by the Forms Management Center.

**IEPA/BOL**

R0518

If eligible for reimbursement, where should reimbursement checks be sent? Please note that only owners or operators or USTs may be eligible for reimbursement. Therefore, payment can only be made to an owner or operator.

Pay to the order of: Howard Warsaw

Send in care of: Howard Warsaw

Address: Route 122

City: Minier State: IL Zip: 61759

Number of Petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101: X 101 or more: \_\_\_\_\_

Number of USTs at the site: 7 (Number of USTs included USTs presently at the site and USTs that have been removed.)

Number of incidents reported to IEMA: 2

Incident Numbers assigned to the site due to releases from USTs: 981987, 991610

Please list all tanks which have ever been located at the site and are presently located at the site:

Product Stored	Size (gallons)	Did UST have a release?		Incident No.	Type of Release
<u>gasoline</u>	<u>500</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>gasoline</u>	<u>500</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>gasoline</u>	<u>2,000</u>	<u>Yes</u>	<u>No</u>	<u>981987, 991610</u>	<u>UST &amp; Piping leak, spills/overfills</u>
<u>diesel</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
<u>gasoline</u>	<u>2,500</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>N/A</u>
_____	_____	<u>Yes</u>	<u>No</u>	_____	_____
_____	_____	<u>Yes</u>	<u>No</u>	_____	_____

**B. PROPOSED BUDGET SUMMARY AND BUDGET TOTAL**

1. Investigation Costs:	<u>\$0.00</u>
2. Analysis Costs:	<u>\$362.79</u>
3. Personnel Costs:	<u>\$50,488.00</u>
4. Equipment Costs:	<u>\$291.80</u>
5. Field Purchases and Other Costs:	<u>\$7,800.00</u>
6. Handling Charges:	<u>\$1,299.22</u>
<b>TOTAL PROPOSED BUDGET =</b>	<b><u>\$60,241.81</u></b>



_____	metals prep	samples X	<u>\$17.45</u>	per sample =	<u>\$0.00</u>
_____	total arsenic	samples X	<u>\$17.45</u>	per sample =	<u>\$0.00</u>
_____	total barium	samples X	<u>\$10.90</u>	per sample =	<u>\$0.00</u>
_____	total cadmium	samples X	<u>\$17.45</u>	per sample =	<u>\$0.00</u>
_____	total chromium	samples X	<u>\$10.90</u>	per sample =	<u>\$0.00</u>
_____	total Lead	samples X	<u>\$17.45</u>	per sample =	<u>\$0.00</u>
_____	total mercury	samples X	<u>\$10.90</u>	per sample =	<u>\$0.00</u>
_____	total selenium	samples X	<u>\$17.45</u>	per sample =	<u>\$0.00</u>
_____	total silver	samples X	<u>\$10.90</u>	per sample =	<u>\$0.00</u>
_____	Lab and/or Field Blank	samples X		per sample =	<u>\$0.00</u>
_____	microbial plate count	samples X	<u>\$100.00</u>	per sample =	<u>\$0.00</u>
_____		samples X		per sample =	<u>\$0.00</u>
_____		samples X		per sample =	<u>\$0.00</u>
_____		samples X		per sample =	<u>\$0.00</u>

3. Groundwater Analysis Costs - This must be for laboratory analysis only.

<u>2</u>	BTEX	samples X	<u>\$91.90</u>	per sample =	<u>\$183.80</u>
_____	TPHg	samples X	<u>\$133.04</u>	per sample =	<u>\$0.00</u>
_____	COD	samples X	<u>\$32.71</u>	per sample =	<u>\$0.00</u>
_____	pH	samples X	<u>\$15.27</u>	per sample =	<u>\$0.00</u>
_____	nitrogen	samples X	<u>100</u>	per sample =	<u>\$0.00</u>
_____	phosphorus	samples X	<u>100</u>	per sample =	<u>\$0.00</u>
_____	Total Plate Count	samples X	<u>\$100.00</u>	per sample =	<u>\$0.00</u>
_____	total cadmium	samples X	<u>19.63</u>	per sample =	<u>\$0.00</u>
_____	total iron	samples X	<u>\$13.09</u>	per sample =	<u>\$0.00</u>
_____	total chromium	samples X	<u>13.09</u>	per sample =	<u>\$0.00</u>
_____	total zinc	samples X	<u>\$37.80</u>	per sample =	<u>\$0.00</u>
_____	total mercury	samples X	<u>28.35</u>	per sample =	<u>\$0.00</u>
_____	total lead	samples X	<u>\$19.63</u>	per sample =	<u>\$0.00</u>
_____	total selenium	samples X	<u>\$16.36</u>	per sample =	<u>\$0.00</u>
_____	total arsenic	samples X	<u>\$19.63</u>	per sample =	<u>\$0.00</u>
_____	total silver	samples X	<u>\$13.09</u>	per sample =	<u>\$0.00</u>
_____	total barium	samples X	<u>\$13.09</u>	per sample =	<u>\$0.00</u>

Total Analysis Costs = \$362.79

**G. PERSONNEL**

All personnel costs that are not included elsewhere in the budget/billing form must be listed here. Costs must be listed per task, not personnel type. The following are some examples of tasks: Drafting, data collection, plan, report or budget preparation for \_\_\_\_\_ (i.e., site classification work plan, 45 day report, or high priority corrective action budget), sampling, field oversight for \_\_\_\_\_ (i.e. drilling/well installation, corrective action, or early action), of maintenance of \_\_\_\_\_. The above list is not inclusive of all possible tasks.

**Thomas Clark, PE**

Sr. Professional Engineer (PG) : 10 hours x \$125.00 per hour = \$1,250.00

Task to be performed for the above hours: Review and Certify CACR

**Andrew Fetterolf**

Project Manager : 20 hours x \$78.00 per hour = \$1,560.00

Task to be performed for the above hours: groundwater sampling, planning, sample prep

**Todd Birky**

Sr. Project Manager : 205 hours x \$98.00 per hour = \$20,090.00

Task to be performed for the above hours: Corrective Action implementation

**Allan Green**

Sr. Project Manager : 40 hours x \$98.00 per hour = \$3,920.00

Task to be performed for the above hours: Planning, CAP & Budget amendment

**Todd Birky**

Project Manager : 100 hours x \$98.00 per hour = \$9,800.00

Task to be performed for the above hours: CAP Preparation; design, research

**Gaye Lynn Green**

Sr. Acct. Technician : 16 hours x \$55.00 per hour = \$880.00

Task to be performed for the above hours: Reimbursement forms and documentation

**Gaye Lynn Green**

Sr. Admin. Assist. : 24 hours x \$42.00 per hour = \$1,008.00

Task to be performed for the above hours: Report/Reimbursement review, copy, bind and mail

**Todd Birky**

Project Manager : 50 hours x \$98.00 per hour = \$4,900.00

Task to be performed for the above hours: Water Permitting; IEPA Water Correspondence

**Penny Silzer**

Sr. Geologist, PG : 12 hours x \$100.00 per hour = \$1,200.00

Task to be performed for the above hours: review and certify reimbursement, CAP & Budgets

**Penny Silzer**

Sr. Project Manager : 60 hours x \$98.00 per hour = \$5,880.00

Task to be performed for the above hours: HAA, ELUC, Village Ordinance, perform TACO calculations, slug test analysis

TOTAL = \$50,488.00





**Other Costs** - A listing and description of all other costs which will be/were incurred and are not specifically listed on this form should be attached. The listing should include a cost breakdown in a time and materials format.

Air permit and renewal	\$400.00
Water Permit	\$6,000.00
Repair of blower by IOEM	\$1,400.00

<b>Total Other Costs =</b>	<u>\$7,800.00</u>
<b>Subtotal I-1 =</b>	<u>\$0.00</u>
<b>Total pages I-1 and I-2:</b>	<u>\$7,800.00</u>

**J. HANDLING CHARGES**

Handling charges are eligible for payment on subcontractor billings and/or field purchases only if they are equal to or less than the amounts determined on the following table:

<b>Subcontractor or Field Purchase Cost</b>	<b>Eligible Charges as a Percentage Of Cost</b>
\$1 - \$5000	12%
\$5,001 - \$15,000	\$600 + 10% of amt. Over \$5,000
\$15,001 - \$50,000	\$1,600 + 8% of amt. Over \$15,000
\$50,001 - \$100,000	\$4,400 + 5% of amt. Over \$50,000
\$100,001 - \$1,000,000	\$6,900 + 2% of amt. Over \$100,000

**A. Subcontractor Charges**

Subcontractor	Section in these Forms where Cost is Listed	Subcontractor Amount
IEPA - Air	I	\$400.00
IEPA - Water	I	\$6,000.00
IOME	I	\$1,400.00

<b>Subtotal J-1 :</b>	<b>\$7,800.00</b>
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**M. JUSTIFICATION FOR BUDGET AMENDMENTS**

If this form is being submitted for an amendment, you must submit a narrative justifying the need for the amendment. If the amendment includes a revision in a corrective action proposal, a new proposal must be submitted.

Please see narrative attached Corrective Action Plan.



**Midwest Environmental Consulting & Remediation Services Inc.**

22200 Illinois Route 9 • P.O. Box 614

Tremont, IL 61568-0614

Phone: (309) 925-5551 • Fax: (309) 925-5606 1790455007 - Tazewell County

Warsaw, Howard

Incident # 981987

Leaking UST Technical File

March 3, 2014

Mr. Jim Ransdell

Illinois Environmental Protection Agency

Bureau of Land - #24

LUST Section

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

EPA - DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

JUL 23 2014

REVIEWER RDH

Re: LPC #1790455007 – Tazewell County

Minier/Warsaw, Howard

Route 122

LUST Incident No. 981987

LUST Technical File

Dear Mr. Ransdell:

Attached please find the Corrective Action Plan and Budget Amendment for the subject site.

If you have any questions or comments, please contact our office.

Sincerely,

Midwest Environmental Consulting and Remediation Services, Inc.



Allan M. Green

President

PLS/glg

cc: Mr. Howard Warsaw

Attachments

Job No. 9890

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**IEPA/BOL**

Leaking Underground Storage Tank Program  
**High Priority Corrective Action Plan Amendment**

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**Incident Location:** Warsaw - ITCO  
Route 122  
Minier, Illinois - Tazewell Co.

**Prepared for:** John Warsaw  
PO Box 886  
Minier, Illinois 61759

**Prepared by:** Midwest Environmental Consulting  
and Remediation Services, Inc.  
22200 Illinois Route 9  
Post Office Box 614  
Tremont, Illinois 61568-0614  
Contact: Allan Green - President

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**IEPA/BOL**

**For Review by:** Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
Contact: Mr. Jim Ransdell

# High Priority Site Investigation Corrective Action Plan

## TABLE OF CONTENTS

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### FORMS

IEPA Corrective Action Plan Form

### SECTIONS

Section 1. Introduction  
Section 2. Results of the Investigation Completed to Date  
Section 3. Anticipated Cleanup Methods  
Section 4. Additional Investigation Required

### TABLES

Table 1 Soil Analytical Data  
Table 2 Groundwater Analytical Data

### FIGURES

Figure 1 Area map  
Figure 2 Monitoring Well and Soil Boring Location Map  
Figure 3 Proposed Boring and Well Location Map  
Figure 4 Potentiometric Surface Map

### APPENDICES

Appendix A Soil and Groundwater Sampling Protocol  
Appendix B Laboratory Data Reports  
Appendix C IDOT HAA  
Appendix D Village of Minier Groundwater Ordinance  
Appendix E Budget

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**IEPA Corrective Action Plan Form**

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

## Illinois Environmental Protection Agency Leaking Underground Storage Tank Program Corrective Action Plan

### A. Site Identification

IEMA Incident # (6- or 8-digit): 981987 IEPA LPC# (10-digit): 1790455007

Site Name: Warsaw, Howard (Warsaw ITCO)

Site Address (Not a P.O. Box): Route 122

City: Minier County: Tazewell ZIP Code: 61759

Leaking UST Technical File

### B. Site Information

1. Will the owner or operator seek reimbursement from the Underground Storage Tank Fund? Yes  No

2. If yes, is the budget attached? Yes  No

3. Is this an amended plan? Yes  No

4. Identify the material(s) released: Gasoline

5. This Corrective Action Plan is submitted pursuant to:

a. 35 Ill. Adm. Code 731.166

The material released was:  
-petroleum  
-hazardous substance (see Environmental Protection Act Section 3.215)

b. 35 Ill. Adm. Code 732.404

c. 35 Ill. Adm. Code 734.335

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### C. Proposed Methods of Remediation

1. Soil TACO and institutional controls

2. Groundwater TACO and institutional controls

### D. Soil and Groundwater Investigation Results (for incidents subject to 35 Ill. Adm. Code 731 only or 732 that were classified using Method One or Two, if not previously provided)

Provide the following:

1. Description of investigation activities performed to define the extents of soil and/or groundwater contamination;

2. Analytical results, chain-of-custody forms, and laboratory certifications;

3. Tables comparing analytical results to applicable remediation objectives;
4. Boring logs;
5. Monitoring well logs; and
6. Site maps meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440 and showing:
  - a. Soil sample locations;
  - b. Monitoring well locations; and
  - c. Plumes of soil and groundwater contamination.

## **E. Technical Information - Corrective Action Plan**

Provide the following:

1. Executive summary identifying the objectives of the corrective action plan and the technical approach to be utilized to meet such objectives;
  - a. The major components (e.g., treatment, containment, removal) of the corrective action plan;
  - b. The scope of the problems to be addressed by the proposed corrective action; and
  - c. A schedule for implementation and completion of the plan;
2. Identification of the remediation objectives proposed for the site;
3. A description of the remedial technologies selected:
  - a. The feasibility of implementing the remedial technologies;
  - b. Whether the remedial technologies will perform satisfactorily and reliably until the remediation objectives are achieved; and
  - c. A schedule of when the technologies are expected to achieve the applicable remediation objectives;
4. A confirmation sampling plan that describes how the effectiveness of the corrective action activities will be monitored during their implementation and after their completion;
5. A description of the current and projected future uses of the site;
6. A description of engineered barriers or institutional controls that will be relied upon to achieve remediation objectives:
  - a. an assessment of their long-term reliability;
  - b. operating and maintenance plans; and
  - c. maps showing area covered by barriers and institutional controls;
7. The water supply well survey:
  - a. Map(s) showing locations of community water supply wells and other potable wells and the setback zone for each well;
  - b. Map(s) showing regulated recharge areas and wellhead protection areas;
  - c. Map(s) showing the current extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
  - d. Map(s) showing the modeled extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
  - e. Tables listing the setback zone for each community water supply well and other potable water supply wells;
  - f. A narrative identifying each entity contacted to identify potable water supply wells, the name and title of each person contacted, and any field observations associated with any wells identified; and
  - g. A certification from a Licensed Professional Engineer or Licensed Professional Geologist that the survey was conducted in accordance with the requirements and that documentation submitted includes information obtained as a result of the survey (certification of this plan satisfies this requirement);

8. Appendices:
  - a. References and data sources report that are organized; and
  - b. Field logs, well logs, and reports of laboratory analyses;
9. Site map(s) meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440;
10. Engineering design specifications, diagrams, schematics, calculations, manufacturer's specifications, etc.;
11. A description of bench/pilot studies;
12. Cost comparison between proposed method of remediation and other methods of remediation;
13. For the proposed Tier 2 or 3 remediation objectives, provide the following:
  - a. The equations used;
  - b. A discussion of how input variables were determined;
  - c. Map(s) depicting distances used in equations; and
  - d. Calculations; and
14. Provide documentation to demonstrate the following for alternative technologies:
  - a. The proposed alternative technology has a substantial likelihood of successfully achieving compliance with all applicable regulations and remediation objectives;
  - b. The proposed alternative technology will not adversely affect human health and safety or the environment;
  - c. The owner or operator will obtain all Illinois EPA permits necessary to legally authorize use of the alternative technology;
  - d. The owner or operator will implement a program to monitor whether the requirements of subsection (14)(a) have been met;
  - e. Within one year from the date of Illinois EPA approval, the owner or operator will provide to the Illinois EPA monitoring program results establishing whether the proposed alternative technology will successfully achieve compliance with the requirements of subsection (14)(a); and
  - f. Demonstration that the cost of alternative technology will not exceed the cost of conventional technology and is not substantially higher than at least two other alternative technologies, if available and technically feasible.

## F. Exposure Pathway Exclusion

Provide the following:

1. A description of the tests to be performed in determining whether the following requirements will be met:
  - a. Attenuation capacity of the soil will not be exceeded for any of the organic contaminants;
  - b. Soil saturation limit will not be exceeded for any of the organic contaminants;
  - c. Contaminated soils do not exhibit any of the reactivity characteristics of hazardous waste per 35 Ill. Adm. Code 721.123;
  - d. Contaminated soils do not exhibit a  $\text{pH} \leq 2.0$  or  $\geq 12.5$ ; and
  - e. Contaminated soils which contain arsenic, barium, cadmium, chromium, lead, mercury, or selenium (or their associated salts) do not exhibit any of the toxicity characteristics of hazardous waste per 35 Ill. Adm. Code 721.124.
2. A discussion of how any exposure pathways are to be excluded.

**G. Signatures**

All plans, budgets, and reports must be signed by the owner or operator and list the owner's or operator's full name, address, and telephone number.

**UST Owner or Operator**

**Consultant**

Name: John Warsaw  
 Contact: John Warsaw  
 Address: PO Box 886  
 City: Minier  
 State: IL  
 ZIP Code: 61759  
 Phone: (309) 292-2626  
 Signature: *John Warsaw*  
 Date: 3-8-14

Company: M.E.C.R.S., Inc.  
 Contact: Allan M. Green  
 Address: PO Box 614  
 City: Tremont  
 State: IL  
 ZIP Code: 61568  
 Phone: (309) 925-5551  
 Signature: *Allan M. Green*  
 Date: 3/3/14

I certify under penalty of law that all activities that are the subject of this plan were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in this plan has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 Ill. Adm. Code 731, 732 or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

**Licensed Professional Engineer or Geologist**

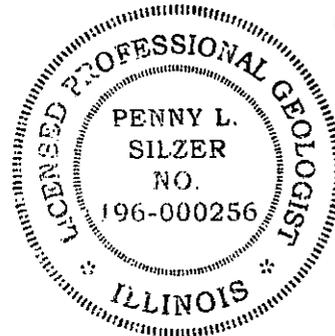
L.P.E. or L.P.G. Seal

Name: Penny Silzer  
 Company: M.E.C.R.S., Inc.  
 Address: PO Box 614  
 City: Tremont  
 State: IL  
 ZIP Code: 61568  
 Phone: (309) 925-5551  
 Ill. Registration No.: 196-000256  
 License Expiration Date: 03/31/15  
 Signature: *Penny Silzer*  
 Date: 3/3/14

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**IEPA/BOL**



**Corrective Action Plan**

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## Section 1. Introduction

The subject site is currently a gasoline service station located on Route 122 in Minier, Illinois. The area is developed for commercial, residential and agricultural use. An area map is provided in Figure 1.

Three underground storage tanks (USTs) were removed from the site on July 6, 1999. The three tanks (1-2,000 gallon, 2-500 gallon) were used for gasoline. Details of the UST removal/free product removal activities can be found in the Report of Early Action/ Amended 45-Day Report dated August 31, 1999 and the Free Product Removal Report dated August 26, 1999, previously submitted to IEPA.

Between May 2000 and August 2001, Midwest Environmental Consulting and Remediation Services, Inc. (MECRS) installed seven groundwater monitoring wells (MW-1 through MW-7) and drilled seven soil borings (B-1 through B-7). Additional soil samples were collected from a recovery trench installed in October 2003 (T-1 through T-10).

Midwest proposed to close the site based on institutional controls. Highway Authority Agreement (HAA) was received from the Illinois Department of Transportation (IDOT) in September 2013. A groundwater use restriction ordinance was obtained from the Village of Minier. The owner of the adjacent property located on the east side of the site, Mr. Jeff Heumann refused to sign the Environmental Land Use Control (ELUC).

Soil and groundwater samples were last collected in October 2003 and January 2005, respectively. It is probable that BTEX concentrations in soil and groundwater have decreased to concentrations below Tier 1 CUOs, or below concentrations that, when modeled, will show that the potential groundwater plume will not extend off-site.

The purpose of this CAP is to propose the investigation necessary to determine the current concentrations of COCs in the subsurface. The data collected from this investigation will be used to determine if the contamination in the subsurface can be addressed without obtaining an ELUC from the neighboring property owner and if the groundwater ordinance is required to close the incident.

The budget for CAP investigation costs incurred and those costs anticipated for additional investigation and preparation of the CAP is attached for IEPA approval.

## Section 2. Results of the Investigation Completed to Date

The subsurface materials encountered during advancement of boring B-1 consisted of: silty clay (OL) from ground surface to 1.5 feet bgs; silty clay (CL-ML) from 1.5 to 7 feet bgs; silty sand (SM) from 7 to 10 feet bgs; grading to sandy gravel (GP) from 10 to 13 feet bgs; clayey silt (ML) from 13 to 16 feet bgs; and silty clay till (CL-ML) from 16 feet bgs to the end of the boring at 26 feet bgs. A significant water-bearing zone was encountered between approximately 9 feet bgs and 13 ft bgs. Groundwater was initially encountered at an approximate depth of 9 feet bgs in most of the borings. Static water level depth appears to range from 5 to 6 feet bgs.

The most recent groundwater data collected shows that the groundwater flow direction is predominantly towards the northwest. However, the migration pattern of the COCs indicates that the direction of contaminant migration is towards the north to northeast.

The extent of soil and groundwater contamination has been defined. COCs appear to have migrated from the possible source areas towards the north and east.

Soil and groundwater analytical data collected to date are presented in Tables 1 and 2. The most recent potentiometric surface map for the most recent sampling event is presented in Figure 3.

### Section 3. Anticipated Cleanup Methods

Final cleanup requirements will be based on the soil and groundwater data collected during the proposed investigation and a Tiered Approach to Cleanup Objectives (TACO) evaluation of the site. Based upon the results of the TACO evaluation, a corrective action plan will be submitted that will detail the most effective and efficient method of remediation for the site, combined with appropriate land use restrictions, engineered barriers, and institutional controls.

Site specific soil and groundwater parameters have been determined and submitted to the IEPA in previous reports. The following site specific parameters will be used. The following data will be collected:

Parameter	Value
Soil Bulk Density	1.77 gm/cm <sup>3</sup>
Soil Particle Density	2.66 gm/gm
Moisture Content	17.1%
Hydraulic Conductivity	3.14 x 10 <sup>-4</sup> cm/sec
f <sub>oc</sub>	2.55%

Laboratory data collected but not previously reported to the IEPA is presented in Appendix B. A copy of the fully executed Highway Authority Agreement is presented in Appendix C. A copy of the Village of Minier groundwater ordinance is presented in Appendix D.

#### **Section 4. Additional Investigation Required**

Groundwater samples will be collected from monitoring wells MW-4 and MW-7. The groundwater has not been sampled since 2005. It is probable that groundwater conditions have changed significantly in that time. Depth to water measurements will be collected from all wells for determination of groundwater flow direction.

To determine current concentrations of COCs in soil, soil borings will be completed using direct push technology at locations where concentrations of COC were detected above Tier 1 CUOs. Soil samples will be collected at the following locations:

1. One soil boring will be completed within five feet of soil boring B-2. This boring will also serve as a re-sampling of soil sample T-7. Soil samples will be screened in the field with a PID. One soil sample from each five foot interval of boring depth will be submitted for laboratory analysis of BTEX based on PID readings. Soil samples collected from beneath the first water bearing zone will not be submitted for laboratory analysis. The anticipated depth of this boring is 15 feet or until groundwater is observed.
2. One soil boring will be completed within five feet of soil boring B-3. Soil samples will be screened in the field with a PID. One soil sample from each five foot interval of boring depth will be submitted for laboratory analysis of BTEX based on PID readings. Soil samples collected from beneath the first water bearing zone will not be submitted for laboratory analysis. The anticipated depth of this boring is 15 feet or until groundwater is observed.
3. One soil boring will be completed within five feet of soil boring MW-4. Soil samples will be screened in the field with a PID. One soil sample from each five foot interval of boring depth will be submitted for laboratory analysis of BTEX based on PID readings. Soil samples collected from beneath the first water bearing zone will not be submitted for laboratory analysis. The anticipated depth of this boring is 15 feet or until groundwater is observed.
4. One soil boring will be completed within five feet of soil boring B-4. Soil samples will be screened in the field with a PID. One soil sample from each five foot interval of boring depth will be submitted for laboratory analysis of BTEX based on PID readings. Soil samples collected from beneath the first water bearing zone will not be submitted for laboratory analysis. The anticipated depth of this boring is 15 feet or until groundwater is observed.
5. One soil boring will be completed within five feet of soil boring B-5. Soil samples will be screened in the field with a PID. One soil sample from each five foot interval of boring depth will be submitted for laboratory analysis of BTEX based on PID readings. Soil samples collected from beneath the first water bearing zone will not be submitted for laboratory analysis. The anticipated depth of this boring is 15 feet or until groundwater is observed.
6. One soil boring will be completed within five feet of soil boring B-7. Soil samples will be screened in the field with a PID. One soil sample from each five foot interval of boring depth will be submitted for laboratory analysis of BTEX based on PID readings. Soil samples

collected from beneath the first water bearing zone will not be submitted for laboratory analysis. The anticipated depth of this boring is 15 feet or until groundwater is observed.

7. One soil boring will be completed within five feet of well MW-5. Soil samples will be screened in the field with a PID. One soil sample from each five foot interval of boring depth will be submitted for laboratory analysis of BTEX based on PID readings. Soil samples collected from beneath the first water bearing zone will not be submitted for laboratory analysis. The anticipated depth of this boring is 15 feet or until groundwater is observed.
8. One soil boring will be completed within five feet of soil sample T-6. Soil samples will be screened in the field with a PID. One soil sample from each five foot interval of boring depth will be submitted for laboratory analysis of BTEX based on PID readings. Soil samples collected from beneath the first water bearing zone will not be submitted for laboratory analysis. The anticipated depth of this boring is 15 feet or until groundwater is observed.

Logs, maps, tables, and laboratory reports will be provided in the next Corrective Action Plan Amendment or Corrective Action Completion Report. Proposed boring locations are shown in Figure 4. Sampling protocol is presented in Appendix A. A budget for the proposed corrective action investigation is presented in Appendix E.

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**Table 1**  
**Soil Analytical Data**

**TABLE 1.**  
**Soil Analytical Results**  
**Warsaw-ITCO**  
**Minier, IL**

Sample ID:	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
B-2, 4-6'	5/3/2000	810	1,300	1,700	6,500	10,310
B-2, 6-8'	5/3/2000	600	220	420	1,900	3,140
B-2, 8-10'	5/3/2000	21,000	41,000	47,000	190,000	299,000
B-3, 6-8'	5/3/2000	400	120	210	460	1,190
B-3, 8-10'	5/3/2000	2,300	2,100	31,000	110,000	145,400
MW-1, 6-8'	5/4/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-2, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-3, 8-10'	5/3/2000	<2.0	<2.0	6	<5.0	<14.7
MW-4, 4-6'	5/4/2000	230	220	870	2,500	3,820
MW-4, 6-8'	5/4/2000	300	1,200	5,400	20,000	26,900
B-4, 0.5-2.5'	8/23/2001	8.1 M	19.0 M	44.7 M	77.2 M	149 M
B-4, 4-6'	8/23/2001	11,600 ME	42,700 ME	9,720 ME	38,000 ME	102,020 ME
B-5, 6-8'	8/23/2001	49	186 E	38	130	403
B-6, 4-6'	8/23/2001	19.5	53.4	31.3	89.8	194.0
B-6, 8-10'	8/23/2001	7.1	12.3	<2.4	10.9	<32.3
B-7, 8-10'	8/23/2001	16.7 M	61.5 M	13.9 M	39.5 M	131.6 M
B-7, 12-14'	8/23/2001	754.0	<61.3	<61.3	<153	<1,029.6
MW-5, 8-10'	8/23/2001	494 M	4,750 M	5,890 M	7,570 M	18,704 M
MW-6, 6-8'	8/23/2001	6.5	12.4	6.3	11.3	36.5
MW-7, 4-6'	8/23/2001	11.7	25.1	10.8	20.0	67.6
MW-7, 8-10	8/23/2001	15.5 M	20.2 M	6.8	11.8	54.3
T-1	10/20/2003	<2.6	3.2	<2.6	<6.5	<14.9
T-2	10/20/2003	<2.6	<2.6	<2.6	<6.5	<14.3
T-3	10/20/2003	<2.4	5.1	5.1	14.2	<26.8
T-4	10/20/2003	<2.4	<2.4	<2.4	<5.9	<13.1
T-5	10/20/2003	3.4	40.8	360.0	947.0	1,351.2
T-6	10/20/2003	85.3	635.0	1,840.0	7,140.0	9,700.3
T-7	10/20/2003	85.5	43.8	1,120.0	2,460.0	3,709.3
T-8	10/20/2003	<2.5	6.6	18.9	56.8	<84.8
T-9	10/20/2003	<2.4	<2.4	<2.4	<6.1	<13.3
T-10	10/20/2003	<2.5	<2.5	<2.5	<6.2	<13.7

Notes:

1. All results in parts per billion (ppb).
2. IEPA Tier I Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
30	12,000	13,000	5,600

3. All bolded values are above Tier I Residential Cleanup Objectives
4. M = Matrix interferences identified
5. E = Estimated

Sample #	foc	pH	Moisture	Soil Bulk Density	Soil Particle Density
Subsurface	2.55%	7.3	17.1%	1.77 gm/cm <sup>3</sup>	2.66

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**Table 2**

**Groundwater Analytical Data**

**Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois**

Sample #	Date	DTW	GWE	Benzene	Toluene	E-benzene	Xylenes	Total BTEX
<b>MW-1</b>		Elevation Top of Casing = 99.62						
SC	5/12/2000	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3
1	10/24/2000	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4
2	8/23/2001	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E
3	11/13/2001	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.41	94.21	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.65	94.97	NS	NS	NS	NS	NS
<b>MW-2</b>		Elevation Top of Casing = 99.28						
SC	5/9/2000	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7
3	11/13/2001	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.12	94.16	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.38	94.90	NS	NS	NS	NS	NS
<b>MW-3</b>		Elevation Top of Casing = 100						
SC	5/9/2000	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
3	11/13/2001	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.37	94.63	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.34	95.66	NS	NS	NS	NS	NS
<b>MW-4</b>		Elevation Top of Casing = 99.84						
SC	5/9/2000	5.90	93.94	2,600	12,000	4,500	18,000	37,100
1	10/24/2000	7.80	92.04	2,300	5,200	4,000	13,000	24,500
2	8/23/2001	6.67	93.17	2,290 M	2,380 M	8,150	23,600 E	36,420 E
3	11/13/2001	6.11	93.73	1,910	3,960	3,360	10,000	19,230
4	2/14/2002	5.00	94.84	1,100	1,200	2,900	5,500	10,700
5	1/24/2005	4.47	95.37	NS	NS	NS	NS	NS
<b>MW-5</b>		Elevation Top of Casing = 99.57						
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9
3	11/13/2001	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.86	1.4	2.2	1.5	4.5	9.6
5	1/24/2005	3.89	95.68	NS	NS	NS	NS	NS
<b>MW-6</b>		Elevation Top of Casing = 99.37						
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5
3	11/13/2001	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.66	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	WELL ICED OVER		NS	NS	NS	NS	NS
<b>MW-7</b>		Elevation Top of Casing = 100.07		WELL DESTROYED AT TIME OF 1/25/05 DTW MEASUREMENT				
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	7.28	92.79	<2.0	<2.0	<2.0	5.9	<11.9
3	11/13/2001	6.23	93.84	117 E	<2.0	<2.0	<5.0	<126 E
4	2/14/2002	5.52	94.55	7	<1.0	<1.0	<3.0	<12.0
5	1/24/2005	--	--	NS	NS	NS	NS	NS

- All results reported in ug/kg (i.e. parts per billion, ppb)
- IEPA Tier I Cleanup Objectives (ug/kg):

Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

- = No data available
- MDL = Method Detection Limit
- DTW = Depth to Water
- GWE = Groundwater Elevation referenced to datum point
- NA/NS = Not analyzed/not sampled this event
- E = Estimated - value outside linear range
- M = Matrix interferences identified.

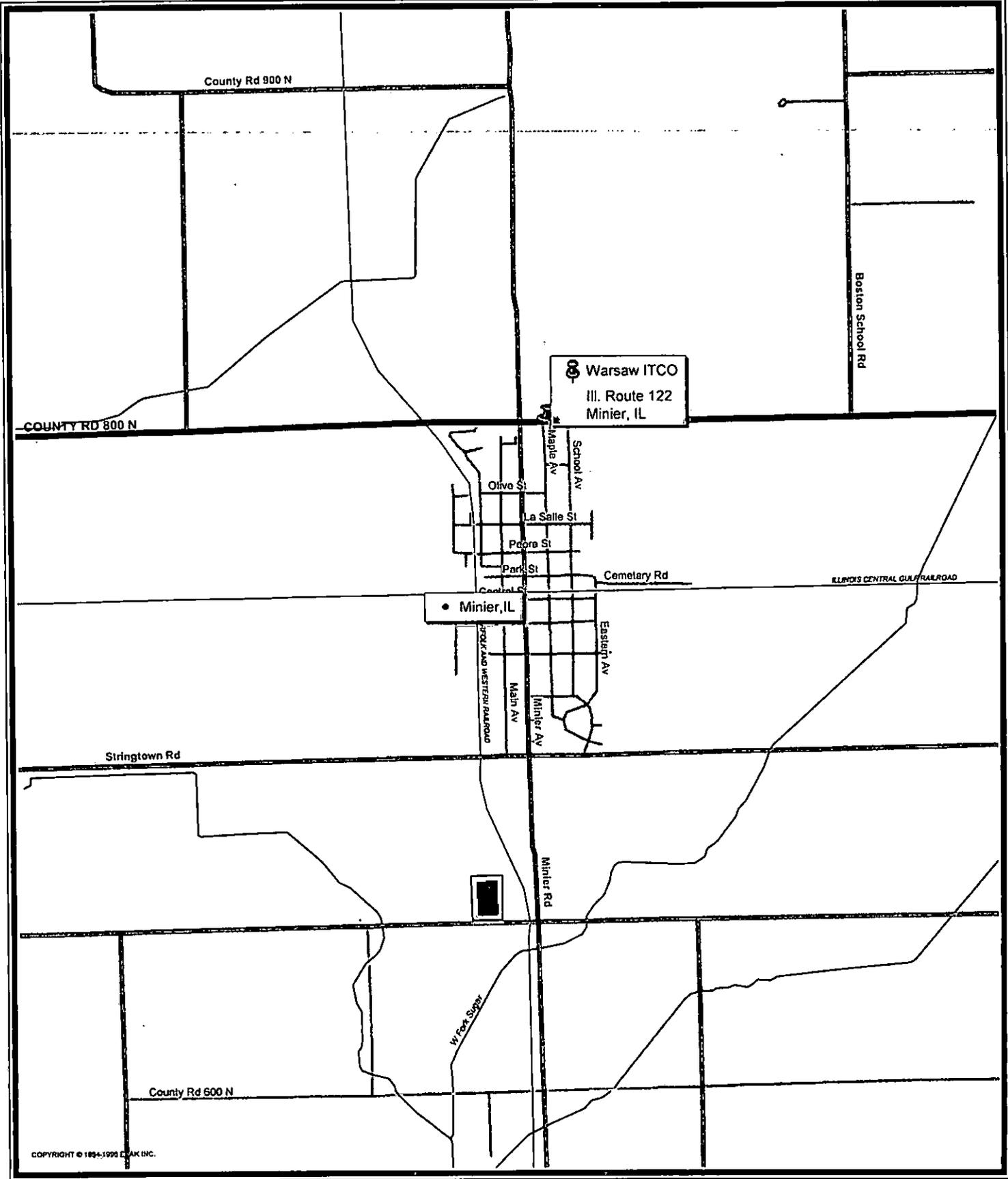
**R0548**

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**Figure 1**

**Area Map**

Figure 1. Site Location Map, Warsaw ITCO, Minier, IL



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**Figure 2**

**Monitoring Well and Soil Boring Location Map**

Agricultural

Route 122

Sump (cleanout)

Sump (cleanout)

Sump (pump)

Maple Street

Agricultural

School Ave



Figure 2  
Soil Boring and Monitoring Well Locations  
Warsaw ITCO  
Minier, IL

Date: 12/11/13

Drawn by: PLS

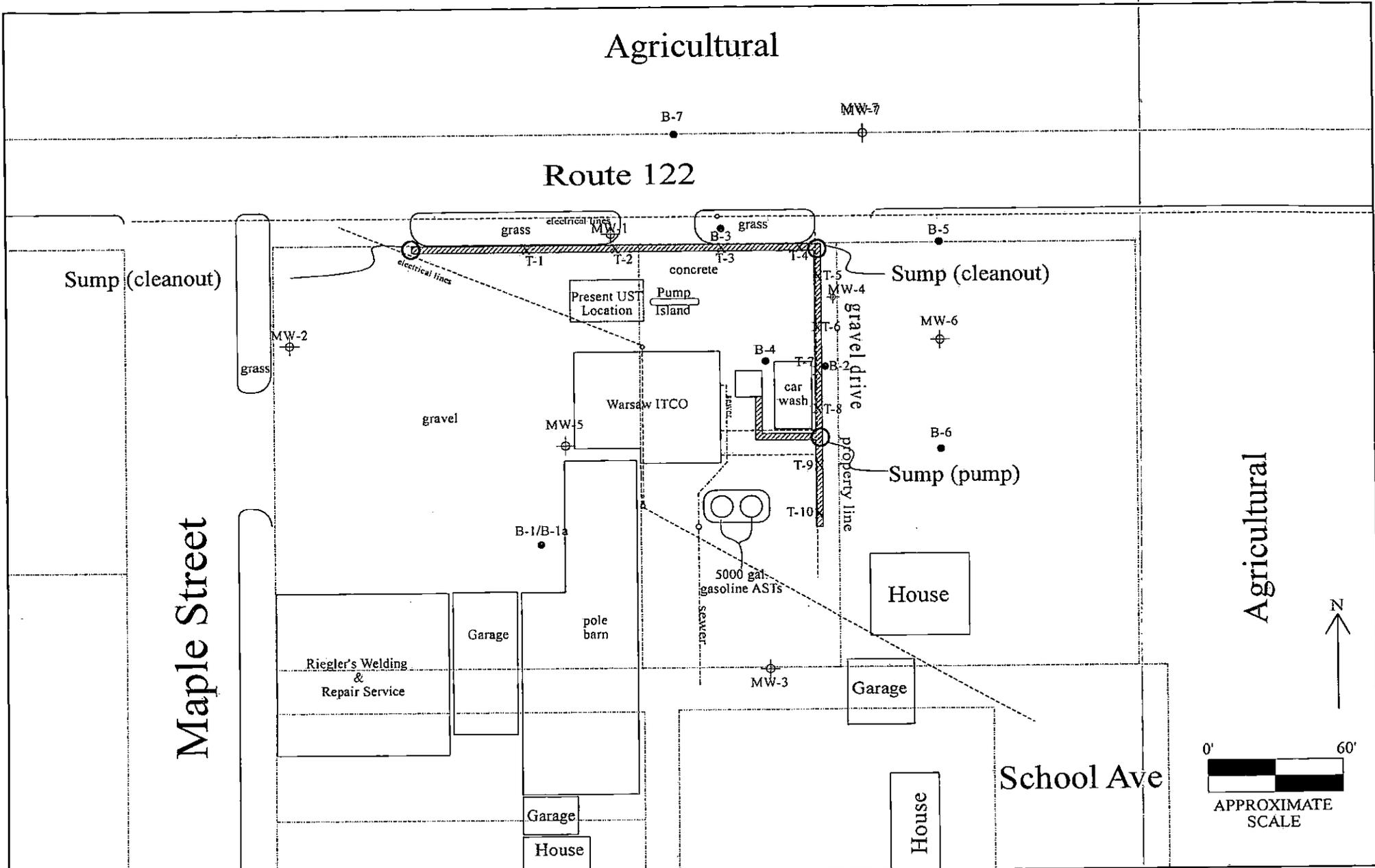
Job No.: 9890

Approved by: AMG

M.E.C.R.S., Inc.  
R0552

MW-3  
⊕ = Existing Monitoring Well Location

B-2  
● = Existing Boring Location



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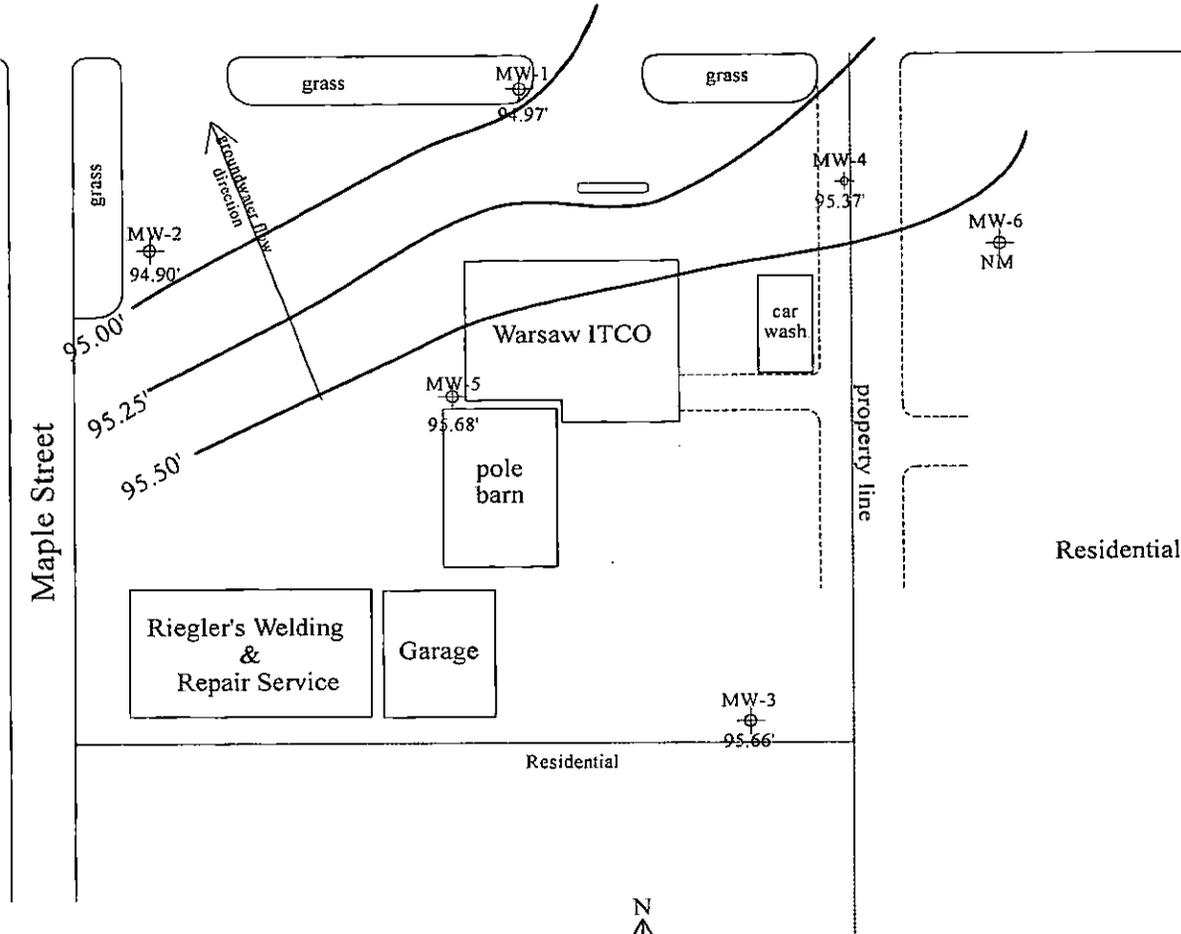
**Figure 3**

**Piezometric Surface Map 01/24/05**

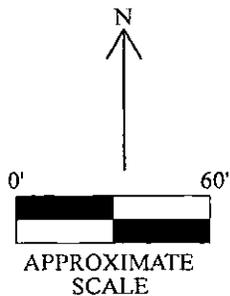
# Agricultural

MW-7  
 ⊕  
 DESTROYED

Route 122



MW-3  
 ⊕ = Existing Monitoring Well Location  
 B-2  
 ● = Existing Boring Location



**FIGURE 3**  
 Piezometric Surface  
 Map - 1/24/05  
 Warsaw - ITCO  
 Minier, IL

Date: 1/24/05

Drawn by: TKB

Job No.: 9890

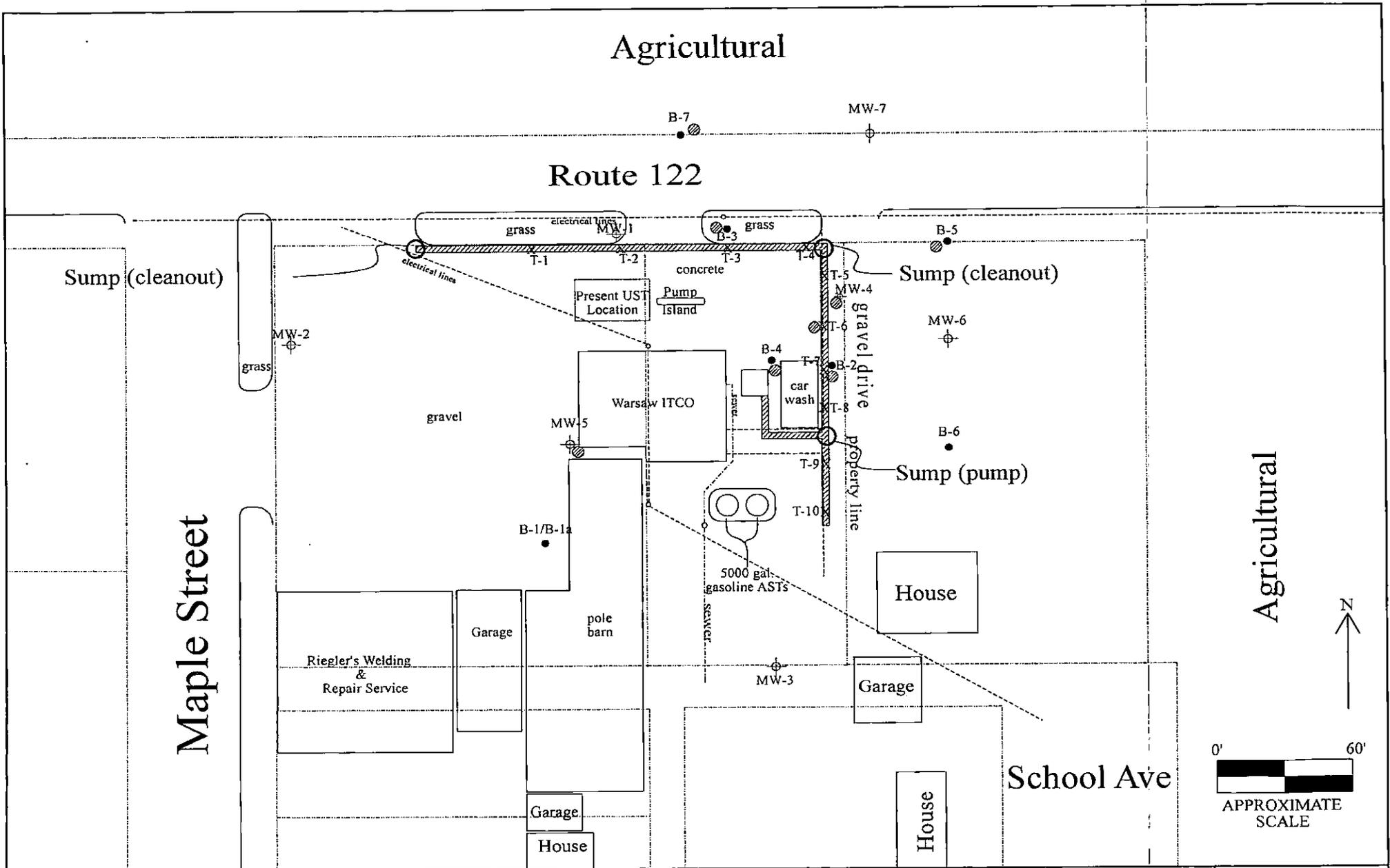
Approved by: AMG

**M.E.C.R.S., Inc.**  
 R0554

---

**Figure 4**

**Proposed Boring Locations**



**Figure 4**  
**Proposed Soil Boring Locations**  
**Warsaw ITCO**  
**Minier, IL**

Date: 2/20/14	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**  
**R0556**

- ⊙ = Proposed Soil Boring Location
- MW-3  
⊕ = Existing Monitoring Well Location
- B-2  
● = Existing Boring Location

---

**Appendix A**

**Soil and Groundwater Sampling Protocol**

**SOIL SAMPLING PROTOCOL - ENCORES**  
**For Subsurface Investigations**

1. Sampling Methodology - Split Spoon Sampling

- A. All sampling equipment to be used will be cleaned and decontaminated using deionized water prior to and between samples.
- B. Verification will be made that all boring equipment to include augers, split spoon samplers and associated equipment has been properly cleaned and decontaminated prior to initiating investigation.
- C. All boring and associated samplers will be decontaminated in accordance with the following schedule.
  - 1.) Augers and center plugs will be decontaminated between borings using a high pressure washer or steam cleaner.
  - 2.) Split Spoon Samplers will be decontaminated between samples using a warm water Alconox wash and triple rinsing.
- D. Samples representative of the interval retrieved will be taken from the split spoon using a 5-gram Encore (or equivalent) sampling device. The encore sampling device will be inserted into the soil as per the manufacturers directions, until completely full so as to take a sample of undisturbed material. The sample will be immediately capped with the manufacturer provided cap. Three 5-gram Encore samplers will be collected per sample.
- E. The sample will then be labeled, and placed into the zip-lock type bag that the manufacturer has provided with the Encore sampling device, and then placed on the chain of custody.
- F. A log of all borings will be recorded during sampling. The logs will include data regarding soil types and depths, anomalies, odor, HNU readings, and moisture contents.

2. Sample Storage, Handling and Transport

- A. Samples for analysis will be immediately cooled using a thermally insulated cooler and ice. The samples will be transported, on ice, as soon as possible, to the laboratory or to the engineering office cooler to await transport to the laboratory.
- B. The sample will be prepared within 48 hours (the allowable hold time) of sample collection by the laboratory, two with methanol and one with sodium bisulfate.
- C. A chain of custody record will be kept for all samples taken for laboratory analysis.

## **SOIL SAMPLING PROTOCOL**

### **For Subsurface Investigations**

#### **1. Sampling Methodology - Split Spoon Sampling**

- A. All sampling equipment to be used will be cleaned and decontaminated using deionized water prior to and between samples.
- B. Verification will be made that all boring equipment to include augers, split spoon samplers and associated equipment has been properly cleaned and decontaminated prior to initiating investigation.
- C. All boring and associated samplers will be decontaminated in accordance with the following schedule.
  - 1.) Augers and center plugs will be decontaminated between borings using a high pressure washer or steam cleaner.
  - 2.) Split Spoon Samplers will be decontaminated between samples using a warm water Alconox wash and triple rinsing.
- D. Samples representative of the interval retrieved will be removed and placed into new, glass jars with teflon lined lids. Proper care will be taken to minimize volatilization of possible contaminants from the sample during handling.
- E. The sample will be allowed to sit undisturbed for a period of time sufficient for vapor equilibrium to be reached. A headspace analysis of the sample will then be conducted using a portable photoionization detector.
- F. A log of all borings will be recorded during sampling. The logs will include data regarding soil types and depths, anomalies, odor, HNU readings, and moisture contents.

#### **2. Sample Storage, Handling and Transport**

- A. Samples for analysis will be immediately cooled using a thermally insulated cooler and ice. The samples will be transported, on ice, as soon as possible, to the laboratory or to the engineering office cooler to await transport to the laboratory.
- B. No sample will be allowed to remain in the possession of the engineer or laboratory for more than two weeks prior to analysis.
- C. A chain of custody record will be kept for all samples taken for laboratory analysis.

## D. SOIL SAMPLING PROTOCOL

### 1. Sampling Methodology - Shelby Tube Samples

- A. All sampling equipment to be used will be cleaned and decontaminated using deionized water prior to and between samples.

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- B. Verification will be made that all boring equipment to include augers, shelby tube samplers and associated equipment has been properly cleaned and decontaminated prior to initiating investigation.
- C. All boring and associated samplers will be decontaminated in accordance with the following schedule.
  - 1.) Augers and center plugs will be decontaminated between borings using a high pressure washer or steam cleaner.
  - 2.) Shelby tube samplers will be inspected prior to use. No samplers will be used showing indications of damage, corrosion or contamination. Samplers will not be reused or washed in the field.
- D. Shelby tube samplers will be carefully removed to minimize sample disturbance and volatilization or contamination.
- E. Plastic end caps will immediately be placed on the shelby tubes as they are removed.

### 2. Sample Storage, Handling, & Transport

- A. Shelby tube samples will be placed in a thermally insulated cooler with ice or cooler packs (Blue Ice).
- B. No sample will be allowed to remain in the possession of the engineer or laboratory for more than two weeks prior to analysis.
- C. A chain of custody record will be kept for all samples taken for laboratory analysis.
- D. No samples will be removed from the Shelby tubes except by the laboratory performing analysis.

## Appendix B

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### Laboratory Data Reports

9890

**TELEPHONE**

309-673-2131

TESTS \* INVESTIGATIONS  
ANALYSIS \* DESIGN \* EVALUATIONS  
CONSULTATION \* REPORTS \* INSPECTIONS  
ARBITRATION \* EXPERT WITNESS TESTIMONY  
\*\*\*\*\*  
SOILS \* PORTLAND CEMENT CONCRETE  
BITUMINOUS CONCRETE \* STEEL  
ASPHALT \* AGGREGATES \* EMULSIONS  
POZZOLANIC MATERIALS \* LIME



**WHITNEY & ASSOCIATES**

INCORPORATED

2406 West Nebraska Avenue

PEORIA, ILLINOIS 61604-3193

**TELEFAX**

309-673-3050

GEO TECHNICAL ENGINEERING  
CONSTRUCTION QUALITY CONTROL  
SUBSURFACE EXPLORATIONS  
ENVIRONMENTAL INVESTIGATIONS  
\*\*\*\*\*  
MONITORING WELL INSTALLATIONS  
BUILT-UP ROOF INVESTIGATIONS  
WELDER CERTIFICATIONS  
INSURANCE INVESTIGATIONS

**CLIENT:**

**W&A FILE NO.** -

**DATE:**

02-25-11

Ms. Penny Silzer  
Midwest Environmental Consulting  
And Remediation Services, Inc.  
P. O. Box 614  
Tremont, Illinois 61568-0614

**PROJECT:**

Warsaw - ITCO  
Route 122  
Minier, Illinois Project #9890

**LABORATORY TEST SUMMARY**

<b>SAMPLE DEPTH - FEET</b>	:	Subsurface
<b>VISUAL SOIL CLASSIFICATION</b>	:	Gray And Orange-Brown Mottled Dark Gray SILTY CLAY - CL-ML
<b>SPECIFIC GRAVITY</b>	:	2.66

Should you have any questions or comments whatsoever in regard to these test results, or if any additional information is desired, please do not hesitate to contact us at your convenience.

Respectfully submitted,

WHITNEY & ASSOCIATES

(By)

*James R. Krusemark*  
James R. Krusemark, P. E.

JRK:rma



The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Laboratory Certification for Physical Soil Analysis**

**A. Site Identification**

IEMA Incident # (6- or 8-digit): 981987      IEPA LPC# (10-digit): 1790455007  
Site Name: Warsaw - ITCO  
Site Address (Not a P.O. Box): Route 122  
City: Minier      County: Tazewell      ZIP Code: 61759  
Leaking UST Technical File

**B. Sample Collector**

I certify that:

1. Samples were collected using ASTM procedures.
2. Chain-of-custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

MF  
(initial)  
MF  
(initial)  
AP  
(initial)  
AP  
(initial)

**C. Laboratory Representative**

I certify that:

1. Proper chain-of-custody procedures were followed as documented on the chain-of-custody forms.
2. Sample integrity was maintained by proper preservation.
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

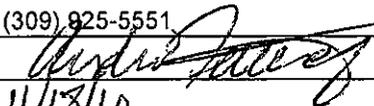
JRL  
(initial)  
JRL  
(initial)  
JRK  
(initial)  
JRK  
(initial)

- |    |  |                         |
|----|--|-------------------------|
| 5. | The test methods specified in the ASTM Standard D 422-63 or or D 1140-54 were used for particle size analysis. | <u>N/A</u><br>(initial) |
| 6. | The test methods specified in ASTM Standards D 2216-90 or D 4643-87 were used for soil moisture content.       | <u>N/A</u><br>(initial) |
| 7. | The test methods specified in ASTM Standards D 2487-90 or D 2488-90 were used for soil classification.         | <u>JPK</u><br>(initial) |
| 8. | The test methods specified in ASTM Standards D 5084-90 or D 4525-90 were used for hydraulic conductivity.      | <u>N/A</u><br>(initial) |

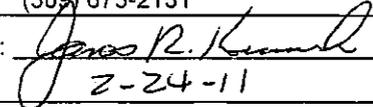
**D. Signatures**

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Sample Collector**

Name: Andrew Fetterolf  
 Title: Project Manager  
 Company: M.E.C.R.S., Inc.  
 Address: 22200 IL Rt. 9, PO Box 614  
 City: Tremont  
 State: Illinois  
 ZIP Code: 61568  
 Phone: (309) 925-5551  
 Signature:   
 Date: 11/18/10

**Laboratory Representative**

Name: James R. Krusemark  
 Title: Professional Engineer  
 Company: Whitney and Associates, Inc.  
 Address: 2406 West Nebraska Avenue  
 City: Peoria  
 State: Illinois  
 ZIP Code: 61604  
 Phone: (309) 673-2131  
 Signature:   
 Date: 2-24-11

**TELEPHONE**

309-673-2131

TESTS \* INVESTIGATIONS  
ANALYSIS \* DESIGN \* EVALUATIONS  
CONSULTATION \* REPORTS \* INSPECTIONS  
ARBITRATION \* EXPERT WITNESS TESTIMONY  
\*\*\*\*\*  
SOILS \* PORTLAND CEMENT CONCRETE  
BITUMINOUS CONCRETE \* STEEL  
ASPHALT \* AGGREGATES \* EMULSIONS  
POZZOLANIC MATERIALS \* LIME



**WHITNEY & ASSOCIATES**

INCORPORATED  
2406 West Nebraska Avenue  
PEORIA, ILLINOIS 61604-3193

**TELEFAX**

309-673-3050

GEOTECHNICAL ENGINEERING  
CONSTRUCTION QUALITY CONTROL  
SUBSURFACE EXPLORATIONS  
ENVIRONMENTAL INVESTIGATIONS  
\*\*\*\*\*  
MONITORING WELL INSTALLATIONS  
BUILT-UP ROOF INVESTIGATIONS  
WELDER CERTIFICATIONS  
INSURANCE INVESTIGATIONS

W&A FILE NO. 1897001

DATE: 09-04-01

Mr. Todd Birky  
Midwest Environmental Consulting  
And Remediation Services, Inc.  
P. O. Box 614  
Tremont, Illinois 61568-0614

**PROJECT:**

Warsaw ITCO Site Investigation  
Minier, Illinois

*Previously  
Submitted to  
IEPA*

**SUMMARY OF SOIL INVESTIGATION**

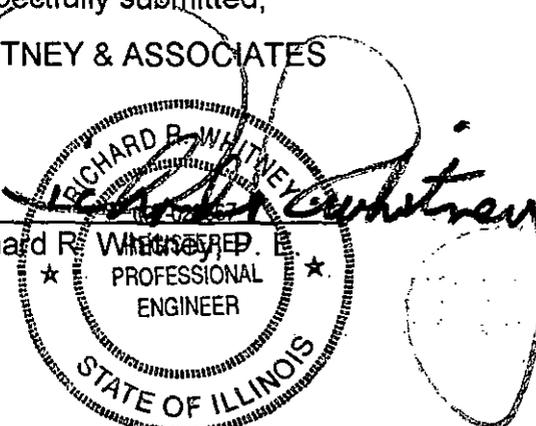
BORING NUMBER	SAMPLE DEPTH FEET	NATURAL MOIST DENSITY-PCF	NATURAL DRY DENSITY-PCF	NATURAL MOISTURE CONTENT - %	MATERIAL CLASSIFICATION
B-4	0.5 - 2.5	125.3 <i>2.01 g/cm<sup>3</sup></i>	112.1 <i>1.80</i>	11.8	Brown, SILTY CLAYEY SAND - SC-SM; Medium- To Coarse-Grained Sand And Fine-Grained Gravel (REMOLDED)
B-4	4.0 - 6.0	129.2 <i>2.07 g/cm<sup>3</sup></i>	110.2 <i>1.77 g/cm<sup>3</sup></i>	17.1	Gray-Brown, Olive-Green And Orange-Brown SANDY LEAN CLAY - CL (Clay Loam)

Should you have any questions or comments whatsoever in regard to these test results, or any additional information is desired, please do not hesitate to contact me personally at your convenience.

Respectfully submitted,  
WHITNEY & ASSOCIATES

(By)

Richard R. Whitney, P.E.  
PROFESSIONAL ENGINEER



RRW:rma

**TMI Analytical Services, LLC**  
**3430 Constitution Drive, Suite 116**  
**Springfield, Illinois 62707**  
**217-698-0642**

**Delivery Group ID: 2001:0000549**  
 Customer: Midwest Environmental Services  
 Contact Name: Birky, Todd  
 P.O. Box 614  
 Tremont, IL 61568-0614

Date Received: 8/24/01  
 Date Sampled: 8/23/01

Project Name: 9890 Warsaw-ITCO

*Previously submitted to DFFA*

18 Sample(s) are included in this Delivery

**Sample ID: 2001:0000549-8**      **Client's Sample ID: B-4 0.5-2.5**

Program: ENVIRO      Matrix: Solid

Test Name	Method	MDL	Units	Result
% Moisture	160.3		%	13.3
Fraction of Organic Carbon	SM 209 D		%	2.45
Solids, %	160.3		%	86.7
BTEX, 5035 to level		Method: 8020/5035	Units: µg/kg	
Analyte		MDL		Result
Benzene		2.3		8.1 M
Ethylbenzene		2.3		44.7 M
Toluene		2.3		19.0 M
Xylenes		5.8		77.2 M

**Sample ID: 2001:0000549-9**      **Client's Sample ID: B-4 4-6**

Program: ENVIRO      Matrix: Soil

Test Name	Method	MDL	Units	Result
% Moisture			%	18.3
Fraction of Organic Carbon	SM 209 D		%	2.55
Solids, %	160.3		%	81.7
BTEX, 5035 to level		Method: 8020/5035	Units: µg/kg	
Analyte		MDL		Result
Benzene		122		11600 ME
Ethylbenzene		122		9720 ME
Toluene		122		42700 ME
Xylenes		306		38000 ME

**Sample ID: 2001:0000549-10**      **Client's Sample ID: B-5 6-8**

Program: ENVIRO      Matrix: Soil

Test Name	Method	MDL	Units	Result
Solids, %	160.3		%	88.9
BTEX, 5035 to level		Method: 8020/5035	Units: µg/kg	
Analyte		MDL		Result
Benzene		2.2		49.0
Ethylbenzene		2.2		38.0
Toluene		2.2		186 E

9890



Wednesday, December 1, 2010

Ms. Penny Silzer  
 Midwest Environmental Consulting  
 PO Box 614  
 Tremont, IL 61568-0614  
 TEL: (309) 925-5551  
 FAX: (309) 925-5606

RE: 9890 Warsaw ITCO

PAS WO: 10K0321

Prairie Analytical Systems, Inc. received 1 sample(s) on 11/19/2010 for the analyses presented in the following report.

All applicable quality control procedures met method specific acceptance criteria unless otherwise noted.

This report shall not be reproduced, except in full, without the prior written consent of Prairie Analytical Systems, Inc.

If you have any questions, please feel free to contact me at (217) 753-1148.

Respectfully submitted,

Kristen A. Potter  
 Project Manager

Certifications: NELAP/NELAC - IL #100323

1210 Capital Airport Drive	*	Springfield, IL 62707	*	1.217.753.1148	*	1.217.753.1152 Fax
9114 Virginia Road Suite #112	*	Lake in the Hills, IL 60156	*	1.847.651.2604	*	1.847.458.0538 Fax

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: 9890 Warsaw ITCO  
 Client Sample ID: Subsurface  
 Collection Date: 11/18/10 14:00

Lab Order: 10K0321  
 Lab ID: 10K0321-01  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Conventional Chemistry Parameters</b>									
*pH	7.31	0.0100		pH Units	1	12/1/10 11:40	12/1/10 12:42	SW 9045C	AJD

---

**LABORATORY RESULTS**

**Client:** Midwest Environmental Consulting  
**Project:** 9890 Warsaw ITCO

**Lab Order:** 10K0321

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**Notes and Definitions**

- \* NELAC certified compound.
- U Analyte not detected (i.e. less than RL or MDL).



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**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Laboratory Certification for Chemical Analysis**

**A. Site Identification**

IEMA Incident # (6- or 8-digit): 981987      IEPA LPC# (10-digit): 1790455007  
Site Name: Warsaw - ITCO  
Site Address (Not a P.O. Box): Route 122.  
City: Minier      County: Tazewell      ZIP Code: 61759  
Leaking UST Technical File

**B. Sample Collector**

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
2. Chain-of-custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

AF  
(initial)

AF  
(initial)

AF  
(initial)

AF  
(initial)

**C. Laboratory Representative**

I certify that:

1. Proper chain-of-custody procedures were followed as documented on the chain-of-custody forms
2. Sample integrity was maintained by proper preservation.
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

KD  
(initial)

KD  
(initial)

KD  
(initial)

KD  
(initial)

5. Sample holding times were not exceeded.

KP  
(initial)

6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses.

KP  
(initial)

7. An accredited lab performed quantitative analysis using test methods identified in 35 IAC 186.180 (for samples collected on or after January 1, 2003).

KP  
(initial)

#### D. Signatures

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

##### Sample Collector

Name: Andrew Fetterolf  
Title: Project Manager  
Company: M.E.C.R.S, Inc.  
Address: 22200 IL Rte. 9, P.O. Box 614  
City: Tremont  
State: Illinois  
ZIP Code: 61568  
Phone: (309) 925-5551  
Signature: *Andrew Fetterolf*  
Date: 11/18/10

##### Laboratory Representative

Name: Kristen Potter  
Title: Project Manager  
Company: Prairie Analytical  
Address: 1210 Capital Airport Drive  
City: Springfield  
State: Illinois  
ZIP Code: 62707  
Phone: (217) 753-1148  
Signature: *Kristen Potter*  
Date: 12/1/10

**Appendix C**

**IDOT HAA**

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## HIGHWAY AUTHORITY AGREEMENT

This Agreement is entered into this 6<sup>th</sup> day of September, 2013 pursuant to 35 Ill. Adm. Code 742.1020 by and between the Warsaw ITCO "Owner/Operator" and Illinois Department of Transportation "Highway Authority," collectively known as the "Parties."

**WHEREAS**, Warsaw ITCO is the owner or operator of one or more leaking underground storage tanks presently or formerly located at IL Route 122, Minier, Illinois ("the Site");

**WHEREAS**, as a result of one or more releases of contaminants from the above referenced underground storage tanks "the Release(s)", soil and/or groundwater contamination at the Site exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742;

**WHEREAS**, the soil and/or groundwater contamination exceeding Tier 1 residential remediation objectives extends or may extend into the Highway Authority's right-of-way;

**WHEREAS**, the Owner/Operator is conducting corrective action in response to the Release(s);

**WHEREAS**, the Parties desire to prevent groundwater beneath the Highway Authority's right-of-way that exceeds Tier 1 remediation objectives from use as a supply of potable or domestic water and to limit access to soil within the right-of-way that exceeds Tier 1 residential remediation objectives so that human health and the environment are protected during and after any access;

**NOW, THEREFORE**, the Parties agree as follows:

1. The recitals set forth above are incorporated by reference as if fully set forth herein.
2. The Illinois Emergency Management Agency has assigned incident number **981987** to the Release(s).
3. Attached as Exhibit A is a scaled map(s) prepared by the Owner/Operator that shows the Site and surrounding area and delineates the current and estimated future extent of soil and groundwater contamination above the applicable Tier 1 residential remediation objectives as a result of the Release(s).
4. Attached as Exhibit B is a table(s) prepared by the Owner/Operator that lists each contaminant of concern that exceeds its Tier 1 residential remediation objective, its Tier 1 residential remediation objective and its concentrations within the zone where Tier 1 residential remediation objectives are exceeded. The locations of the concentrations listed in Exhibit B are identified on the map(s) in Exhibit A.
5. Attached as Exhibit C is a scaled map prepared by the Owner/Operator showing the area of the Highway Authority's right-of-way that is governed by this agreement ("Right-of-Way"). Because Exhibit C is not a surveyed plat, the Right-of-Way boundary may be an approximation of the actual Right-of-Way lines.
6. The Highway Authority stipulates it has jurisdiction over the Right-of-Way that gives it sole control over the use of the groundwater and access to the soil located within or beneath the Right-of-Way.
7. The Highway Authority agrees to prohibit within the Right-of-Way all potable and domestic uses of groundwater exceeding Tier 1 residential remediation objectives.

8. The Highway Authority further agrees to limit access by itself and others to soil within the Right-of-Way exceeding Tier 1 residential remediation objectives. Access shall be allowed only if human health (including worker safety) and the environment are protected during and after any access. The Highway Authority may construct, reconstruct, improve, repair, maintain and operate a highway upon the Right-of-Way, or allow others to do the same by permit. In addition, the Highway Authority and others using or working in the Right-of-Way under permit have the right to remove soil or groundwater from the Right-of-Way and dispose of the same in accordance with applicable environmental laws and regulations. The Highway Authority agrees to issue all permits for work in the Right-of-Way, and make all existing permits for work in the Right-of-Way, subject to the following or a substantially similar condition:

As a condition of this permit the permittee shall request the office issuing this permit to identify sites in the Right-of-Way where a Highway Authority Agreement governs access to soil that exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742. The permittee shall take all measures necessary to protect human health (including worker safety) and the environment during and after any access to such soil.

9. This agreement shall be referenced in the Agency's no further remediation determination issued for the Release(s).
10. The Agency shall be notified of any transfer of jurisdiction over the Right-of-Way at least 30 days prior to the date the transfer takes effect. This agreement shall be null and void upon the transfer unless the transferee agrees to be bound by this agreement as if the transferee were an original party to this agreement. The transferee's agreement to be bound by the terms of this agreement shall be memorialized at the time of transfer in a writing ("Rider") that references this Highway Authority Agreement and is signed by the Highway Authority, or subsequent transferor, and the transferee.
11. This agreement shall become effective as a Highway Authority Agreement on the date the Agency issues a no further remediation determination for the Release(s). It shall remain effective as a Highway Authority Agreement until the Right-of-Way is demonstrated to be suitable for unrestricted use and the Agency issues a new no further remediation determination to reflect there is no longer a need for this agreement, or until the agreement is otherwise terminated or voided.
12. In addition to any other remedies that may be available, the Agency may bring suit to enforce the terms of this agreement or may, in its sole discretion, declare this agreement null and void if any of the Parties or any transferee violates any term of this agreement. The Parties or transferee shall be notified in writing of any such declaration.
13. This agreement shall be null and void as a Highway Authority Agreement if a court of competent jurisdiction strikes down any part or provision of the agreement.
14. This agreement supersedes any prior written or oral agreements or understandings between the Parties on the subject matter addressed herein. It may be altered, modified or amended only upon the written consent and agreement of the Parties.
15. Any notices or other correspondence regarding this agreement shall be sent to the Parties at following addresses:

Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, IL 62974-9276

If to Owner/Operator:

If to Department:

John Warsaw  
P. O. Box 886  
Minier, Illinois 61759

Illinois Department of Transportation  
Region Three Engineer  
Attn: District Four Environmental Studies Unit  
401 Main Street  
Peoria, Illinois 61602

And to:

And to:

Midwest Environmental Consulting  
Attn: Penny Silzer  
PO Box 614  
Tremont, Illinois 61568

Illinois Department of Transportation  
Attn: Assistant Chief Counsel  
2300 S. Dirksen Parkway, Room 313  
Springfield, Illinois 62764

16. This Agreement is not binding upon the Department until it is executed by the undersigned representative of the Department. Prior to execution by the undersigned representative of the Department this Agreement constitutes an offer by Owner/Operator. The duly authorized representatives of Owner/Operator have signed this Agreement and this Agreement is binding upon them, their successors and assigns.
17. The IEPA and Illinois Attorney General "AG" must review and approve this Agreement, and this Agreement shall be referenced in the IEPA's "No Further Remediation" determination in the chain of title for the Site in the county where the Site is located. This Agreement shall be null and void as a Highway Authority Agreement should the IEPA or AG not approve it or should it not be referenced in the "No Further Remediation" determination, provided, however, that this Agreement shall be effective between the Owner/Operator and the Department immediately upon signature by their representatives.
18. The Owner/Operator agrees to defend, indemnify and hold harmless the Department, and other highway authorities, if any, maintaining the highway Right-of-Way by an agreement with the Department, and the Department's agents, contractors or employees for all obligations asserted against or costs incurred by them, including reasonable attorney's fees and court costs, associated with the release of Contaminants from the Site, regardless whether said obligations or costs were caused by the negligence, but not the gross negligence, of them.
19. As an additional consideration, Owner/Operator agrees to reimburse the Department for reasonable costs to protect human health and the environment, including, but not limited to, identifying, investigating, handling, storing and disposing of contaminated soil and/or groundwater in the Right-of-Way as a result of the release of contaminants at this Site. It has been determined that the Department has not incurred any reimbursable costs at the time this Agreement is executed by the undersigned representative of the Department. If future costs are incurred, a cashier's check made payable to "Treasurer, State of Illinois" shall be tendered to the Department of Transportation upon demand by the Department.
20. Violation of the terms of this Agreement by Owner/Operator, or their successors in interest, may be grounds for avoidance of this Agreement as a Highway Authority Agreement. Violation of the terms of this Agreement by the Department will not void this Agreement, unless the IEPA has determined that the violation is grounds for voiding this Agreement as a Highway Authority Agreement and the Department has not cured the violation within such time as IEPA has granted to cure the violation.

21. This Agreement is in settlement of claims the Department may have arising from the release of Contaminants into the Right-of-Way associated with IEMA incident number 981987.

22. Prior to accessing or granting access to the soil as provided in Paragraph 8 herein; the Department will first give Owner/Operator written notice, unless there is an immediate threat to the health or safety to any individual or to the public, that it intends to perform a site investigation in the Right-of-Way and remove or dispose of contaminated soil or groundwater to the extent necessary for its work. Failure to give notice is not a violation of this Agreement. The removal or disposal shall be based upon the site investigation (which may be modified by field conditions during excavation). A copy of the site investigation report will be provided to Owner/Operator. If practicable, as reasonably determined by the Department, the Department may provide Owner/Operator with an opportunity to perform the Site investigation and to remove and dispose of the contaminated soil and/or groundwater necessary for the Department's work in advance of that work.

The Owner/Operator shall reimburse the reasonable costs incurred by the Department to perform the site investigation and to dispose of any contaminated soil or groundwater, provided, however, that if notice to Owner/Operator has not been given and there was no immediate threat to health or safety, reimbursement for those costs shall be limited to \$10,000.00. There is a rebuttable presumption that the Contaminants found in the highway Right-of-Way arose from the release of Contaminants from the Site. Should Owner/Operator not reimburse the reasonable costs under the conditions set forth herein, this Agreement shall be null and void, at the Department's option, upon written notice to Owner/Operator by the Department that those costs have not been reimbursed. Owner/Operator may cure that problem within twenty working days by making payment, or may seek to enjoin that result.

23. The Department's sole responsibility under this Agreement with respect to others using the highway Right-of-Way under permit from the Department is to include the following, or similar language, in the future standard permit provisions and to make an effort to notify its current permit holders of the following:

As a condition of this permit the permittee shall request the office issuing this permit to identify sites in the Right-of-Way where a Highway Authority Agreement governs access to soil that exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742. The permittee shall take all measures necessary to protect human health (including worker safety) and the environment during and after any access to such soil.

Owner/Operator hereby releases the Department from liability for breach of this Agreement by others under permit and agrees to defend and indemnify the Department against claims that may arise from others under permit causing a breach of this Agreement. Owner/ Operator agrees that its personnel, if any, at the Site who are aware of this Agreement will notify anyone they know is excavating in the Right-of-Way about this Agreement.

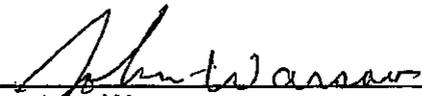
24. Should the Department breach this Agreement, Owner/Operator's sole remedy is for an action for damages in the Illinois Court of Claims. Any and all claims for damages against the Department, its agents, contractors, employees or its successors in interest arising at any time for a breach of paragraphs 7 and 8 of this Agreement are limited to an aggregate maximum of \$20,000.00. No other breach by the Department, its agents, contractors, employees and its successors in interest of a provision of this Agreement is actionable in either law or equity by Owner/Operator against the Department or them and Owner/Operator hereby releases the Department, its agents, contractors, employees and its successors in interest for any cause of action it may have against them, other than as allowed in this paragraph, arising under this Agreement or environmental laws, regulations or common law governing the contaminated soil or groundwater in the highway Right-of-Way. Should the Department convey, vacate or transfer jurisdiction of that highway Right-of-Way, Owner/Operator

may pursue an action under this Agreement against the successors in interest, other than a State agency, in a court of law.

~~25. This Agreement is entered into by the Department in recognition of laws passed by the General Assembly and regulations adopted by the Pollution Control Board which encourage a tiered approach to remediating environmental contamination. This Agreement is entered into by the Department in the spirit of those laws and under its right and obligations as a highway authority.~~

Should any provisions of this Agreement be struck down as beyond the authority of the Department, however, this Agreement shall be null and void.

IN WITNESS WHEREOF, Owner/Operator, Warsaw ITCO, has caused this Agreement to be signed by its duly authorized representative.

BY:   
John Warsaw  
President

DATE: 15 August 2013

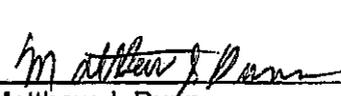
IN WITNESS WHEREOF, the Department has caused this Agreement to be signed by its Secretary.

Illinois Department of Transportation

BY:   
Ann L. Schrieider  
Secretary

DATE: 9/6/13

This Agreement is approved on behalf of the Office of the Illinois Attorney General.

BY:   
Matthew J. Dunn  
Assistant Attorney General  
Chief, Division of Environmental/Asbestos Litigation

DATE: 9/30/13

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**Exhibit: A**

Agricultural

Route 122

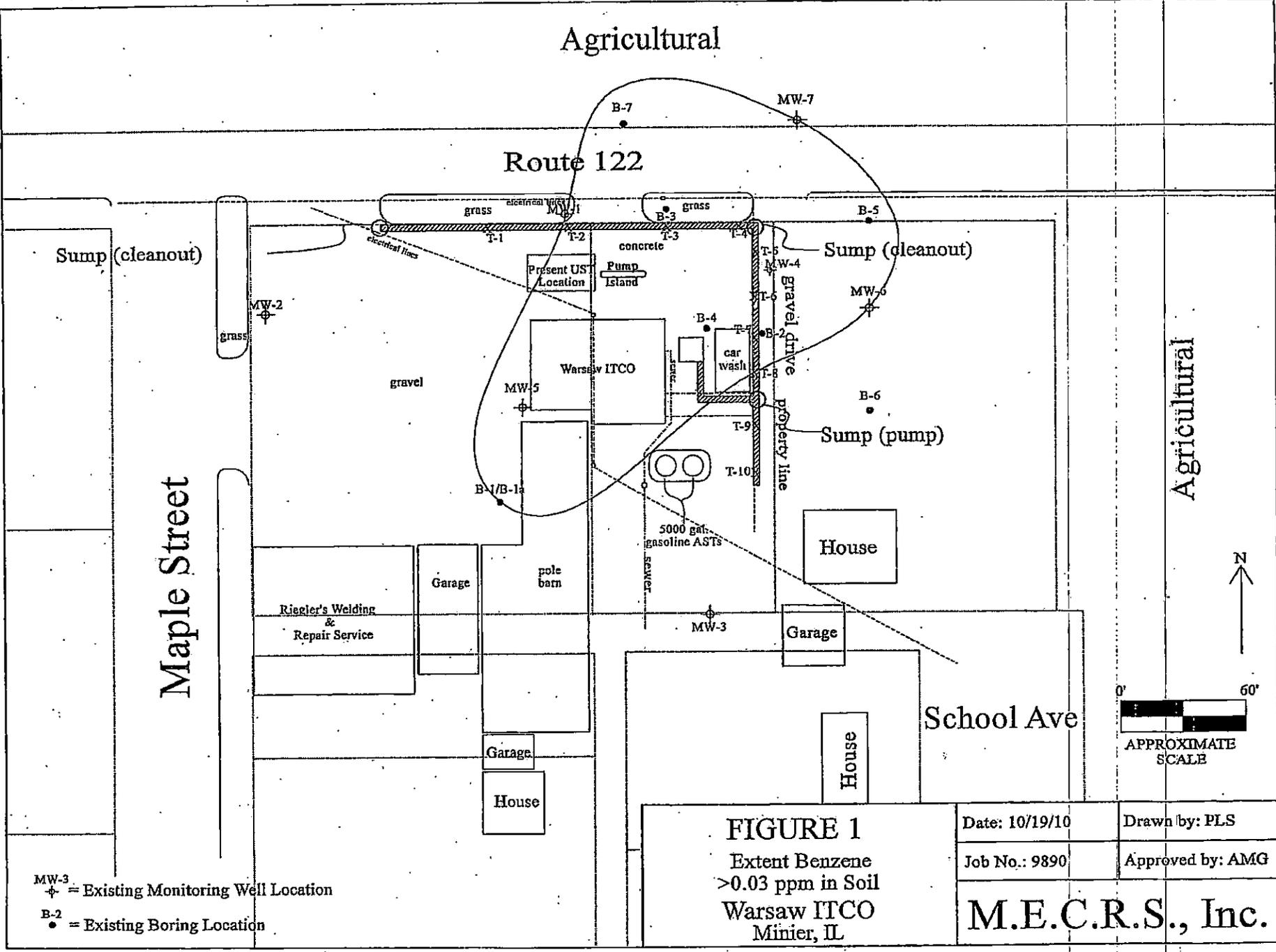
Sump (cleanout)

Sump (cleanout)

Maple Street

Agricultural

Page 7 of 13



**FIGURE 1**  
 Extent Benzene  
 >0.03 ppm in Soil  
 Warsaw ITCO  
 Minier, IL

Date: 10/19/10	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**

HAA 1342

R0581

Agricultural

Route 122

Extent Benzene in GW > 0.005 ppm

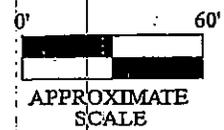
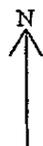
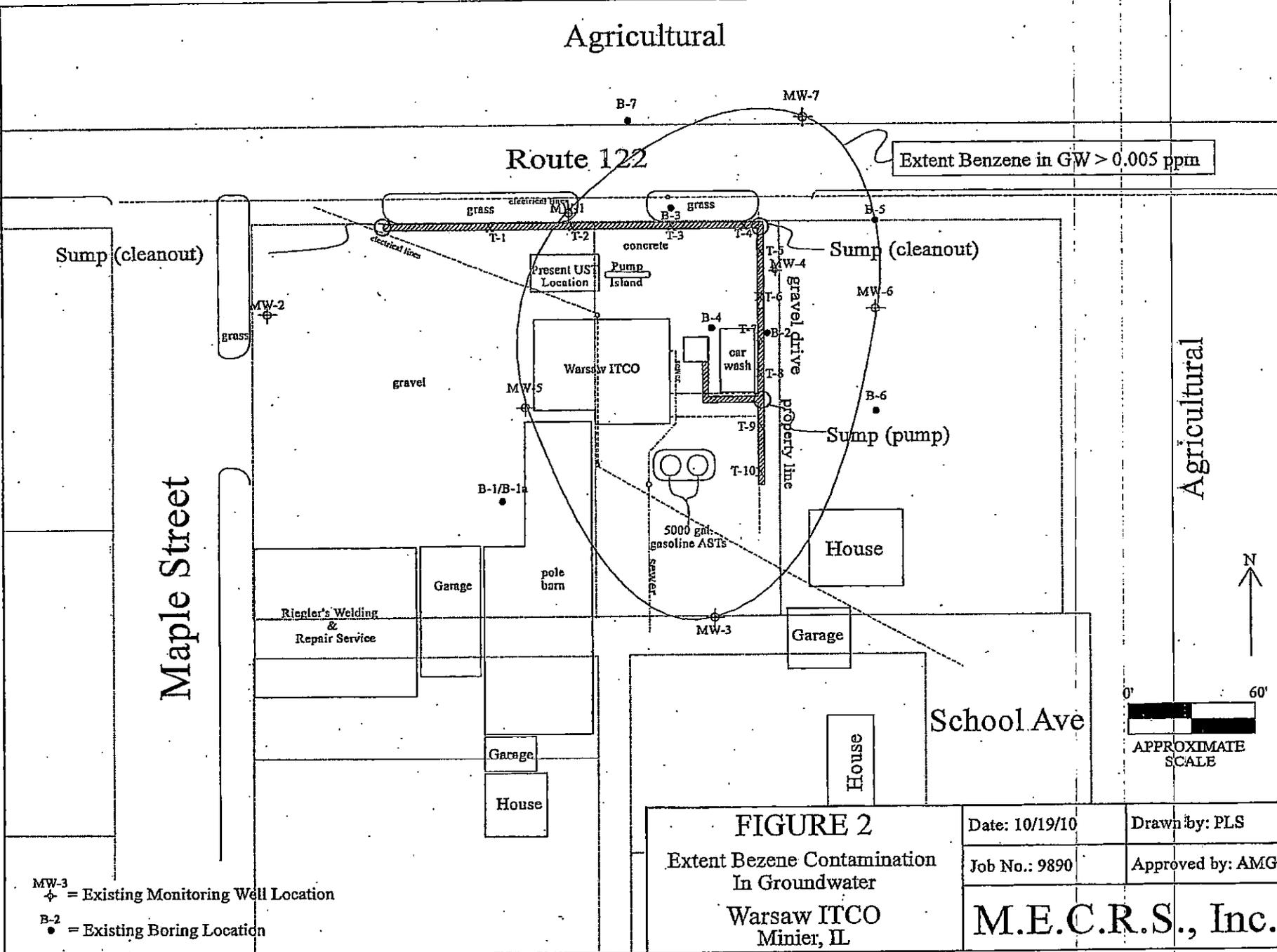
Sump (cleanout)

Sump (cleanout)

Maple Street

Agricultural

Page 8 of 13



MW-3  
 + = Existing Monitoring Well Location  
 B-2  
 • = Existing Boring Location

**FIGURE 2**  
 Extent Benzene Contamination  
 In Groundwater  
 Warsaw ITCO  
 Miner, IL

Date: 10/19/10	Drawn by: PLS
Job No.: 9890	Approved by: AMG
<b>M.E.C.R.S., Inc.</b>	

HAA 1342

R0582

**Exhibit: B**

**The appearance of some of the images  
following this page is due to**

**Poor Quality Original Documents**

**and not the scanning or filming processes.**

**Com Microfilm Company  
(217) 525-5860**

J:\mthox\poor\Docs.doc

**TABLE 1.**  
**Soil Analytical Results**  
**- Warsaw-ITCO**  
**Minier, IL**

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/2000	<0.002	<0.002	<0.002	<0.005	<0.011
B-2, 4-6'	5/3/2000	0.810	1.300	1.700	6.500	10.310
B-2, 6-8'	5/3/2000	0.600	0.220	0.420	1.900	3.140
B-2, 8-10'	5/3/2000	21.0	41.0	47.0	190.0	299.0
B-3, 6-8'	5/3/2000	0.400	0.120	0.210	0.460	1.190
B-3, 8-10'	5/3/2000	2.300	2.100	21	110	135.400
MW-1, 6-8'	5/4/2000	<0.002	<0.002	<0.002	<0.005	<0.011
MW-2, 8-10'	5/3/2000	<0.002	<0.002	<0.002	<0.005	<0.011
MW-3, 8-10'	5/3/2000	<0.002	<0.002	0.006	<0.005	<0.0147
MW-4, 4-6'	5/4/2000	0.230	0.220	0.870	2.500	3.820
MW-4, 6-8'	5/4/2000	0.300	1.200	5.400	20.000	26.900
B-4, 0.5-2.5'	8/23/2001	0.0081 M	0.019 M	0.0447 M	0.0772 M	0.149 M
B-4, 4-6'	8/23/2001	11.6 ME	42.7 ME	9.72 ME	38.0 ME	102.02 ME
B-5, 6-8'	8/23/2001	0.049	0.186 E	0.038	0.130	0.403
B-6, 4-6'	8/23/2001	0.020	0.053	0.031	0.090	0.194
B-6, 8-10'	8/23/2001	0.007	0.012	<0.0024	0.011	<0.0323
B-7, 8-10'	8/23/2001	0.0167 M	0.0615 M	0.0139 M	0.0395 M	0.1316 M
B-7, 12-14'	8/23/2001	0.754	<0.0613	<0.0613	<0.153	<1.0296
MW-5, 8-10'	8/23/2001	0.494 M	4.75 M	5.89 M	7.57 M	18.704 M
MW-6, 6-8'	8/23/2001	0.007	0.012	0.006	0.011	0.037
MW-7, 4-6'	8/23/2001	0.012	0.025	0.011	0.020	0.068
MW-7, 8-10	8/23/2001	0.0155 M	0.0202 M	0.007	0.012	0.054
T-1	10/20/2003	<0.0026	0.0032	<0.0026	<0.0065	<0.0149
T-2	10/20/2003	<0.0026	<0.0026	<0.0026	<0.0065	<0.0143
T-3	10/20/2003	<0.0024	0.0051	0.0051	0.0142	<0.0268
T-4	10/20/2003	<0.0024	<0.0024	<0.0024	<0.0059	<0.0131
T-5	10/20/2003	0.0034	0.0408	0.3600	0.9470	1.3512
T-6	10/20/2003	0.0853	0.6350	1.8400	7.1400	9.7003
T-7	10/20/2003	0.0855	0.0438	1.1200	2.4600	3.7093
T-8	10/20/2003	<0.0025	0.0066	0.0189	0.0568	<0.0848
T-9	10/20/2003	<0.0024	<0.0024	<0.0024	<0.0061	<0.0133
T-10	10/20/2003	<0.0025	<0.0025	<0.0025	<0.0062	<0.0137

## Notes:

- All results in mg/kg (parts per million, ppm).
- IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
0.03	12	13	150

- All bolded values are above Tier 1 Residential Cleanup Objectives
- M = Matrix interferences identified.
- E = Estimated - Value outside linear calibration curve.

MIDWEST ENVIRONMENTAL CONSULTING AND REMEDIATION SERVICES, INC.

Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois

HAA 1342

Sample #	Date	DTW	GWE	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX
<b>MW-1</b> Elevation Top of Casing = 99.62								
SC	5/12/2000	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3
1	10/24/2000	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4
2	8/23/2001	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E
3	11/13/2001	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.41	94.21	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.65	94.97	NS	NS	NS	NS	NS
<b>MW-2</b> Elevation Top of Casing = 99.28								
SC	5/9/2000	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7
3	11/13/2001	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.12	94.16	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.38	94.90	NS	NS	NS	NS	NS
<b>MW-3</b> Elevation Top of Casing = 99.700								
SC	5/9/2000	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
3	11/13/2001	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.37	94.63	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.34	95.66	NS	NS	NS	NS	NS
<b>MW-4</b> Elevation Top of Casing = 99.84								
SC	5/9/2000	5.90	93.94	2,600	12,000	4,500	18,000	37,100
1	10/24/2000	7.80	92.04	2,300	5,200	4,000	13,000	24,500
2	8/23/2001	6.67	93.17	2,290 M	2,380 M	8,150	23,600 E	36,420 E
3	11/13/2001	6.11	93.73	1,910	3,960	3,360	10,000	19,230
4	2/14/2002	5.00	94.84	1,100	1,200	2,900	5,500	10,700
5	1/24/2005	4.47	95.37	NS	NS	NS	NS	NS
<b>MW-5</b> Elevation Top of Casing = 99.57								
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9
3	11/13/2001	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.86	1.4	2.2	1.5	4.5	9.6
5	1/24/2005	3.89	95.68	NS	NS	NS	NS	NS
<b>MW-6</b> Elevation Top of Casing = 99.59								
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5
3	11/13/2001	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.65	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	WELL ICED OVER		NS	NS	NS	NS	NS
<b>MW-7</b> Elevation Top of Casing = 100.07 WELL DESTROYED AT TIME OF 1/25/05 DTW MEASUREMENT								
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	7.28	92.79	<2.0	<2.0	<2.0	5.9	<11.9
3	11/13/2001	6.23	93.84	117 E	<2.0	<2.0	<5.0	<126 E
4	2/14/2002	5.52	94.55	7	<1.0	<1.0	<3.0	<12.0
5	1/24/2005	--	--	NS	NS	NS	NS	NS

- All results reported in ug/kg (i.e. parts per billion, ppb)
- IEPA Tier I Cleanup Objectives (ug/kg):
- No data available
- MDL = Method Detection Limit
- DTW = Depth to Water
- GWE = Groundwater Elevation referenced to datum point
- NA/NS = Not analyzed/not sampled this event
- E = Estimated - value outside linear range
- M = Matrix interferences identified.

Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

Date	Average DTW
5/9/2000	5.85
10/24/2000	7.78
8/23/2001	6.09
11/13/2001	6.01
2/14/2002	5.12
1/24/2005	4.35
Cumulative DTW Average:	5.87

**Exhibit: C**

Agricultural

Route 122

Sump (cleanout)

Sump (cleanout)

Present US Location  
Pump Island

Warsaw ITCO

car wash

Sump (pump)

House

Riegler's Welding & Repair Service

Garage

pole barn

Garage

Garage

House

House

School Ave

Agricultural



Page 13 of 13

Maple Street

MW-3  
⊕ = Existing Monitoring Well Location  
B-2  
● = Existing Boring Location

FIGURE 3  
Highway Authority  
Agreement Area  
Warsaw ITCO  
Minier, IL

Date: 10/19/10  
Job No.: 9890  
Drawn by: PLS  
Approved by: AMG

M.E.C.R.S., Inc.

HAA 1342

R0588

## Appendix D

### Village of Minier Groundwater Ordinance

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**VILLAGE OF MINIER**

---

**ORDINANCE NO. 808**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS PROHIBITING THE  
USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE  
INSTALLATION OR THE USE OF POTABLE WATER SUPPLY WELLS OR BY ANY  
OTHER METHOD**

---

**ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS**

**THIS 19th DAY OF MARCH 2013**

---

**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 19th day of March, 2013.**

**ORDINANCE NO. 808**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS PROHIBITING THE  
USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE  
INSTALLATION OR THE USE OF POTABLE WATER SUPPLY WELLS OR BY ANY  
OTHER METHOD**

---

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

WHEREAS, certain properties in the Village of Minier ("Village"), Illinois have been used over a period of time for commercial/industrial purposes; and

WHEREAS, because of said use, concentrations of certain chemical constituents in the groundwater beneath the Village may exceed Class I groundwater quality standards for potable resource groundwater as set forth in 35 Illinois Administrative Code 620 or Tier 1 remediation objectives as set forth in 35 Illinois Administrative Code 742; and

WHEREAS, the Village to limit potential threats to human health from groundwater contamination while facilitating the redevelopment and productive use of properties that are the source of said chemical constituents;

**NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER, ILLINOIS:**

**Section One.** Use of groundwater as a potable water supply prohibited.

Except for such uses or methods in existence before the effective date of this ordinance, the use or attempt to use as a potable water supply groundwater from within the corporate limits of the Village of Minier, as a potable water supply, by the installation or drilling of wells or by any other method is hereby prohibited. This prohibition does not include the Village of Minier.

**Section Two.** Penalties.

Any person violating the provisions of this ordinance shall be subject to a fine of up to \$250.00 for each violation.

**Section Three.** Definitions.

"Person" is any individual, partnership, co-partnership, firm, company, limited

liability company, corporation, association, joint stock company, trust, estate, political subdivision, or any other legal entity, or their legal representatives, agents or assigns.

"Potable water" is any water used for human or domestic consumption, including, but not limited to, water used for drinking, bathing, swimming, washing dishes, or preparing foods.

**Section Four.** Memorandum of Understanding.

The President of the Village of Minier was previously authorized and directed to enter into a Memorandum of Understanding on or about January 4, 2011 with the Illinois Environmental Protection Agency ("Illinois EPA") in which the Village of Minier assumes responsibility for tracking all sites that have received no further remediation determinations from the Illinois EPA, notifying the Illinois EPA of changes to this ordinance, and taking certain precautions when siting public potable water supply wells.

**Section Five.** Repealer.

All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed insofar as they are in conflict with this ordinance.

**Section Six.** Severability.

If any provision of this ordinance or its application to any person or under any circumstances is adjudged invalid, such adjudication shall not affect the validity of the ordinance as a whole or of any portion not adjudged invalid.

**Section Seven.** Effective date.

This ordinance shall be in full force and effect from and after its passage, approval and publication as required by law.

PASSED at a regular meeting of the Village Board of the Village of Minier held the 19th day of March, 2013.

AYES: Devine, Burt, LaDew, Crawford, Beccue & Needles

NAYS: None

ABSENT: None

APPROVED this 19th day of March, 2013.

ATTEST:

Neil Kenagy  
Village President

---

Gandy Lancaster  
Village Clerk

## CERTIFICATION OF ORDINANCE

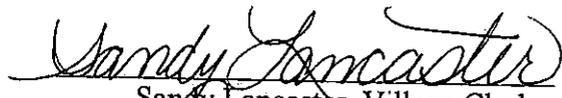
I, SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that on March 19, 2013, the Corporate Authorities of the above municipality passed and approved Ordinance No. 808 .

Ordinance No. 808, including the cover sheet thereof, was prepared, and published in pamphlet form on the 19th day of March, 2013. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

Dated at Minier, Illinois, this the 19th day of March, 2013.

(SEAL)

  
Sandy Lancaster, Village Clerk

**CERTIFICATION OF ORDINANCE**

I, SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

---

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Dated at Minier, Illinois, this the 19th day of March, 2013.

(SEAL)

  
Sandy Lancaster, Village Clerk

# Appendix E

## Budget Amendment

---

# General Information for the Budget and Billing Forms

LPC#: 1790455007 County: Tazewell  
City: Minier Site Name: Warsaw, Howard (Warsaw ITCO)  
Site Address: Ill. Rte. 122

IEMA Incident No: 981987  
IEMA Notification Date: August 11, 1998  
Date this form was prepared: February 24, 2014

**This form is being submitted as a (check one if applicable):**

- Budget Proposal
- Budget Amendment (Budget Amendments must include only the costs over the previous budget.)
- Billing Package

Please provide the name(s) and date(s) of report(s) documenting the costs as requested:  
Name(s): \_\_\_\_\_  
Date (s): \_\_\_\_\_

**This package is being submitted for the site activities indicated below:**

**RECEIVED**  
MAR 14 2014  
**IEPA/BOL**

**35 Ill. Adm. Code 734:**

- Early Action
- Free Produce Removal After Early Action
- Site Investigation.....Stage 1:  Actual Costs      Stage 2:       Stage 3:
- Corrective Action

**35 Ill. Adm. Code 732:**

- Early Action
- Free Produce Removal After Early Action
- Site Classification
- Low Priority Corrective Action
- High Priority Corrective Action

**35 Ill. Adm. Code 731**

- Site Investigation
- Corrective Action

IL 532-2825  
LPC 630 Rev. 1/2007

# General Information for the Budget and Billing Forms

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund.

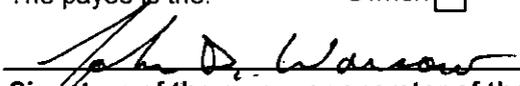
Pay to the order of: John Warsaw

Send in care of: Midwest Environmental Consulting & Remediation Services, Inc

Address: PO Box 614

City: Tremont State: IL Zip: 61568

The payee is the: Owner:  Operator:  (Check one or both)

  
**Signature of the owner or operator of the UST(s) (required)** W-9 must be submitted.  
 Click [here](#) to print off a W-9 Form.

Number of petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101  101 or more:

Number of USTs at the site: 10 (Number of USTs includes USTs presently at the site and USTs that have been removed).

Number of incidents reported to the IEMA for this site: 1

Incidents Numbers assigned to the site due to releases from USTs: 981987

Please list all tanks that have ever been located at the site and tanks that are presently located at the site.

Product Stored in UST	Size (gallons)	Did UST have a release?	Incident No.	Type of Release Tank Leak / Overfill / Piping Leak
gasoline	500	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
gasoline	500	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
gasoline	2,000	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
diesel	2,500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		

# Budget Summary

Chose the applicable regulation:  734  732

<b>734</b>	Free Product	Stage 1 Site Investigation	Stage 2 Site Investigation	Stage 3 Site Investigation	Corrective Action
Drilling and Monitoring Well Costs Form					\$2,264.40
Analytical Costs Form					\$2,908.56
Remediation and Disposal Costs Form					\$1,191.08
UST Removal and Abandonment Costs Form					\$0.00
Paving, Demolition, and Well Abandonment Costs Form					\$0.00
Consulting Personnel Costs Form					\$9,481.11
Consultant's Materials Costs Form					\$185.90
Handling Charges Form	Handling charges will be determined at the time a billing package is submitted to the Illinois EPA. The amount of allowable charges will be determined in accordance with the				
<b>Total</b>					<b>\$16,031.05</b>

# Drilling and Monitoring Well Costs Form

## 1. Drilling

Number of Borings to Be Drilled	Type HSA / PUSH / Injection	Depth (feet) of Each Boring	Total Feet Drilled	Reason for Drilling
8	PUSH	15.00	120.00	define current extend of contamination
			0.00	
			0.00	
			0.00	
			0.00	
			0.00	
			0.00	

Subpart H minimum payment amounts applies.

	Total Feet	Rate per Foot (\$)	Total Cost (\$)
Total Feet via HSA:	120.00	\$18.87	\$2,264.40
Total Feet via PUSH:			\$0.00
Total Feet for Injection via PUSH:			\$0.00
Total Drilling Costs:			\$2,264.40

## 2. Monitoring / Recovery Wells

Number of Wells	Type of Well HSA / PUSH / 4" - 6" Recovery / 8" Recovery	Diameter of Well (inches)	Depth of Well (feet)	Total Feet of Wells to Be Installed (\$)
				0.00
				0.00
				0.00
				0.00
				0.00

Well Installation	Total Feet	Rate per Foot (\$)	Total Cost (\$)
Total Feet via HSA:			\$0.00
Total Feet via PUSH:			\$0.00
Total Feet of 4" or 6" Recovery:			\$0.00
Total Feet of 8' or Greater Recovery:			\$0.00
Total Well Costs:			\$0.00

<b>Total Drilling and Monitoring Well Costs:</b>	<b>\$2,264.40</b>
--	-------------------

## Analytical Costs Form

Laboratory Analysis	Number of Samples		Cost (\$) per Analysis		Total per Parameter
<b>Chemical Analysis</b>					
BTEX Soil with MTBE EPA 8260	24	x	\$101.24	=	\$2,429.76
BTEX Water with MTBE EPA 8260	2	x	\$96.48	=	\$192.96
COD (Chemical Oxygen Demand)		x	\$32.71	=	\$0.00
Corrosivity		x	\$16.36	=	\$0.00
Flash Point or Ignitability Analysis EPA 1010		x	\$35.99	=	\$0.00
Fraction Organic Carbon Content (f <sub>oc</sub> ) ASTM-D 2974-00		x	\$41.44	=	\$0.00
Fat, Oil, & Grease (FOG)		x	\$65.43	=	\$0.00
JUST Pollutants Soil - analysis must include volatile, base/neutral, polynuclear aromatics and metals list in Section 732, Appendix B and 734, Appendix B.		x	\$755.72	=	\$0.00
Dissolved Oxygen (DO)		x	\$26.17	=	\$0.00
Paint Filter (Free Liquids)		x	\$15.27	=	\$0.00
PCB / Pesticides (combination)		x	\$37.08	=	\$0.00
PCBs		x	\$165.76	=	\$0.00
Pesticides		x	\$165.76	=	\$0.00
pH		x	\$15.27	=	\$0.00
Phenol		x	\$37.08	=	\$0.00
Polynuclear Aromatics PNAs or PAH SOIL EPA 8270		x	\$176.80	=	\$0.00
Polynuclear Aromatics PNA, PAH WATER EPA 8270		x	\$176.80	=	\$0.00
Reactivity		x	\$74.15	=	\$0.00
SVOC - Soil (Semi-Volatile Organic Compounds)		x	\$341.33	=	\$0.00
SVOC - Water (Semi-Volatile Organic Compounds)		x	\$341.33	=	\$0.00
TKN (Total Kjeldahl) "nitrogen"		x	\$47.98	=	\$0.00
TPH (Total Petroleum Hydrocarbons)		x	\$133.04	=	\$0.00
VOC (Volatile Organic Compound) - Soil (Non-Aqueous)		x	\$190.84	=	\$0.00
VOC (Volatile Organic Compound) - Water		x	\$184.29	=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
<b>Geo-Technical</b>					
Bulk Density (ρ <sub>b</sub> ) ASTM D4292 / D2937		x	\$23.99	=	\$0.00
Ex-Situ Hydraulic Conductivity / Permeability		x	\$278.08	=	\$0.00
Moisture Content (w) ASTM D2216-90 / D4643-87		x	\$13.09	=	\$0.00
Porosity		x	\$32.71	=	\$0.00
Rock Hydraulic Conductivity Ex-Situ		x	\$381.67	=	\$0.00
Sieve / Particle Size Analysis ASTM D422-63 / D1140-54		x	\$158.12	=	\$0.00
Soil Classification ASTM D2488-90 / D2487-90		x	\$74.15	=	\$0.00
Soil Particle Density (ρ <sub>s</sub> ) ASTM D854-92		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00

# Analytical Costs Form

Metals Analysis					
Soil preparation fee for Metals Soil TCLP (one fee per soil sample)		x	\$86.15	=	\$0.00
Soil preparation fee for Metals Total Soil (one fee per soil sample)		x	\$17.45	=	\$0.00
Water Preparation fee for Metals in Water (one fee per water sample)		x	\$12.00	=	\$0.00
Arsenic TCLP Soil		x	\$17.45	=	\$0.00
Arsenic Total Soil		x	\$17.45	=	\$0.00
Arsenic Water		x	\$19.63	=	\$0.00
Barium TCLP Soil		x	\$10.90	=	\$0.00
Barium Total Soil		x	\$10.90	=	\$0.00
Barium Water		x	\$13.09	=	\$0.00
Cadmium TCLP Soil		x	\$17.45	=	\$0.00
Cadmium Total Soil		x	\$17.45	=	\$0.00
Cadmium Water		x	\$19.63	=	\$0.00
Chromium TCLP Soil		x	\$10.90	=	\$0.00
Chromium Total Soil		x	\$10.90	=	\$0.00
Chromium Water		x	\$13.09	=	\$0.00
Cyanide TCLP Soil		x	\$30.53	=	\$0.00
Cyanide Total Soil		x	\$37.08	=	\$0.00
Cyanide Water		x	\$37.08	=	\$0.00
Iron TCLP Soil		x	\$10.90	=	\$0.00
Iron Total Soil		x	\$10.90	=	\$0.00
Iron Water		x	\$13.09	=	\$0.00
Lead TCLP Soil		x	\$17.45	=	\$0.00
Lead Total Soil		x	\$17.45	=	\$0.00
Lead Water		x	\$19.63	=	\$0.00
Mercury TCLP Soil		x	\$20.72	=	\$0.00
Mercury Total Soil		x	\$10.90	=	\$0.00
Mercury Water		x	\$28.35	=	\$0.00
Selenium TCLP Soil		x	\$17.45	=	\$0.00
Selenium Total Soil		x	\$17.45	=	\$0.00
Selenium Water		x	\$16.36	=	\$0.00
Silver TCLP Soil		x	\$10.90	=	\$0.00
Silver Total Soil		x	\$10.90	=	\$0.00
Silver Water		x	\$13.09	=	\$0.00
Metals TCLP Soil (a combination of all RCRA metals)		x	\$112.32	=	\$0.00
Metals Total Soil (a combination of all RCRA metals)		x	\$102.51	=	\$0.00
Metals Water (a combination of all RCRA metals)		x	\$129.77	=	\$0.00
Other					
EnCore Sampler, purge-and-trap sampler or equivalent sampling device	24	x	\$11.91	=	\$285.84
Sample Shipping per sampling event <sup>1</sup>		x	\$54.52	=	\$0.00

<sup>1</sup>A sampling event, at a minimum, is all samples (soil and groundwater) collected in a calendar day.

Total Analytical Costs: \$2,908.56

# Remediation and Disposal Costs Form

## C. Groundwater Remediation and/or Free Product Removal System

Total Non-Consulting Personnel Costs Summary Sheet (\$)	
Total Remediation Materials Costs Summary Sheet (\$)	
Total Cost of the System	

## D. Groundwater and/or Free Product Removal and Disposal

Subpart H minimum payment amount applies.

Number of Gallons	Cost per Gallon (\$)	Total Cost (\$)

## E. Drum Disposal

Subpart H minimum payment amount applies.

Number of Drums of Solid Waste	Cost Per Drum (\$)	Total Cost (\$)
4	297.77	\$1,191.08
Number of Drums of Liquid Waste	Cost Per Drum (\$)	Total Cost (\$)
Total Drum Disposal Costs		\$1,191.08

Total Remediation and Disposal Costs:	\$1,191.08
---------------------------------------	------------

### Consulting Personnel Costs Form

Employee Name	Personnel Title*	Hours	Rate *	Total \$
Remediation Category	Task			
Allan Green	Senior Project Manager	25	\$119.11	\$2,977.75
CA	project oversight, planning, permits, subcontractors			
Penny Silzer	Project Manager	45	\$107.20	\$4,824.00
CA	oversight of field activities, sample collection and preparation, report prep. Reim			
Andrew Fetterolf	Technician IV	6.00	\$71.46	\$428.76
CA	purge and sample groundwater monitoring wells, collect depth to water in all wells			
Penny Silzer	Sr. Geologist, PG	5	\$131.02	\$655.10
CA	review and certify reports and reimbursements			
Gaye Lynn Green	Sr. Acct Technician	5	\$65.50	\$327.50
CA	reimbursement forms			
Gaye Lynn Green	Sr. Admin. Assistant	5	\$53.60	\$268.00
CA	format, finalize, copy and submit reports and reimbursements			
				\$0.00
				\$0.00

\*Refer to the applicable Maximum Payment Amounts document.

<b>Total of Consulting Personnel Costs</b>	<b>\$9,481.11</b>
--	-------------------

**Consultant's Materials Costs Form**

Consulting Materials Costs:

Materials, Equipment, or Field Purchases	Time or Amount Use	Rate (\$)	Units	Total Cost
Remediation Category	Description/Justification			
Company Vehicle Mileage	105.00	\$0.58	/mile	\$60.90
CA - field	site visits and mobilization to and from site			
Well Sampling Equipment	1.00	\$25.00	/day	\$25.00
CA - field	for sampling groundwater monitoring wells			
PID	1	\$100.00	/day	\$100.00
CA- Field	soil sample screening			
				\$0.00
				\$0.00
				\$0.00
				\$0.00

**Total Consultant's Material's Costs: \$185.90**



Office of the Illinois  
**State Fire Marshal**

General Office  
217-785-0969  
FAX  
217-782-1062

Divisions

ARSON INVESTIGATION  
217-782-9116  
BOILER and PRESSURE  
VESSEL SAFETY  
217-782-2696  
FIRE PREVENTION  
217-785-4714  
MANAGEMENT SERVICES  
217-782-9889  
INFIRS  
217-785-5826  
HUMAN RESOURCES  
217-785-1026  
PERSONNEL STANDARDS  
and EDUCATION  
217-782-4542  
PETROLEUM and  
CHEMICAL SAFETY  
217-785-5878  
PUBLIC INFORMATION  
217-785-1021  
WEB SITE  
www.state.il.us/osfm

CERTIFIED MAIL - RECEIPT REQUESTED #Z 082 409 569.

September 30, 1999

Howard Warsaw  
Route 122  
Minier, IL 61759

In Re: Facility No. 3-005023  
IEMA Incident No. 98-1987  
Warsaw ITCO  
Route 122  
Minier, Tazewell Co., IL

Dear Applicant:

The Reimbursement Eligibility and Deductible Application received on September 23, 1999 for the above referenced occurrence has been reviewed. The following determinations have been made based upon this review.

It has been determined that you are eligible to seek payment of costs in excess of \$10,000. The costs must be in response to the occurrence referenced above and associated with the following tanks:

Eligible Tanks

Tank 1 500 gallon Gasoline  
Tank 2 500 gallon Gasoline  
Tank 3 2,000 gallon Gasoline

You must contact the Illinois Environmental Protection Agency to receive a packet of Agency billing forms for submitting your request for payment.

An owner or operator is eligible to access the Underground Storage Tank Fund if the eligibility requirements are satisfied:

1. Neither the owner nor the operator is the United States Government,
2. The tank does not contain fuel that is exempt from the Motor Fuel Tax Law,
3. The costs were incurred as a result of a confirmed release of any of the following substances:

"Fuel", as defined in Section 1.19 of the Motor Fuel Tax Law

Aviation fuel

Heating oil

Kerosene

Used oil, which has been refined from crude oil used in a motor vehicle, as defined in Section 1.3 of the Motor Fuel Tax Law.

4. The owner or operator registered the tank and paid all fees in accordance with the statutory and regulatory requirements of the Gasoline Storage Act.
5. The owner or operator notified the Illinois Emergency Management Agency of a confirmed release, the costs were incurred after the notification and the costs were a result of a release of a substance listed in this Section. Costs of corrective action or indemnification incurred before providing that notification shall not be eligible for payment.
6. The costs have not already been paid to the owner or operator under a private insurance policy, other written agreement, or court order.
7. The costs were associated with "corrective action".

This constitutes the final decision as it relates to your eligibility and deductibility. We reserve the right to change the deductible determination should additional information that would change the determination become available. An underground storage tank owner or operator may appeal the decision to the Illinois Pollution Control Board (Board), pursuant to Section 57.9 (c) (2). An owner or operator who seeks to appeal the decision, shall file a petition for a hearing before the Board within 35 days of the date of mailing of the final decision, (35 Illinois Administrative Code 105.102(a) (2)).

For information regarding the filing of an appeal, please contact:

Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
State of Illinois Center  
100 West Randolph, Suite 11-500  
Chicago, Illinois 60601  
(312) 814-3620

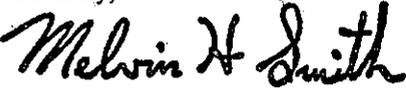
The following tanks are also listed for this site:

Tank 4 2,500 gallon Diesel  
Tank 5 2,500 gallon Gasoline  
Tank 6 2,500 gallon Gasoline  
Tank 7 2,500 gallon Gasoline

Your application indicates that there has not been a release from these tanks under this incident number. You may be eligible to seek payment of corrective action costs associated with these tanks if it is determined that there has been a release from one or more of these tanks. Once it is determined that there has been a release from one or more of these tanks you may submit a separate application for an eligibility determination to seek corrective action costs associated with this/these tanks.

If you have any questions regarding the eligibility or deductibility determinations, please contact our Office at (217) 785-1020 or (217) 785-5878.

Sincerely,

A handwritten signature in cursive script that reads "Melvin H. Smith".

Melvin H. Smith  
Division Director  
Division of Petroleum and Chemical Safety

MHS/dl

cc: IEPA  
Facility File

R0608

## Owner/Operator and Licensed Professional Engineer/Geologist Budget Certification Form

I hereby certify that I intend to seek payment from the UST Fund for costs incurred while performing corrective action activities for Leaking UST incident 981987. I further certify that the costs set forth in this budget are necessary activities and are reasonable and accurate to the best of my knowledge and belief. I also certify that the costs included in this budget are not for corrective action in excess of the minimum requirements of 415 ILCS 5/57 and no costs are included in this budget which are not described in the corrective action plan, and no costs exceed Subpart H: Maximum Payment Amounts, Appendix D Sample Handling and Analysis amounts, and Appendix E Personnel Titles and Rates of 35 Ill. Adm. Code 732 or 734. I further certify that costs ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code Section 732.606 or 734.630 are not included in the budget proposal or amendment. Such ineligible costs include but are not limited to:

- Costs associated with ineligible tanks.
- Costs associated with site restoration (e.g., pump islands, canopies).
- Costs associated with utility replacement (e.g., sewers, electrical, telephone, etc).
- Costs incurred prior to IEMA notification.
- Costs associated with planned tank pulls.
- Legal fees or costs.
- Costs incurred prior to July 28, 1989.
- Costs associated with installation of new USTs or the repair of existing USTs.

**RECEIVED**

MAR 14 2014

Owner/Operator: John Warsaw

Authorized Representative: John Warsaw

Title: Owner

**EPA/BOL**

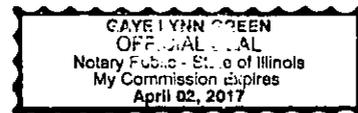
Signature: *John Warsaw*

Date: 3-8-14

Subscribed and sworn to before me the 8<sup>th</sup> day of March, 2014.  
*(Budget Proposals and Budget Amendments must be notarized when the certification is signed.)*

*Gaye Lynn Green*  
 (Notary Public)

Seal:



In addition, I certify under penalty of law that all activities that are the subject of this plan, budget or report were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan, budget, or report and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in the plan, budget, or report has been completed in accordance with the Environmental Protection Act [415 ILCS5], 35 Ill. Adm. Code 732-734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

L.P.E./L.P.G.: Penny Silzer

L.P.E./L.P.G. Seal:

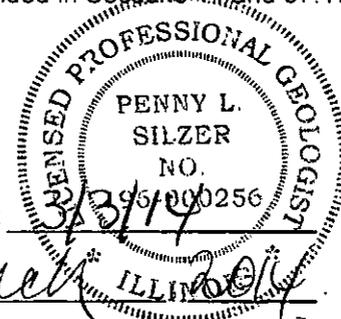
L.P.E./L.P.G. Signature: *Penny Silzer*

Date: 3/31/14

Subscribed and sworn to before me the 3<sup>rd</sup> day of March, 2014.

*Gaye Lynn Green*  
 (Notary Public)

Seal:



The Illinois EPA is authorized to require this information under 415 ILCS 5/7. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder.

JUL 23 2014

LEAKING UST TECHNICAL REVIEW NOTES

REVIEWER RDH

Reviewed by: Jim Ransdell  
Date Reviewed: 3/15/11  
Amended CAP/Bu Rec'd 11/19/10  
CAP Rec'd 3/14/14

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw  
Warsaw Itco/Rt. 122

Warsaw, Howard 981987

Corrective Action Plan/Bu Rec'd 11/19/10:

Plan proposes a Taco, and a pathways exposure evaluation.

Will determine site-specific parameters (Remediation Objectives) pursuant to Section 732.408

1. Proposing to the Village of Minier to adopt a Groundwater Ordinance
2. Proposing to obtain Highway Authority Agreement (HAA) with the Illinois Department of Transportation (IDOT) for the contamination under Ill. Rt. 122.
3. Proposing that concrete on-site as an Engineered Barrier.
4. Site will be limited to Industrial/Commercial land use.
5. A Construction Worker Caution statement in the NFR.
6. An ELUC is proposed for property east of the site. (residential)
7. MW-4 and MW-7 will be sampled for BTEX

**Budget (See Page 2)**

\$34,790.00 deduction in Personnel Costs for Costs of corrective action implementation, CAP preparation, design, and research, and permitting costs associated with enhanced bioremediation and a groundwater treatment system.

\$7,800.00 deduction in Field Purchases and Other Costs for Bureau of Air and Bureau of Water permitting and repair of equipment

The costs are not consistent with materials, activities, and services associated an Illinois EPA-approved technical plan. One of the overall goals of the financial review is to assure that costs associated with materials, activities, and services are consistent with the associated technical plan. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.510(b).

The plan at hand, which is approved, does not propose corrective action activities involving enhanced bioremediation and/or a groundwater treatment system.

R0610

Costs for Alternative Technology has never been approved in prior CAP's.

CAP Received 8/25/05 was rejected, the Agency PM requested information about the proposed Technology to be used and requested sites that have had success. It was also requested that Appendix G (TACO parameters) and soil sample locations on site map for T-1 through T-10 be submitted. These were never submitted.

The CAP Rec'd 6/18/10 proposed the same Alternative Tech. Treatment system enhanced bio-remediation with horizontal recovery wells

Budget: Personnel Costs

CAP Implementation for 205 hours

Water Permitting for 50 hours

CAP prep, Design and Research 100 hours

The Personnel Costs for these activities were \$34,790.00 and the Water Permit was \$7,800.00

It is unclear if Consultant implemented this technology between 2005 and 2010 and is requesting Costs be approved.

End

Costs for Soil Bulk Density (\$24.96) and Moisture Content (\$13.61) were added to Budget to complete 734.410

**Illinois EPA Recommendation/Comments:**

Plan will be approved for TACO and Institutional Controls. The Budget will be Modified to reflect current CAP proposals.

**CAP/BU Dated 3/3/14 and Received 3/14/14**

- 1. Owner/Operator proposes to utilize TACO and I/C's for closure.**
  - A. UST Owner has Ordinance #808 currently at Division of Legal Council (DLC) for review.
  - B. The O/O has submitted a Highway Authority Agreement (HAA) #1342 with the Illinois Department of Transportation (IDOT) for Rt. 122 for Agency review
- 2. Proposed Sampling for groundwater**
  - A. Midwest Consulting resample MW-4 and MW-7
- 3. Proposed sampling for Soil**
  - A. Soil sampling will consist of drilling 8 borings to 15 feet or to groundwater and sample every 5 feet for BTEX within 5 feet of soils that exceeded RO's in 2005 Existing samples will include B-2, B-3, B-4, B-5, B-7, MW-4, MW-5, and T-6

Agency PM will approve both CAP and Budget, since 9 years have passed since the last sampling event there is a possibility that contamination has dissipated or lowered below RO's. and there may be no need for Institutional Controls. MW-4 and MW-7 was last sampled in 2002

Budget is for \$16,031.05 which reflects tasks necessary in CAP and meets Subpart H rates

PM has reviewed HAA and appears to be in order

TAH:JSR

LEAKING UST TECHNICAL REVIEW NOTES

Reviewed by: Jim Ransdell  
Date Reviewed: 3/15/11  
Amended CAP/Bu Rec'd 11/19/10

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw  
Warsaw Itco/Rt. 127  
*UST Tech*  
Warsaw, Howard 981987

Corrective Action Plan/Bu Rec'd 11/19/10:

Plan proposes a Taco, and a pathways exposure evaluation.  
Will determine site-specific parameters (Remediation Objectives) pursuant to Section 732.408

1. Proposing to the Village of Minier to adopt a Groundwater Ordinance
2. Proposing to obtain Highway Authority Agreement (HAA) with the Illinois Department of Transportation (IDOT) for the contamination under Ill. Rt. 122.
3. Proposing that concrete on-site as an Engineered Barrier.
4. Site will be limited to Industrial/Commercial land use.
5. A Construction Worker Caution statement in the NFR.
6. An ELUC is proposed for property east of the site. (residential)
7. MW-4 and MW-7 will be sampled for BTEX

**Budget**

\$34,790.00 deduction in Personnel Costs for Costs of corrective action implementation, CAP preparation, design, and research, and permitting costs associated with enhanced bioremediation and a groundwater treatment system.

\$7,800.00 deduction in Field Purchases and Other Costs for Bureau of Air and Bureau of Water permitting and repair of equipment

The costs are not consistent with materials, activities, and services associated an Illinois EPA-approved technical plan. One of the overall goals of the financial review is to assure that costs associated with materials, activities, and services are consistent with the associated technical plan. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.510(b).

The plan at hand, which is approved, does not propose corrective action activities involving enhanced bioremediation and/or a groundwater treatment system.

RELEASE

10 2011

AD

R0613

Page 2

Costs for Soil Bulk Density (\$24.96) and Moisture Content (\$13.61) were added to Budget to complete 732.408

**Illinois EPA Recommendation/Comments:**

Plan will be approved for TACO and Institutional Controls. The Budget will be Modified to reflect current CAP proposals.

TAH:JSR



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829  
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/782-6762

CERTIFIED MAIL

MAR 18 2011

7009 3410 0002 3807 9759

Howard Warsaw  
Rt. 122  
Minier, Illinois 61759

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
WarsawItco/Rt. 122  
Leaking UST Incident No. 981987  
Leaking UST Technical File

RELEASABLE

MAR 18 2011

REVIEWER MD

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Amended Corrective Action Plan (plan) submitted for the above-referenced incident. This plan, dated November 8, 2010, was received by the Illinois EPA on November 19, 2010. Citations in this letter are from the Environmental Protection Act (Act), as amended by Public Act 92-0554 on June 24, 2002, and Public Act 96-0908 on June 8, 2010, and 35 Illinois Administrative Code (35 Ill. Adm. Code).

Pursuant to Sections 57.7(b)(2) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(a), the plan is approved. The activities proposed in the plan are appropriate to demonstrate compliance with Title XVI of the Act. Please note that all activities associated with the remediation of this release proposed in the plan must be executed in accordance with all applicable regulatory and statutory requirements, including compliance with the proper permits.

In addition, the budget is modified pursuant to Sections 57.7(b)(3) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(b). Based on the modifications listed in Section 2 of Attachment A, the amounts listed in Section 1 of Attachment A have been approved. Please note that the costs must be incurred in accordance with the approved plan. Be aware that the amount of payment from the Fund may be limited by Sections 57.7(c), 57.8(d), 57.8(e), and 57.8(g) of the Act, as well as 35 Ill. Adm. Code 734.630 and 734.655.

If the owner or operator agrees with the Illinois EPA's modifications, submittal of an amended plan and/or budget, if applicable, is not required (Section 57.7(c) of the Act).

Pursuant to Sections 57.7(b)(5) and 57.12(c) and (d) of the Act and 35 Ill. Adm. Code 734.100 and 734.125, the Illinois EPA requires that a Corrective Action Completion Report that achieves compliance with applicable remediation objectives be submitted within 30 days after completion of the plan to:

Attachment A

Re: LPC # 1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
Warsaw Itco/Rt. 122  
Leaking UST Incident No. 981987  
Leaking UST Technical File

**SECTION 1**

As a result of the Illinois EPA's modification(s) in Section 2 of this attachment, the following amounts are approved:

\$0.00	Investigation Costs
\$401.36	Analysis Costs
\$15,698.00	Personnel Costs
\$291.80	Equipment Costs
\$0.00	Field Purchases and Other Costs

Handling charges will be determined at the time a billing package is reviewed by the Illinois EPA. The amount of allowable handling charges will be determined in accordance with Section 57.8(f) of the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code) 732.607.

**SECTION 2**

1. \$34,790.00 deduction in Personnel Costs for costs for corrective action implementation, CAP preparation, design, and research, and permitting costs associated with enhanced bioremediation and a groundwater treatment system

\$7,800.00 deduction in Field Purchases and Other Costs for Bureau of Water and Bureau of Air permitting and repair of equipment

These costs are not consistent with materials, activities, and services associated with an Illinois EPA-approved technical plan. One of the overall goals of the financial review is to assure that costs associated with materials, activities, and services are consistent with the associated technical plan. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.510(b).

The plan at-hand, which is approved, does not propose corrective action activities involving enhanced bioremediation and/or a groundwater treatment system.

Illinois Environmental Protection Agency  
Bureau of Land - #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

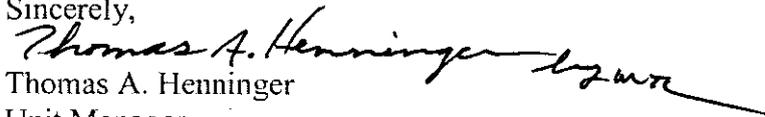
If within four years after the approval of this plan, compliance with the applicable remediation objectives has not been achieved and a Corrective Action Completion Report has not been submitted; the Illinois EPA requires the submission of a status report pursuant to Section 57.7(b)(6) of the Act.

**Please be advised that, pursuant to Public Act 96-0908, effective June 8, 2010, all releases of petroleum from USTs are subject to Title XVI of the Act, as amended by Public Act 92-0554 on June 24, 2002, and Public Act 96-0908 on June 8, 2010, and 35 Ill. Adm. Code 734. The regulations at 35 Ill. Adm. Code 732 no longer exist, and the only releases subject to 35 Ill. Adm. Code 731 are those from hazardous substance USTs.**

An underground storage tank system owner or operator may appeal this decision to the Illinois Pollution Control Board. Appeal rights are attached.

If you have any questions or need further assistance, please contact Jim Ransdell at 217/557-6938.

Sincerely,

  
Thomas A. Henninger

Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

TAH:JSR

Attachment: Attachment A

c: Midwest Environmental Consulting & Remediation Services, Inc.  
BOL File

**R0617**

A Moisture Content sample and a Soil Bulk Density sample has been approved, costs are added to Analytical Costs to complete Section 734.410 (Remediation Objectives).

TAH:JSR

## Appeal Rights

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board pursuant to Sections 40 and 57.7(c)(4) of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the filing of an appeal, please contact:

Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
State of Illinois Center  
100 West Randolph, Suite 11-500  
Chicago, IL 60601  
312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency  
Division of Legal Counsel  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276  
217/782-5544

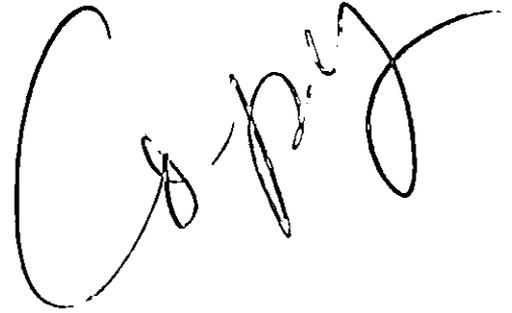
# Midwest Environmental Consulting & Remediation Services Inc.

22200 Illinois Route 9 • P.O. Box 614  
Tremont, IL 61568-0614  
Phone: (309) 925-5551 • Fax: (309) 925-5606

March 29, 2011

Mr. Jim Ransdell  
Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Re: LPC #1790455007 – Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 981987  
LUST Technical File



Dear Mr. Ransdell:

Enclosed please find the Village of Minier Ordinances #783 and #785. It is our intention to invoke these two ordinances as institutional controls to exclude the groundwater ingestion exposure route for the subject site. Please send the enclosed documents to the Division of Legal Council (DLC) for review and acceptance as institutional controls.

If you have any questions or comments, please contact our office.

Sincerely,

Midwest Environmental Consulting and Remediation Services, Inc.



Penny Silzer  
Senior Geologist

Enclosures

RECEIVED

MAR 31 2011

IEPA/BOI

IEPA-DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

OCT 30 2013

REVIEWER: MJK

R0620

# Village of Minier

Neill Keneipp  
Village President



Sandy Lancaster  
Village Clerk

110 W. Central • Box 350 • Minier, Illinois 61759  
Phone: 309/392-2442 • Fax: 309/392-2906

March 21, 2011

Penny Silzer  
Midwest Environmental Consulting &  
Remediation Services, Inc.  
22200 IL. Route 9  
P.O. Box 614  
Tremont, IL. 61568-0614

Dear Ms. Silzer:

Enclosed please find Ordinance #785, an ordinance entering into a Memorandum of Understanding with the IEPA as requested. Also enclosed is a copy of Ordinance #783, the groundwater well ordinance and a map of the legal boundaries of the Village of Minier.

If you need anything further, please let me know.

Sincerely,

A handwritten signature in cursive script that reads "Sandy Lancaster".

Sandy Lancaster  
Village Clerk

Enclosure

cc: John Warsaw

RECEIVED  
MAR 31 2011  
IEPA/BOL

R0621

**VILLAGE OF MINIER**

---

**ORDINANCE NO. 785**

**AN ORDINANCE OF THE VILLAGE OF MINIER,  
ENTERING INTO A MEMORANDUM OF  
UNDERSTANDING WITH THE ILLINOIS  
ENVIRONMENTAL PROTECTION AGENCY**

---

**ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS**

**THIS 15th DAY OF MARCH, 2011**

**RECEIVED  
MAR 31 2011  
IEPA/BOL**

---

**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 15th day of March, 2011.**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS  
ENTERING INTO A MEMORANDUM OF UNDERSTANDING WITH  
THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

---

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

SECTION 1. Certain properties in the Village have been used over a period of time for commercial/industrial purposes; and

SECTION 2. Because of said use, concentrations of certain chemical constituents in the groundwater beneath the Village may exceed Class I groundwater quality standards for potable resource groundwater as forth in 35 Illinois Administrative Code 620, or Tier 1 residential remediation objectives as set forth in 35 Illinois Administrative Code 742; and

SECTION 3. The Village desires to limit potential threats to human health from groundwater contamination while facilitating the redevelopment and productive use of properties that are the source of said chemical constituents; and

SECTION 4. Section 9-1-16 of Chapter 9 of the Code of the Village provides a listing of all properties where the use of private water systems is prohibited; and

SECTION 5. It is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois ("Village"), to enter into a Memorandum of Understanding with the Illinois Environmental Protection Agency to memorialize the institutional controls established to insure that the public water system is safe from contaminates; and

SECTION 7. All ordinances or parts of ordinances in conflict herewith are hereby repealed; and

SECTION 8. This ordinance is hereby published in pamphlet form by authority of the Village Board of the Village of Minier; and

**NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER, ILLINOIS,** that the Village President may enter into and execute the Memorandum of Understanding with the Illinois Environmental Protection Agency attached hereto as Exhibit A.

PASSED at a regular meeting of the Village Board of the Village of Minier held the  
15th day of March, 2011.

AYES: Devine, Burt, Crawford & Needles

NAYS: None

ABSENT: J. Beccue & M. Beccue

APPROVED this \_\_\_\_\_ day of \_\_\_\_\_, 2011.

Neill Kemezy  
Village President

ATTEST:

Sandy Lancaster  
Village Clerk

**CERTIFICATION OF ORDINANCE**

I SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that on March 15, 2011 the Corporate Authorities of the above municipality passed and approved Ordinance No. 785.

Ordinance No. 785, including the cover sheet thereof, was prepared and published in pamphlet form on the 15<sup>th</sup> day of March, 2011. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

Dated at Minier, Illinois, this 15<sup>th</sup> day of March, 2011.

(SEAL)

  
Sandy Lancaster, Village Clerk

MEMORANDUM OF UNDERSTANDING BETWEEN  
VILLAGE OF MINIER AND THE ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY REGARDING THE USE OF A LOCAL GROUNDWATER OR  
WATER WELL ORDINANCE AS AN ENVIRONMENTAL INSTITUTIONAL CONTROL

I. PURPOSE AND INTENT

- A. This Memorandum of Understanding ("MOU") between Village of Minier and the Illinois Environmental Protection Agency ("Illinois EPA") is entered into for the purpose of satisfying the requirements of 35 Ill. Adm. Code 742.1015 for the use of groundwater or water well ordinances as environmental institutional controls. The Illinois EPA has reviewed the groundwater or water well ordinance of Village of Minier (Attachment A) and determined that the ordinance prohibits the use of groundwater for potable purposes and/or the installation and use of new potable water supply wells by private entities but does not expressly prohibit those activities by the unit of local government itself. In such cases, 35 Ill. Adm. Code 742.1015(a) provides that the unit of local government may enter into an MOU with the Illinois EPA to allow the use of the ordinance as an institutional control.
- B. The intent of this Memorandum of Understanding is to specify the responsibilities that must be assumed by the unit of local government to satisfy the requirements for MOUs as set forth at 35 Ill. Adm. Code 742.1015(i).

II. DECLARATIONS AND ASSUMPTION OF RESPONSIBILITY

In order to ensure the long-term integrity of the groundwater or water well ordinance as an environmental institutional control and that risk to human health and the environment from contamination left in place in reliance on the groundwater or water well ordinance is effectively managed, Village of Minier hereby assumes the following responsibilities pursuant to 35 Ill. Adm. Code 742.1015(d)(2) and (i):

- A. Village of Minier will notify the Illinois EPA Bureau of Land of any proposed ordinance changes or requests for variance at least 30 days prior to the date the local government is scheduled to take action on the proposed change or request (35 Ill. Adm. Code 742.1015(i)(4));
- B. Village of Minier will maintain a registry of all sites within its corporate limits that have received "No Further Remediation" determinations in reliance on the ordinance from the Illinois EPA (35 Ill. Adm. Code 742.1015(i)(5));
- C. Village of Minier will review the registry of sites established under paragraph II. B. prior to siting public potable water supply wells within the area covered by the ordinance (35 Ill. Adm. Code 742.1015(i)(6)(A));



- D. Village of Minier will determine whether the potential source of potable water has been or may be affected by contamination left in place at the sites tracked and reviewed under paragraphs II. B. and C. (35 Ill. Adm. Code 742.1015(i)(6)(B)); and
- E. Village of Minier will take action as necessary to ensure that the potential source of potable water is protected from contamination or treated before it is used as a potable water supply (35 Ill. Adm. Code 742.1015(i)(6)(C)).

NOTE: Notification under paragraph II. A. above or other communications concerning this MOU should be directed to:

Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, IL 62794-9276

### III. SUPPORTING DOCUMENTATION

The following documentation is required by 35 Ill. Adm. Code 742.1015(i) and is attached to this MOU:

- A. Attachment A: A copy of the groundwater or water well ordinance certified by the city clerk or other official as the current, controlling law (35 Ill. Adm. Code 742.1015(i)(3));
- B. Attachment B: Identification of the legal boundaries within which the ordinance is applicable (certification by city clerk or other official that the ordinance is applicable everywhere within the corporate limits; if ordinance is not applicable throughout the entire city or village, legal description and map of area showing sufficient detail to determine where ordinance is applicable) (35 Ill. Adm. Code 742.1015(i)(2));
- C. Attachment C: A statement of the authority of the unit of local government to enter into the MOU (council resolution, code of ordinances, inherent powers of mayor or other official signing MOU -- attach copies) (35 Ill. Adm. Code 742.1015(i)(1)).

IN WITNESS WHEREOF, the lawful representatives of the parties have caused this MOU to be signed as follows:

FOR: Village of Minier  
(Name of city or village)

BY: Neill Keneipp  
(Name and title of signatory)  
Neill Keneipp, Village President

DATE: 3/15/11

FOR: Illinois Environmental Protection Agency

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
Manager, Division of Remediation Management  
Bureau of Land

**VILLAGE OF MINIER**

---

**ORDINANCE NO. 783**

**AN ORDINANCE OF THE VILLAGE OF MINIER,  
ILLINOIS AMENDING CHAPTER 9, ARTICLE 1,  
SECTION 9-1-16 OF THE VILLAGE CODE**

---

**ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS**

**THIS 4<sup>th</sup> DAY OF JANUARY, 2011**

---

**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 4<sup>th</sup> day of January, 2011.**

**ORDINANCE NO. 783**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS  
AMENDING THE WATER SYSTEM ORDINANCE**

---

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

SECTION 1. It is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois ("Village"), amend Chapter 9, Article 1, Section 9-1-16 the Water System Ordinance; and

SECTION 2. Certain properties in the Village have been used over a period of time for commercial/industrial purposes; and

SECTION 3. Because of said use, concentrations of certain chemical constituents in the groundwater beneath the Village may exceed Class I groundwater quality standards for potable resource groundwater as forth in 35 Illinois Administrative Code 620, or Tier 1 residential remediation objectives as set forth in 35 Illinois Administrative Code 742; and

SECTION 4. The Village desires to limit potential threats to human health from groundwater contamination while facilitating the redevelopment and productive use of properties that are the source of said chemical constituents; and

SECTION 5. Section 9-1-16 of Chapter 9 of the Code of the Village provides a listing of all properties where the use of private water systems is prohibited; and

SECTION 6. Chapter 9, Article 1, Section 9-1-16 of the Village Code of the Village of Minier is hereby amended to add the language set forth below; and

**NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER, ILLINOIS,** that Section 9-1-16 of Chapter 9 of the Code of the Village is amended as follows:

9-16-16: PRIVATE WATER SYSTEMS PROHIBITED: No person having his residence or place of business within the territorial limits of the Village waterworks and sewerage system shall be permitted to secure water for such residence, or place of business, located in the Village, otherwise than through the water mains of the Village, whenever the water mains of the water system of the Village are adjacent to any subdivided lot, or parcel of real estate upon which said residence or place of business is located, unless such system existed prior to installation of the public water main.

Notwithstanding the preceding paragraph, the use of private water systems is expressly prohibited because of the possibility of ground water contamination at the following location:

A. 208 Route 122, Minier, IL 61759

A tract described as follows: Starting at the Northeast corner of Lot 16 in Livesay's Addition to the Village of Minier, thence North to the south line of the public highway; thence East 166' to the place of beginning; thence east 90'; thence South to the North line of Livesay's addition; thence West 90'; thence north to POB in the NW 1/4 of the NE 1/4 Section 22, TWP 23 N, R2E, Tazewell County, ILL (Also known as part of Lot 17).

PIN: 19-19-22-201-013

SECTION 7. All ordinances or parts of ordinances in conflict herewith are hereby repealed;  
and

SECTION 8. This ordinance is hereby published in pamphlet form by authority of the Village Board of the Village of Minier; and

PASSED at a regular meeting of the Village Board of the Village of Minier held the 4<sup>th</sup> day of January, 2011.

AYES: Devine, Burt, Crawford & Needles

NAYS: None

ABSENT: J. Beccue & M. Beccue

APPROVED this 4<sup>th</sup> day of January, 2011.

Neil Kenney  
Village President

ATTEST:

Yandy Lancaster  
Village Clerk

**CERTIFICATION OF ORDINANCE**

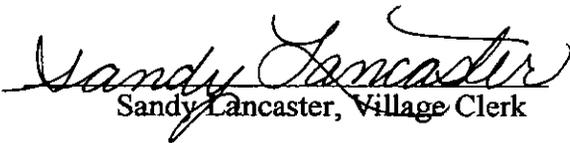
I, SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

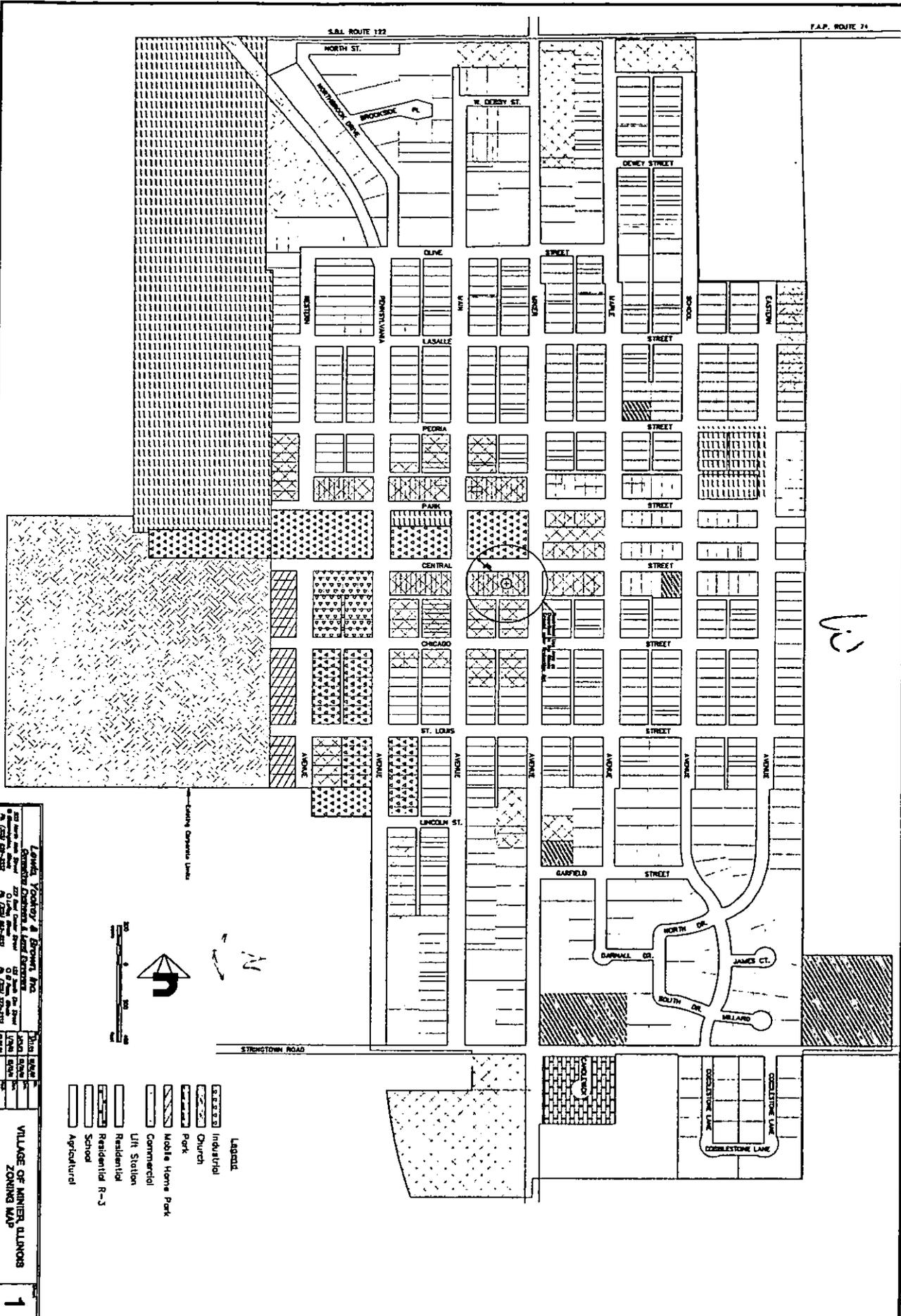
I further certify that on January 4, 2011, the Corporate Authorities of the above municipality passed and approved Ordinance No. 783 entitled, "An Ordinance of the Village of Minier Amending the Water System Ordinance.

Ordinance No. 783, including the cover sheet thereof, was prepared, and published in pamphlet form on the 4<sup>th</sup> day of January, 2011. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

Dated at Minier, Illinois, this 4<sup>th</sup> day of January, 2011.

(SEAL)

  
Sandy Lancaster, Village Clerk



12

Legend: Village of Amherst Planning Dept.  
 100 Main Street, Amherst, NY 14226  
 716/253-3333  
 Fax: 716/253-3334  
 E-mail: info@amherstplanning.com  
 Website: www.amherstplanning.com  
 Date: 12/15/2011  
 Scale: 1" = 100'  
 1

**CERTIFICATION**

I SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that the attached map is a true and correct legal boundary of the Village of Minier and that the Groundwater ordinance is applicable everywhere within the Village limits.

Dated at Minier, Illinois, this 15<sup>th</sup> day of March, 2011.

(SEAL)

  
Sandy Lancaster, Village Clerk



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217/524-3300

CERTIFIED MAIL

JUL 03 2014

7012 0470 0001 3004 5178

Howard Warsaw  
John Warsaw  
Rt. 122  
Minier, Illinois 61759

EPA-DIVISION OF REGULATORY AFFAIRS  
RELEASEABLE

JUL 28 2014

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
Warsaw Itco/Rt. 122  
Leaking UST Incident No. 981987  
Leaking UST Technical File

REVIEWER RDN

Dear M. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Corrective Action Plan (plan) submitted for the above-referenced incident. This plan, dated March 3, 2014, was received by the Illinois EPA on March 14, 2014. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

Pursuant to Sections 57.7(b)(2) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(a), the plan is approved. The activities proposed in the plan are appropriate to demonstrate compliance with Title XVI of the Act. Please note that all activities associated with the remediation of this release proposed in the plan must be executed in accordance with all applicable regulatory and statutory requirements, including compliance with the proper permits.

In addition, the total budget is approved for the amounts listed in Attachment A. Please note that the costs must be incurred in accordance with the approved plan. Be aware that the amount of payment from the Fund may be limited by Sections 57.7(c), 57.8(d), 57.8(e), and 57.8(g) of the Act, as well as 35 Ill. Adm. Code 734.630 and 734.655.

Please be advised that Senate Bill 20, which created the Economic Development Act of 2013, was signed into law as Public Act 98-109 and became effective July 25, 2013. The law requires, in part, that certain corrective action activities include a Project Labor Agreement (PLA) if payment of costs is requested from the UST Fund. Visit the Leaking UST Program Web page at [www.epa.state.il.us/land/lust](http://www.epa.state.il.us/land/lust) for information about Senate Bill 20, the fact sheet, and the PLA Certification. For corrective action activities that require a PLA, a complete application for payment from the UST Fund must contain a PLA Certification in order for payment from the UST Fund to be approved.

Page 1

Pursuant to Sections 57.7(b)(5) and 57.12(c) and (d) of the Act and 35 Ill. Adm. Code 734.100 and 734.125, the Illinois EPA requires that a Corrective Action Completion Report that achieves compliance with applicable remediation objectives be submitted within 30 days after completion of the plan to:

Illinois Environmental Protection Agency  
Bureau of Land - #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

If within four years after the approval of this plan, compliance with the applicable remediation objectives has not been achieved and a Corrective Action Completion Report has not been submitted, the Illinois EPA requires the submission of a status report pursuant to Section 57.7(b)(6) of the Act.

If you have any questions or need further assistance, please contact Jim Ransdell at 217/557-6938.

Sincerely,



Thomas A. Henninger  
Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

TAH:JSR

Attachment: Attachment A

c: Midwest Environmental & Consulting  
BOL File

**R0636**

Attachment A

Re: LPC # 1790455007 -- Will County  
Steger/Warsaw, Howard  
Warsaw Itco/Rt. 122  
Leaking UST Incident No. 981987  
Leaking UST Technical File

**SECTION 1**

The following amounts are approved:

\$2,264.40	Drilling and Monitoring Well Costs
\$2,908.56	Analytical Costs
\$1,191.08	Remediation and Disposal Costs
\$0.00	UST Removal and Abandonment Costs
\$0.00	Paving, Demolition, and Well Abandonment Costs
\$9,481.11	Consulting Personnel Costs
\$185.90	Consultant's Materials Costs

Handling charges will be determined at the time a billing package is reviewed by the Illinois EPA. The amount of allowable handling charges will be determined in accordance with Section 57.1(a) of the Environmental Protection Act and 35 Illinois Administrative Code 734.635.

TAH:JSR\

LPC#1790455007 Tazewell County  
Warsaw, Howard  
Incident #981987  
Leaking UST Technical File

**Midwest Environmental Consulting & Remediation Services Inc.**

22200 Illinois Route 9 • P.O. Box 614  
Tremont, IL 61568-0614  
Phone : (309) 925-5551 • Fax : (309) 925-5606

February 9, 2015

Mr. Jim Ransdell  
Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

IEPA-DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

Re: LPC #1790455007 – Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 981987  
LUST Technical File

APR 29 2015

REVIEWER: JKS

Dear Mr. Ransdell:

Attached please find the Corrective Action Plan and Budget Amendment for the subject site.

If you have any questions or comments, please contact our office.

Sincerely,

Midwest Environmental Consulting and Remediation Services, Inc.



Allan M. Green  
President

PLS/gle  
cc: Mr. Howard Warsaw  
Attachments  
Job No. 9890

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MAR 10 2015

**IEPA/BOL**

Leaking Underground Storage Tank Program  
High Priority Corrective Action Plan Amendment

**Incident Location:** Warsaw - ITCO  
Route 122  
Minier, Illinois – Tazewell Co.

**Prepared for:** John Warsaw  
PO Box 886  
Minier, Illinois 61759

**Prepared by:** Midwest Environmental Consulting  
and Remediation Services, Inc.  
22200 Illinois Route 9  
Post Office Box 614  
Tremont, Illinois 61568-0614  
Contact: Allan Green – President

**For Review by:** Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
Contact: Mr. Jim Ransdell

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MAR 10 2015

**IEPA/BOL**

**R0639**

# High Priority Site Investigation Corrective Action Plan

## TABLE OF CONTENTS

### FORMS

IEPA Corrective Action Plan Form

### SECTIONS

- Section 1. Introduction
- Section 2. Results of the Investigation Completed to Date
- Section 3. Anticipated Cleanup Methods
- Section 4. Additional Investigation Required

### TABLES

- Table 1 Soil Analytical Data
- Table 2 Groundwater Analytical Data

### FIGURES

- Figure 1 Area map
- Figure 2 Monitoring Well and Soil Boring Location Map
- Figure 3 Potentiometric Surface Map
- Figure 4 Proposed Boring Location Map
- Figure 5 Extent of Contamination

### APPENDICES

- Appendix A Laboratory Data Reports
- Appendix B Soil Boring Logs
- Appendix C Soil and Groundwater Sampling Protocol
- Appendix D  $C_{sat}$  Calculations
- Appendix E Institutional Controls – HAA and Groundwater Ordinance with MOU
- Appendix F Budget Amendment

**IEPA Corrective Action Plan Form**

*MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC.*

**RECEIVED**

MAR 1-0 2015

**IEPA/BOL**  
R0641



# Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 – 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation, orally or in writing, in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/44 and 57.17). This form has been approved by the Forms Management Center.

## Leaking Underground Storage Tank Program Corrective Action Plan

### A. Site Identification

IEMA Incident # (6- or 8-digit): 981987 IEPALPC# (10-digit): 1790455007  
Site Name: Warsaw, Howard (Warsaw ITCO)  
Site Address (Not a P.O. Box): Route 122  
City: Minier County: Tazewell ZIP Code: 61759

### B. Site Information

- Will the owner or operator seek reimbursement from the Underground Storage Tank Fund?  Yes  No
- If yes, is the budget attached?  Yes  No
- Is this an amended plan?  Yes  No
- Identify the material(s) released: gasoline
- This Corrective Action Plan is submitted pursuant to:
  - 35 Ill. Adm. Code 731.166   
The material released was:
    - petroleum
    - hazardous substance (see Environmental Protection Act Section 3.215)
  - 35 Ill. Adm. Code 732.404
  - 35 Ill. Adm. Code 734.335

### C. Proposed Methods of Remediation

- Soil excavation, TACO
- Groundwater excavation, TACO

### D. Soil and Groundwater Investigation Results

(for incidents subject to 35 Ill. Adm. Code 731 only or 732 that were classified using Method One or Two, if not previously provided)

Provide the following:

- Description of investigation activities performed to define the extents of soil and/or groundwater contamination;
- Analytical results, chain-of-custody forms, and laboratory certifications;
- Tables comparing analytical results to applicable remediation objectives;

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MAR 10 2015

**IEPA/BOL**

4. Boring logs;
5. Monitoring well logs; and
6. Site maps meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440 and showing:
  - a. Soil sample locations;
  - b. Monitoring well locations; and
  - c. Plumes of soil and groundwater contamination.

## **E. Technical Information - Corrective Action Plan**

Provide the following:

1. Executive summary identifying the objectives of the corrective action plan and the technical approach to be utilized to meet such objectives;
  - a. The major components (e.g., treatment, containment, removal) of the corrective action plan;
  - b. The scope of the problems to be addressed by the proposed corrective action; and
  - c. A schedule for implementation and completion of the plan;
2. Identification of the remediation objectives proposed for the site;
3. A description of the remedial technologies selected:
  - a. The feasibility of implementing the remedial technologies;
  - b. Whether the remedial technologies will perform satisfactorily and reliably until the remediation objectives are achieved; and
  - c. A schedule of when the technologies are expected to achieve the applicable remediation objectives;
4. A confirmation sampling plan that describes how the effectiveness of the corrective action activities will be monitored during their implementation and after their completion;
5. A description of the current and projected future uses of the site;
6. A description of engineered barriers or institutional controls that will be relied upon to achieve remediation objectives:
  - a. an assessment of their long-term reliability;
  - b. operating and maintenance plans; and
  - c. maps showing area covered by barriers and institutional controls;
7. The water supply well survey:
  - a. Map(s) showing locations of community water supply wells and other potable wells and the setback zone for each well;
  - b. Map(s) showing regulated recharge areas and wellhead protection areas;
  - c. Map(s) showing the current extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
  - d. Map(s) showing the modeled extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
  - e. Tables listing the setback zone for each community water supply well and other potable water supply wells;
  - f. A narrative identifying each entity contacted to identify potable water supply wells, the name and title of each person contacted, and any field observations associated with any wells identified; and
  - g. A certification from a Licensed Professional Engineer or Licensed Professional Geologist that the survey was conducted in accordance with the requirements and that documentation submitted includes information obtained as a result of the survey (certification of this plan satisfies this requirement);

8. Appendices:
  - a. References and data sources report that are organized; and
  - b. Field logs, well logs, and reports of laboratory analyses;
9. Site map(s) meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440;
10. Engineering design specifications, diagrams, schematics, calculations, manufacturer's specifications, etc.;
11. A description of bench/pilot studies;
12. Cost comparison between proposed method of remediation and other methods of remediation;
13. For the proposed Tier 2 or 3 remediation objectives, provide the following:
  - a. The equations used;
  - b. A discussion of how input variables were determined;
  - c. Map(s) depicting distances used in equations; and
  - d. Calculations; and
14. Provide documentation to demonstrate the following for alternative technologies:
  - a. The proposed alternative technology has a substantial likelihood of successfully achieving compliance with all applicable regulations and remediation objectives;
  - b. The proposed alternative technology will not adversely affect human health and safety or the environment;
  - c. The owner or operator will obtain all Illinois EPA permits necessary to legally authorize use of the alternative technology;
  - d. The owner or operator will implement a program to monitor whether the requirements of subsection (14)(a) have been met;
  - e. Within one year from the date of Illinois EPA approval, the owner or operator will provide to the Illinois EPA monitoring program results establishing whether the proposed alternative technology will successfully achieve compliance with the requirements of subsection (14)(a); and
  - f. Demonstration that the cost of alternative technology will not exceed the cost of conventional technology and is not substantially higher than at least two other alternative technologies, if available and technically feasible.

## **F. Exposure Pathway Exclusion**

Provide the following:

1. A description of the tests to be performed in determining whether the following requirements will be met:
  - a. Attenuation capacity of the soil will not be exceeded for any of the organic contaminants;
  - b. Soil saturation limit will not be exceeded for any of the organic contaminants;
  - c. Contaminated soils do not exhibit any of the reactivity characteristics of hazardous waste per 35 Ill. Adm. Code 721.123;
  - d. Contaminated soils do not exhibit a pH  $\leq$  2.0 or  $\geq$  12.5; and
  - e. Contaminated soils which contain arsenic, barium, cadmium, chromium, lead, mercury, or selenium (or their associated salts) do not exhibit any of the toxicity characteristics of hazardous waste per 35 Ill. Adm. Code 721.124.
2. A discussion of how any exposure pathways are to be excluded.

## G. Signatures

All plans, budgets, and reports must be signed by the owner or operator and list the owner's or operator's full name, address, and telephone number.

### UST Owner or Operator

Name Warsaw ITCO  
Contact John Warsaw  
Address PO Box 886  
City Minier  
State IL  
Zip Code 61759  
Phone 309-392-2626  
Signature *John Warsaw*  
Date 14 Feb 2015

### Consultant

Company Midwest Environmental Consulting  
Contact Allan Green  
Address Po Box 614  
City Tremont  
State IL  
Zip Code 61568  
Phone 309-925-5551  
Signature *Allan Green*  
Date 2/10/15

I certify under penalty of law that all activities that are the subject of this plan were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in this plan has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 Ill. Adm. Code 731, 732 or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

### Licensed Professional Engineer or Geologist

Name Penny Silzer  
Company Midwest Environmental  
Address PO Box 614  
City Tremont  
State IL  
Zip Code 61568  
Phone 309-925-5551  
Ill. Registration No. 196-000256  
License Expiration Date 03/31/2015  
Signature *Penny Silzer*  
Date 2-10-15

### L.P.E. or L.P.G. Seal



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# Corrective Action Plan



Agency ID: 170000783472

Media File Type LAND

Bureau ID: 1790455007

Site Name: Warsaw, Howard

Site Address1: Rte 122

Site Address2:

Site City: Minier

State: IL

Zip: 61759-

**This record has been determined to  
be partially or wholly exempt from  
public disclosure**

**Exemption Type:**

**Redaction**

**Exempt Doc #: 5**

**Document Date: 3 /10/2015**

**Staff: JKS**

**Document Description: CORRECTIVE ACTION PLAN AND BUDGET AMMENDMENT: SUMMARY**

**Category ID: 21A**

**Category Description: LEAKING UST TECHNICAL**

**Exempt Type: Redaction**

**Permit ID:**

**Date of Determination:**

**4 /29/2015**

## Section 1. Introduction

The subject site is currently a gasoline service station located on Route 122 in Minier, Illinois. The area is developed for commercial, residential and agricultural use. An area map is provided in Figure 1.

Three underground storage tanks (USTs) were removed from the site on July 6, 1999. The three tanks (1-2,000 gallon, 2-500 gallon) were used for gasoline. Details of the UST removal/free product removal activities can be found in the Report of Early Action/ Amended 45-Day Report dated August 31, 1999 and the Free Product Removal Report dated August 26, 1999, previously submitted to IEPA. During tank removal activities, an exploratory excavation was dug in order to investigate the extent of contamination. Free product was noted entering the excavation from the native silty clay sidewalls. Upon this discovery, free product recovery activities were initiated. A significant amount of free product was recovered during free product recovery activities. Approximately 690 yds<sup>3</sup> of gasoline saturated/contaminated soil was removed, and approximately 58,570 gallons of free product/gasoline contaminated groundwater was recovered. Approximately 500 gallons of free product gasoline was separated from the recovered water. Analytical data collected from the excavation indicated significant concentrations of contaminants of concern remained on site.

Between May 2000 and August 2001, Midwest Environmental Consulting and Remediation Services, Inc. (MECRS) installed seven groundwater monitoring wells (MW-1 through MW-7) and drilled seven soil borings (B-1 through B-7). Additional soil samples were collected from a recovery trench installed in October 2003 (T-1 through T-10).

Midwest proposed to close the site based on institutional controls. A Highway Authority Agreement (HAA) was received from the Illinois Department of Transportation (IDOT) in September 2013. A groundwater use restriction ordinance with an memorandum of understanding (MOU) was obtained from the Village of Minier. [REDACTED] of the site, refused to sign the Environmental Land Use Control (ELUC). The HAA and the groundwater ordinance with the MOU are included in Appendix E.

In November 2014, additional soil samples were collected at the site to determine the current concentrations of COCs in the subsurface. Significant concentrations of xylenes, above the soil saturation limit were detected in one boring. The results of this investigation are presented herein. Additional groundwater sampling from wells MW-4 and MW-7 was proposed as part of the investigation approved in the CAP dated March 3, 2014. Neither well could be located and groundwater samples were not collected. Current groundwater analytical data is essential to calculate the groundwater model. The proposal to collect groundwater samples is presented herein.

The budget for CAP investigation costs incurred and those costs anticipated for additional investigation and preparation of the CAP is attached for IEPA approval.

## **Section 2. Results of the Investigation Completed to Date**

The subsurface materials encountered during advancement of boring B-1 consisted of: silty clay (OL) from ground surface to 1.5 feet bgs; silty clay (CL-ML) from 1.5 to 7 feet bgs; silty sand (SM) from 7 to 10 feet bgs; grading to sandy gravel (GP) from 10 to 13 feet bgs; clayey silt (ML) from 13 to 16 feet bgs; and silty clay till (CL-ML) from 16 feet bgs to the end of the boring at 26 feet bgs. A significant water-bearing zone was encountered between approximately 9 feet bgs and 13 ft bgs. Groundwater was initially encountered at an approximate depth of 9 feet bgs in most of the borings. Static water level depth appears to range from 5 to 6 feet bgs.

On November 13, 2014, eight geoprobe borings were completed at the site. Soil analytical data collected indicates concentrations of BTEX in one boring, GP-7, above Tier 1 CUOs. Boring GP-7 is located on-site, southeast of the dispenser island. Soil analytical data collected at the perimeter of the site from borings GP-3, GP-5, GP-6 and GP-8 demonstrate that the contaminants have not migrated off-site in soil to the property located east of the site. Based on the current soil analytical data, an Environmental Land Use Control is not necessary for the property located east of the site.

Midwest proposed to collect water samples from wells MW-4 and MW-7. Data from these wells was to be used to assess current groundwater conditions and to calculate the groundwater models. Neither of these wells could be located. In order to calculate the groundwater model, groundwater analytical data from these areas is necessary.

The extent of soil and groundwater contamination has been defined. COCs appear to have migrated from the possible source areas towards the north and east.

Soil and groundwater analytical data collected to date are presented in Tables 1 and 2. Soil boring and monitoring well locations are shown in Figure 2. The most recent potentiometric surface map for the most recent sampling event is presented in Figure 3. Laboratory data reports are presented in Appendix A. Soil boring logs are presented in Appendix B. Sampling protocol is presented in Appendix C.

### Section 3. Anticipated Cleanup Methods

In order to eliminate exposure pathways through the use of engineered barriers and/or institutional controls, the soil saturation limits ( $C_{sat}$ ) for the respective contaminants of concern (COCs) must not be exceeded by concentrations of the COCs in the soil samples collected. Benzene, toluene, ethylbenzene and xylenes (BTEX) constituents are the COCs. The table below shows the maximum concentrations of BTEX detected in comparison to the soil saturation limit for each COC:

COC	Maximum Concentration Detected	Soil Saturation Limit $C_{sat}$
Benzene	37.4 ppm	580 ppm
Toluene	629 ppm	290 ppm
Ethylbenzene	272 ppm	150 ppm
Xylenes	1,200 ppm	110 ppm

Toluene, ethylbenzene and xylenes all exceed the soil saturation limits as listed in Appendix A, Table. A.

Soil saturation limits were calculated for all constituents using equation S29. Input parameters and calculations are provided in Appendix D. The table below shows the maximum concentrations of BTEX detected in comparison to the calculated soil saturation limit for each COC:

COC	Maximum Concentration Detected	Calculated Soil Saturation Limit S29
Benzene	37.4 ppm	2,520 ppm
Toluene	629 ppm	2,145 ppm
Ethylbenzene	272 ppm	1,363 ppm
Xylenes	1,200 ppm	1,092 ppm

Xylenes concentrations exceed the calculated soil saturation limit. In order to eliminate exposure pathways and/or to calculate Tier 2 CUOs, the concentration of xylenes in soil must be reduced.

Site specific soil and groundwater parameters were determined and submitted to the IEPA in previous reports. The following site specific parameters were used or will be used in future TACO calculations:

Parameter	Value
Soil Bulk Density	1.77 gm/cm <sup>3</sup>
Soil Particle Density	2.66 gm/gm
Moisture Content	17.1%
Hydraulic Conductivity	3.14 x 10 <sup>-4</sup> cm/sec
$f_{oc}$	2.55%

## **Section 4. Additional Investigation Required**

### **1. Groundwater Data**

Since the groundwater had not been sampled since 2005, Midwest proposed to collect groundwater samples monitoring wells MW-4 and MW-7. Neither of these wells could be located. Current groundwater analytical data from these areas is necessary to calculate a meaningful groundwater model based on representative groundwater data. To collect the necessary groundwater samples, Midwest proposes to use the GeoProbe rig to install temporary wells (PB1 and PB2), one within 5 feet of well MW-4 and one within 5 feet of MW-7. A boring will be drilled to 10' bgs. A one inch diameter, slotted PVC casing will be installed in the boring. Groundwater will be allowed to accumulate in the boring. A groundwater sample will be collected with a clean, small diameter disposable bailer. Once the groundwater sample has been collected, the casing will be pulled and the boring will be backfilled with bentonite pellets. The groundwater sample will be analyzed for BTEX.

Depth to water measurements will be collected from all on-site groundwater monitoring wells that can be located for determination of groundwater flow direction. Groundwater data collected will be used to calculate the groundwater model and to determine which institutional controls are necessary for the site.

### **2. Definition of the Extent of Soil Xylenes concentrations exceed the $C_{sat}$**

Xylenes concentrations in excess of the  $C_{sat}$  was detected at 4 to 5 feet in boring GP-7. Midwest proposes to excavate the shallow contaminated soil to remove the soil with excessive concentrations of Xylenes. Prior to excavating, Midwest proposes to better define the extent of Xylenes in excess of the  $C_{sat}$  in the soil. A minimum of four additional geoprobe borings (PB3 through PB6) are proposed, one boring approximately 20 feet in each direction from GP-7, to better define the proposed excavation area.

The soil borings will be sampled continuously and screened with the photoionization detection meter (PID). One soil sample will be collected from each five-foot interval of each boring. Each sample will be collected from the location within the five-foot interval that is the most contaminated based on the PID readings. If an area of contamination cannot be identified within a five-foot interval, the sample will be collected from the center of the boring. Soil samples will not be collected from beneath the first encountered groundwater as established while drilling.

### **3. Soil Gas Sample**

One soil gas sample will be collected from soil adjacent to proposed boring PB-4. This area was chosen because it is adjacent to both the building and the former tank pit. The area around GP-7 was not selected because it is anticipated that the area around GP-7 will be excavated. A heavy-gauge decontaminated steel probe with an expendable tip will be advanced to three feet bgs. Once the desired depth is reached, a ¼ inch outside diameter post-run tubing of Teflon® will be connected to the expendable point holder. The rods will be pulled up three to six inches to create a cavity to collect the soil sample. The rods will be sealed at the surface with bentonite to prevent air from entering around the rods. The tubing will be purged of three volumes of air prior to collection of the soil gas sample. A helium tracer gas will be used during the sampling to

confirm that there are no leaks around the soil gas sampling train. Soil gas samples will be collected in clean laboratory certified Tedlar Bags or Summa canisters and submitted to the lab to be analyzed for BTEX.

Proposed soil boring locations area shown in Figure 4. The soil data collected during the proposed investigation will be used to determine the volume of shallow soil where concentrations of xylenes exceed the soil saturation limit. It is anticipated that the shallow soil where concentrations of xylenes exceed the soil saturation limit will be excavated. Once the concentrations of xylenes have been reduced to below the soil saturation limit, a TACO evaluation of the site will be completed. The TACO evaluation will include elimination of exposure pathways where appropriate and determination of Tier 2 CUOs and groundwater modeling if needed.

The budget for the proposed scope of work is attached in Appendix F.

**Table 1**  
**Soil Analytical Data**

**TABLE 1.  
Soil Analytical Results  
Warsaw-ITCO  
Minier, IL**

Sample ID:	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
B-2, 4-6'	5/3/2000	810	1,300	1,700	6,500	10,310
B-2, 6-8'	5/3/2000	600	220	420	1,900	3,140
B-2, 8-10'	5/3/2000	21,000	41,000	47,000	190,000	299,000
B-3, 6-8'	5/3/2000	400	120	210	460	1,190
B-3, 8-10'	5/3/2000	2,300	2,100	31,000	110,000	145,400
MW-1, 6-8'	5/4/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-2, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-3, 8-10'	5/3/2000	<2.0	<2.0	6	<5.0	<14.7
MW-4, 4-6'	5/4/2000	230	220	870	2,500	3,820
MW-4, 6-8'	5/4/2000	300	1,200	5,400	20,000	26,900
B-4, 0.5-2.5'	8/23/2001	8.1 M	19.0 M	44.7 M	77.2 M	149 M
B-4, 4-6'	8/23/2001	11,600 ME	42,700 ME	9,720 ME	38,000 ME	102,020 ME
B-5, 6-8'	8/23/2001	49	186 E	38	130	403
B-6, 4-6'	8/23/2001	19.5	53.4	31.3	89.8	194.0
B-6, 8-10'	8/23/2001	7.1	12.3	<2.4	10.9	<32.3
B-7, 8-10'	8/23/2001	16.7 M	61.5 M	13.9 M	39.5 M	131.6 M
B-7, 12-14'	8/23/2001	754.0	<61.3	<61.3	<153	<1,029.6
MW-5, 8-10'	8/23/2001	494 M	4,750 M	5,890 M	7,570 M	18,704 M
MW-6, 6-8'	8/23/2001	6.5	12.4	6.3	11.3	36.5
MW-7, 4-6'	8/23/2001	11.7	25.1	10.8	20.0	67.6
MW-7, 8-10	8/23/2001	15.5 M	20.2 M	6.8	11.8	54.3
T-1	10/20/2003	<2.6	3.2	<2.6	<6.5	<14.9
T-2	10/20/2003	<2.6	<2.6	<2.6	<6.5	<14.3
T-3	10/20/2003	<2.4	5.1	5.1	14.2	<26.8
T-4	10/20/2003	<2.4	<2.4	<2.4	<5.9	<13.1
T-5	10/20/2003	3.4	40.8	360.0	947.0	1,351.2
T-6	10/20/2003	85.3	635.0	1,840.0	7,140.0	9,700.3
T-7	10/20/2003	85.5	43.8	1,120.0	2,460.0	3,709.3
T-8	10/20/2003	<2.5	6.6	18.9	56.8	<84.8
T-9	10/20/2003	<2.4	<2.4	<2.4	<6.1	<13.3
T-10	10/20/2003	<2.5	<2.5	<2.5	<6.2	<13.7
GP-1, 2-3'	11/13/2014	<4.99	<4.99	<4.99	<15.0	<30
GP-1, 6-7'	11/13/2014	<5.28	<5.28	<5.28	<15.8	<32
GP-2, 2-3'	11/13/2014	<5.28	<5.28	<5.28	<15.8	<32
GP-2, 6-7'	11/13/2014	<16.0	<16.0	<16.0	<48.0	<96
GP-3, 2-3'	11/13/2014	<5.12	<5.12	<5.12	<15.4	<31
GP-3, 7-8'	11/13/2014	<5.11	5.29	<5.11	<15.3	<31
GP-4, 2-3'	11/13/2014	<5.20	<5.20	<5.20	<15.6	<32
GP-4, 6-7'	11/13/2014	<4.35	5.00	<4.35	<13.1	<27
GP-5, 2-3'	11/13/2014	<4.83	<4.83	<4.83	<14.5	<29
GP-5, 6-7'	11/13/2014	<4.64	<4.64	<4.64	<13.9	<28
GP-6, 2-3'	11/13/2014	<4.66	<4.66	<4.66	<14.0	<28
GP-6, 7-8'	11/13/2014	<5.06	6.50	<5.06	<15.2	<32
GP-7, 4-5'	11/13/2014	37,400	629,000	272,000	1,200,000	2,138,400
GP-7, 6-7'	11/13/2014	3,180	9,720	143	6,210	19,253
GP-8, 2-3'	11/13/2014	<7.14	<7.14	<7.14	<21.4	<43
GP-8, 6-7'	11/13/2014	<4.96	5.52	<4.96	<14.9	<30

Notes:

1. All results in parts per billion (ppb).
2. IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
30	12,000	13,000	5,600

3. All bolded values are above Tier 1 Residential Cleanup Objectives
4. M = Matrix interferences identified
5. E = Estimated

Sample #	foc	pH	Moisture	Soil Bulk Density	Soil Particle Density
Subsurface	2.55%	7.3	17.1%	1.77 gm/cm <sup>3</sup>	2.66

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**TABLE 1. ANALYTICAL RESULTS  
WARSAW - ITCO  
MINIER, ILLINOIS**

Analytes/ Sample ID: SAMPLE DATE	BENZENE 30 ppb	TOLUENE 12,000 ppb	ETHYL- BENZENE 13,000 ppb	TOTAL XYLENES 5,600 ppb	TOTAL BTEX
F-1 7/6/1999	9,400	46,900	11,100	62,400	129,800
F-2 7/6/1999	BELOW DL	17	20	159	<197.1
NW-1 7/23/1999	BELOW DL	7	31	246	<285.7
NW-2 7/23/1999	2	3	13	38	56
SW-1 7/23/1999	1,440	24,600	14,500	96,600	137,140
SW-2 7/23/1999	259	3,010	6,250	33,700	43,219
EW-1 7/23/1999	31	10	62	192	295
EW-2 7/23/1999	176	3,570	4,020	30,000	37,766
F-1 7/23/1999	7,240	6,540	45,400	219,000	278,280
F-2 7/23/1999	1,810	8,460	9,130	45,400	64,900
NW-3 7/28/1999	37	25	265	1,270	1,597
SW-3 7/28/1999	3,040	1,290	25,900	123,000	153,230
F-3 7/28/1999	763	<125	239	6,270	<7397
WW-1 7/28/1999	796	2,530	21,200	91,500	116,026
WW-2 7/28/1999	21	10	399	3,710	4,140
W-1 (liquid) 7/27/1999	2,730	4,260	1,190	7,660	15,840

**Table 2**  
**Groundwater Analytical Data**

**Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois**

Sample #	Date	DTW	GWE	Benzene	Toluene	E-benzene	Xylenes	Total BTEX	
<b>MW-1</b>		Elevation Top of Casing = 99.62							
SC	5/12/2000	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3	
1	10/24/2000	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4	
2	8/23/2001	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E	
3	11/13/2001	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.41	94.21	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.65	94.97	NS	NS	NS	NS	NS	
<b>MW-2</b>		Elevation Top of Casing = 99.28							
SC	5/9/2000	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/2000	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/2001	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7	
3	11/13/2001	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.12	94.16	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.38	94.90	NS	NS	NS	NS	NS	
<b>MW-3</b>		Elevation Top of Casing = 100							
SC	5/9/2000	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/2000	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/2001	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
3	11/13/2001	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.37	94.63	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.34	95.66	NS	NS	NS	NS	NS	
<b>MW-4</b>		Elevation Top of Casing = 99.84							
SC	5/9/2000	5.90	93.94	2,600	12,000	4,500	18,000	37,100	
1	10/24/2000	7.80	92.04	2,300	5,200	4,000	13,000	24,500	
2	8/23/2001	6.67	93.17	2,290 M	2,380 M	8,150	23,600 E	36,420 E	
3	11/13/2001	6.11	93.73	1,910	3,960	3,360	10,000	19,230	
4	2/14/2002	5.00	94.84	1,100	1,200	2,900	5,500	10,700	
5	1/24/2005	4.47	95.37	NS	NS	NS	NS	NS	
<b>MW-5</b>		Elevation Top of Casing = 99.57							
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9	
3	11/13/2001	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	4.71	94.86	1.4	2.2	1.5	4.5	9.6	
5	1/24/2005	3.89	95.68	NS	NS	NS	NS	NS	
<b>MW-6</b>		Elevation Top of Casing = 99.37							
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5	
3	11/13/2001	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	4.71	94.66	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	WELL ICED OVER		NS	NS	NS	NS	NS	
<b>MW-7</b>		Elevation Top of Casing = 100.07			WELL DESTROYED AT TIME OF 1/25/05 DTW MEASUREMENT				
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	7.28	92.79	<2.0	<2.0	<2.0	5.9	<11.9	
3	11/13/2001	6.23	93.84	117 E	<2.0	<2.0	<5.0	<126 E	
4	2/14/2002	5.52	94.55	7	<1.0	<1.0	<3.0	<12.0	
5	1/24/2005	--	--	NS	NS	NS	NS	NS	

1. All results reported in ug/kg (i.e. parts per billion, ppb)
2. IEPA Tier 1 Cleanup Objectives (ug/kg):

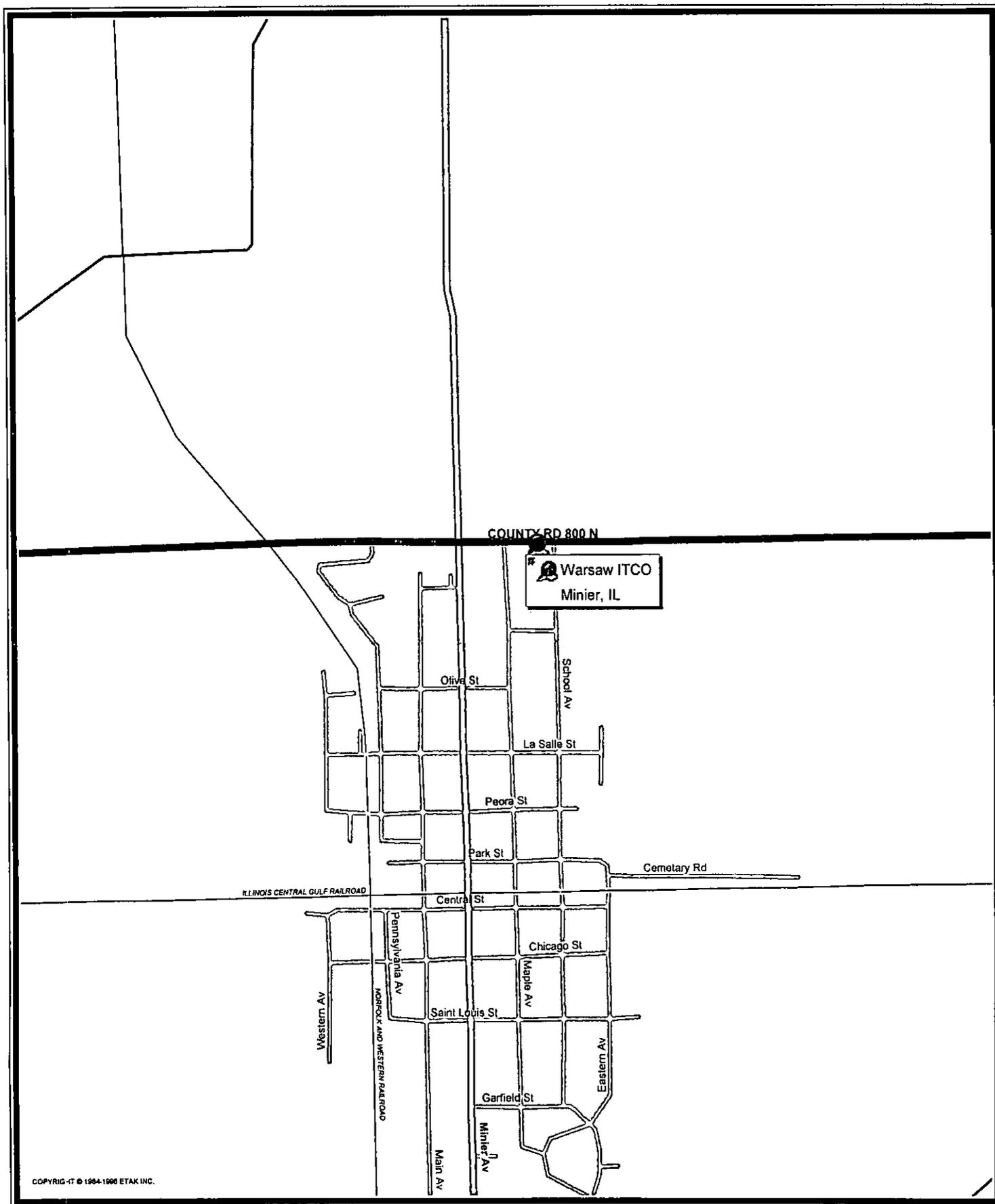
Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

3. -- = No data available
4. MDL = Method Detection Limit
5. DTW = Depth to Water
6. GWE = Groundwater Elevation referenced to datum point
7. NA/NS = Not analyzed/not sampled this event
8. E = Estimated - value outside linear range
9. M = Matrix interferences identified.

**R0657**

**Figure 1**  
**Area Map**

Figure 1. Warsaw ITCO Location Map, Minier, IL



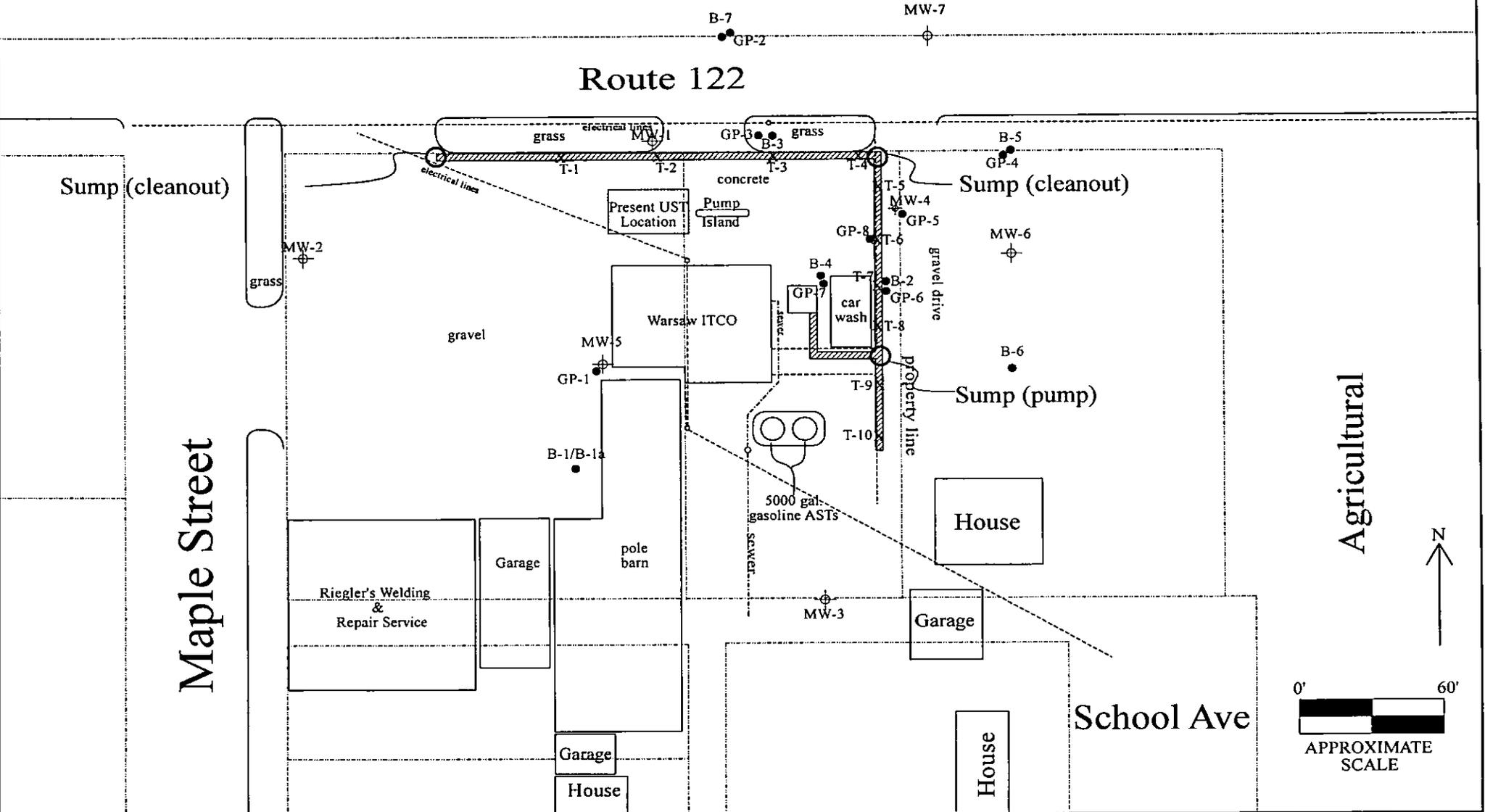
**Figure 2**  
**Monitoring Well and Soil Boring Location Map**

Agricultural

Route 122

Maple Street

Agricultural



**Figure 2**  
**Monitoring Well & Soil Boring Locations**  
**Warsaw ITCO**  
**Minier, IL**

Date: 1/27/15	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**  
**R0661**

- ⊙ = Proposed Soil Boring Location
- MW-3 ⊕ = Existing Monitoring Well Location
- B-2 ● = Existing Boring Location

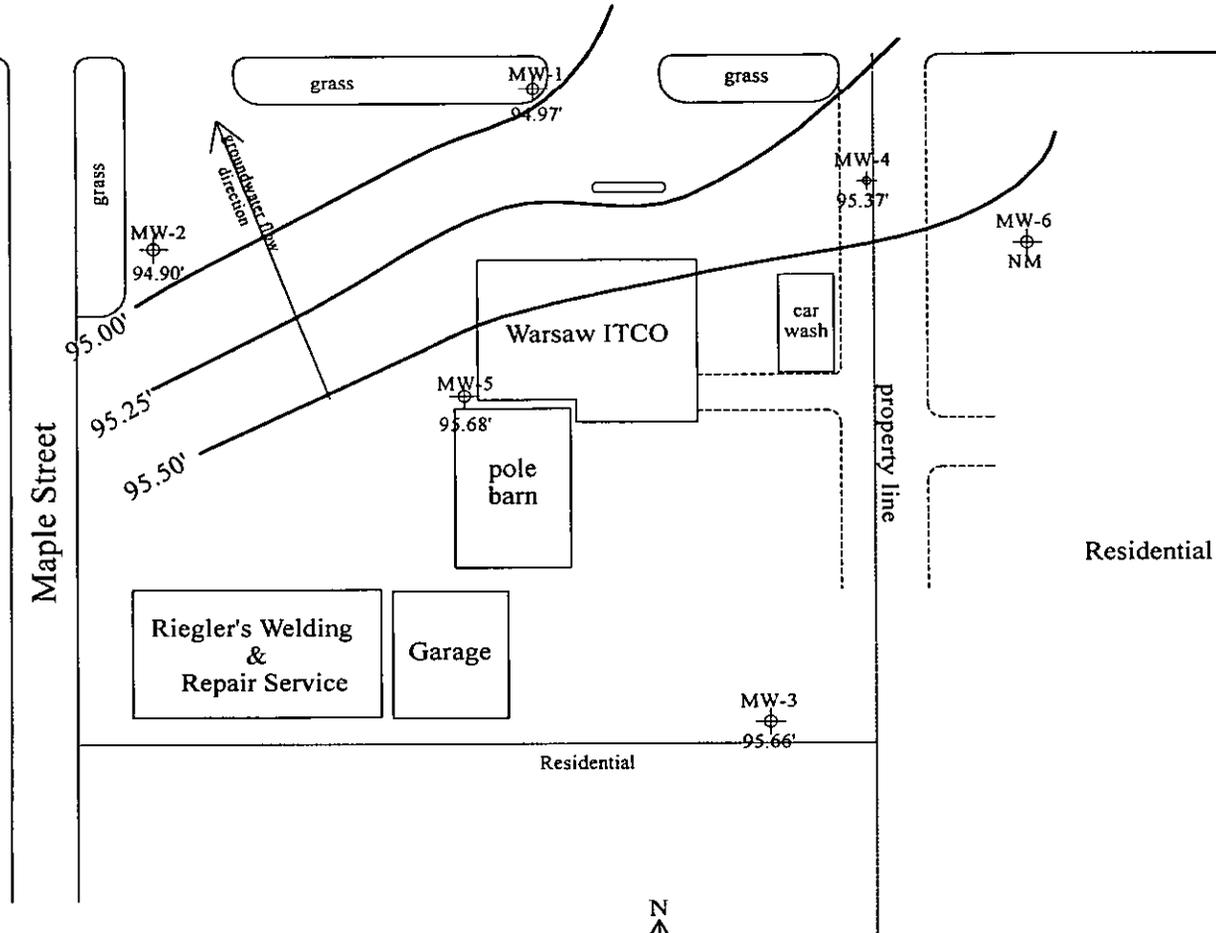
**Figure 3**

**Piezometric Surface Map 01/24/05**

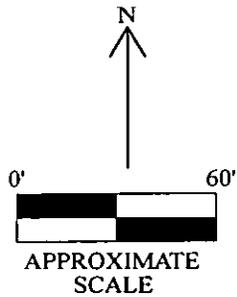
# Agricultural

MW-7  
 DESTROYED

Route 122



MW-3  
 + = Existing Monitoring Well Location  
 B-2  
 • = Existing Boring Location



**FIGURE 3**  
 Piezometric Surface  
 Map - 1/24/05  
 Warsaw - ITCO  
 Minier, IL

Date: 1/24/05

Drawn by: TKB

Job No.: 9890

Approved by: AMG

**M.E.C.R.S., Inc.**

R0663

**Figure 4**

**Proposed Soil Boring Location Map**

- ⊗ = Proposed Soil Boring Location
- ⊕ = Existing Monitoring Well Location
- = Existing Boring Location
- = Excavation Sample Location
- X = Trench Sample Locations

# Route 122

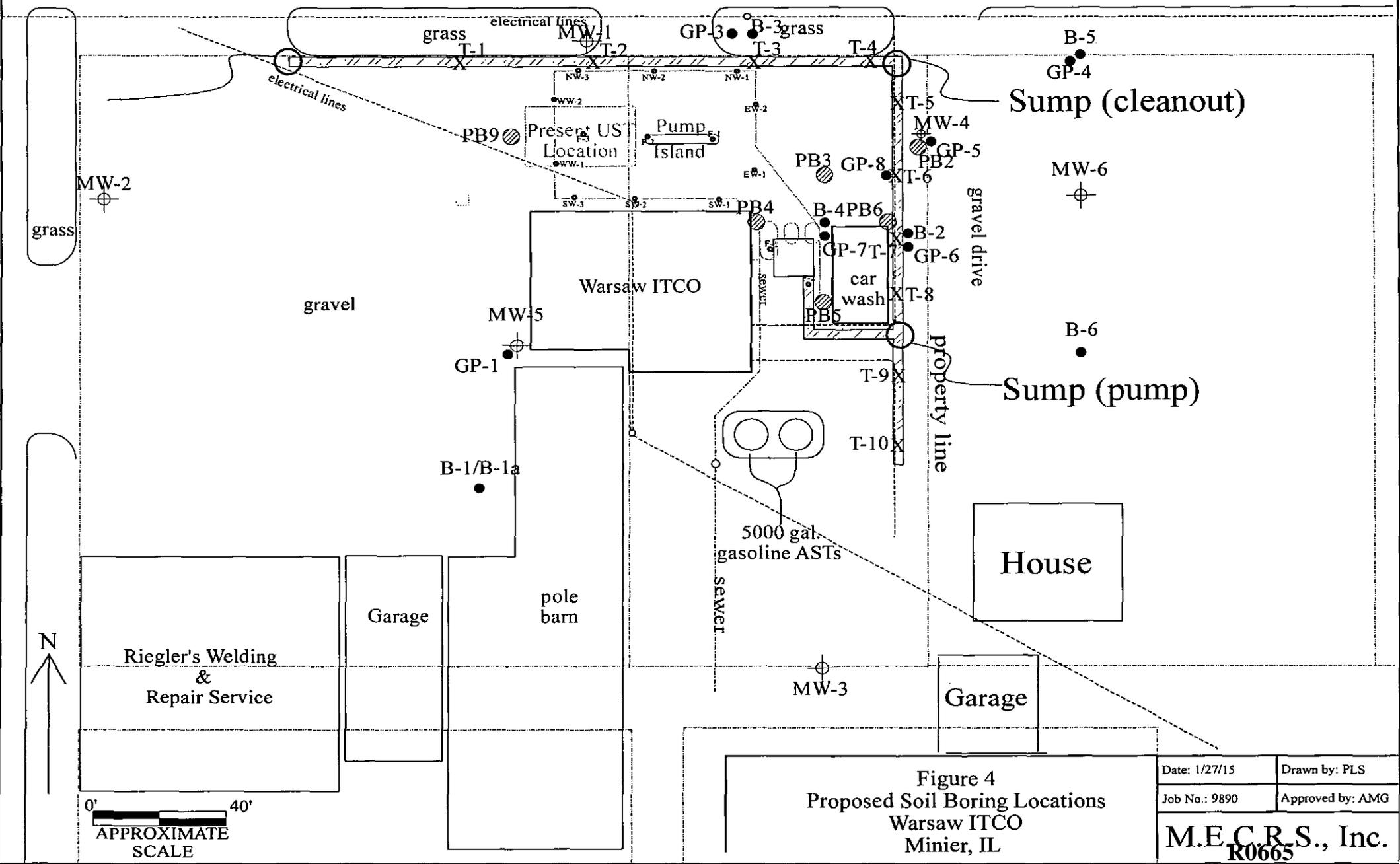


Figure 4  
Proposed Soil Boring Locations  
Warsaw ITCO  
Minier, IL

Date: 1/27/15	Drawn by: PLS
Job No.: 9890	Approved by: AMG
M.E.C.R.S., Inc.	
R0665	

## **Figure 5**

### **Extent of Contamination**

# Agricultural

Route 122

Extent Benzene in GW > 0.005 ppm

Sump (cleanout)

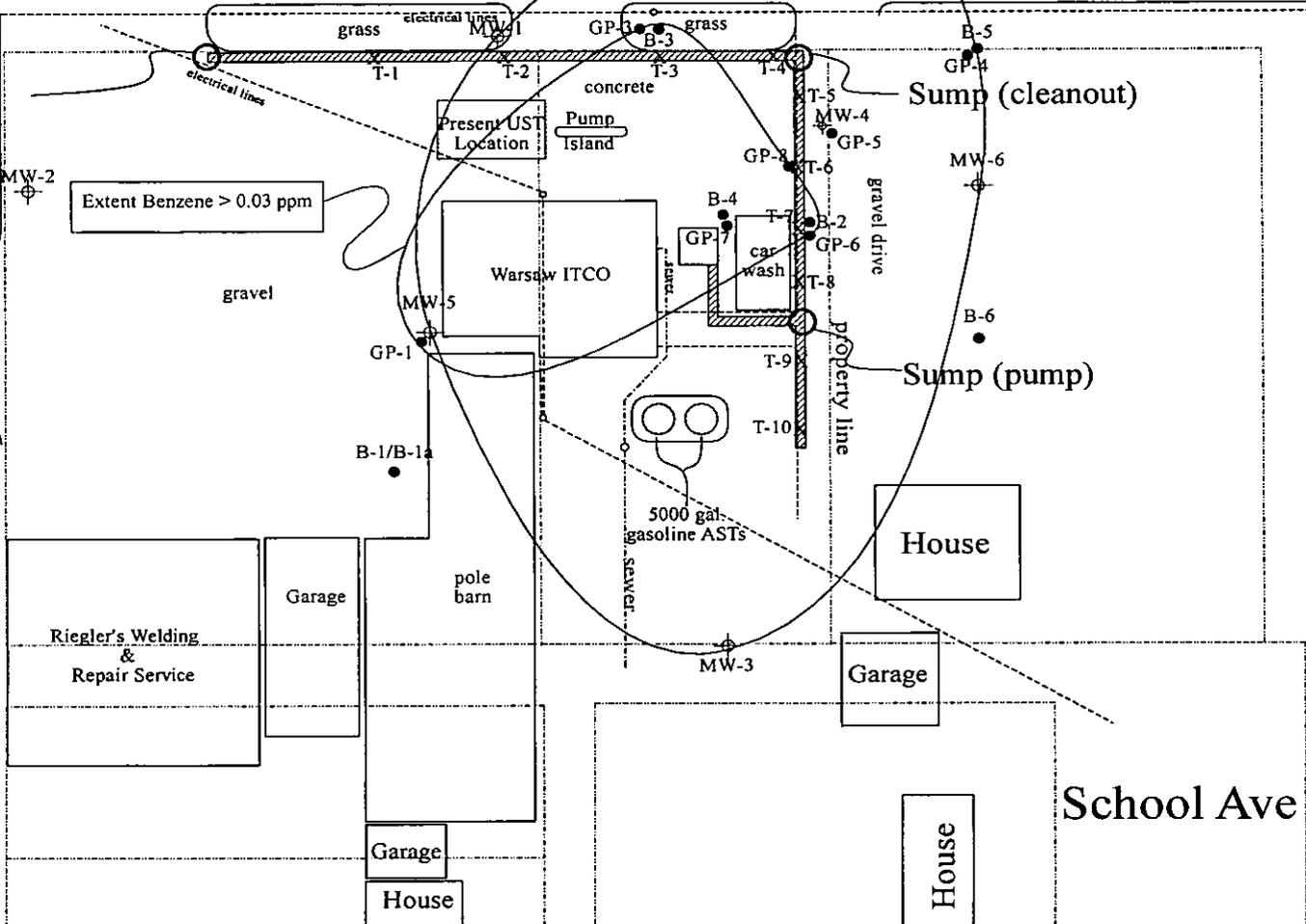
Extent Benzene > 0.03 ppm

Sump (cleanout)

Sump (pump)

Maple Street

Agricultural



- ⊙ = Proposed Soil Boring Location
- MW-3 ⊕ = Existing Monitoring Well Location
- B-2 ● = Existing Boring Location

**Figure 5**  
Extent Contamination  
Warsaw ITCO  
Minier, IL

Date: 1/27/15	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**  
R0667

**Appendix A**  
**Laboratory Data Reports**



Tuesday, December 9, 2014

Ms. Penny Silzer  
Midwest Environmental Consulting  
PO Box 614  
Tremont, IL 61568-0614  
TEL: (309) 925-5551  
FAX: (309) 925-5606

RE: Warsaw ITCO

PAS WO: 14K0287

Prairie Analytical Systems, Inc. received 16 sample(s) on 11/14/2014 for the analyses presented in the following report.

All applicable quality control procedures met method specific acceptance criteria unless otherwise noted.

This report shall not be reproduced, except in full, without the prior written consent of Prairie Analytical Systems, Inc.

If you have any questions, please feel free to contact me at (217) 753-1148.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ana L. Jensen".

Ana L. Jensen For Kristen A. Potter  
Project Manager

**Certifications:** NELAP/NELAC - IL #100323

---

1210 Capital Airport Drive	*	Springfield, IL 62707	*	1.217.753.1148	*	1.217.753.1152 Fax
9114 Virginia Road Suite #112	*	Lake in the Hills, IL 60156	*	1.847.651.2604	*	1.847.458.0538 Fax

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-1 2-3  
 Collection Date: 11/13/14 9:30

Lab Order: 14K0287  
 Lab ID: 14K0287-01  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.99		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:07	SW8260B Re	BDP
*Ethylbenzene	U	4.99		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:07	SW8260B Re	BDP
*Toluene	U	4.99		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:07	SW8260B Re	BDP
*Xylenes (total)	U	15.0		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:07	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	77.7	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-1 6-7  
 Collection Date: 11/13/14 9:40

Lab ID: 14K0287-02  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:36	SW8260B Re	BDP
*Ethylbenzene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:36	SW8260B Re	BDP
*Toluene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:36	SW8260B Re	BDP
*Xylenes (total)	U	15.8		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:36	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	78.8	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-2 2-3  
 Collection Date: 11/13/14 9:50

Lab ID: 14K0287-03  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:05	SW8260B Re	BDP
*Ethylbenzene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:05	SW8260B Re	BDP
*Toluene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:05	SW8260B Re	BDP
*Xylenes (total)	U	15.8		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:05	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	81.0	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-2 6-7  
 Collection Date: 11/13/14 10:10

Lab Order: 14K0287  
 Lab ID: 14K0287-04  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	16.0		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:35	SW8260B Re	BDP
*Ethylbenzene	U	16.0		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:35	SW8260B Re	BDP
*Toluene	U	16.0		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:35	SW8260B Re	BDP
*Xylenes (total)	U	48.0		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:35	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	79.3	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-3 2-3  
 Collection Date: 11/13/14 10:20

Lab ID: 14K0287-05  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.12		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:04	SW8260B Re	BDP
*Ethylbenzene	U	5.12		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:04	SW8260B Re	BDP
*Toluene	U	5.12		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:04	SW8260B Re	BDP
*Xylenes (total)	U	15.4		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:04	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	77.5	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-3 7-8  
 Collection Date: 11/13/14 10:30

Lab ID: 14K0287-06  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.11		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:34	SW8260B Re	BDP
*Ethylbenzene	U	5.11		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:34	SW8260B Re	BDP
*Toluene	5.29	5.11		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:34	SW8260B Re	BDP
*Xylenes (total)	U	15.3		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:34	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	80.3	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-4 2-3  
 Collection Date: 11/13/14 10:35

Lab Order: 14K0287  
 Lab ID: 14K0287-07  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.20		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:03	SW8260B Re	BDP
*Ethylbenzene	U	5.20		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:03	SW8260B Re	BDP
*Toluene	U	5.20		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:03	SW8260B Re	BDP
*Xylenes (total)	U	15.6		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:03	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	79.5	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-4 6-7  
 Collection Date: 11/13/14 10:40

Lab ID: 14K0287-08  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.35		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:32	SW8260B Re	BDP
*Ethylbenzene	U	4.35		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:32	SW8260B Re	BDP
*Toluene	5.00	4.35		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:32	SW8260B Re	BDP
*Xylenes (total)	U	13.1		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:32	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	83.4	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-5 2-3  
 Collection Date: 11/13/14 10:45

Lab ID: 14K0287-09  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.83		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:02	SW8260B Re	BDP
*Ethylbenzene	U	4.83		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:02	SW8260B Re	BDP
*Toluene	U	4.83		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:02	SW8260B Re	BDP
*Xylenes (total)	U	14.5		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:02	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	79.7	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

## LABORATORY RESULTS

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-5 6-7  
 Collection Date: 11/13/14 10:50

Lab Order: 14K0287  
 Lab ID: 14K0287-10  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.64		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:31	SW8260B Re	BDP
*Ethylbenzene	U	4.64		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:31	SW8260B Re	BDP
*Toluene	U	4.64		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:31	SW8260B Re	BDP
*Xylenes (total)	U	13.9		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:31	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	85.5	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-6 2-3  
 Collection Date: 11/13/14 11:00

Lab ID: 14K0287-11  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.66		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:00	SW8260B Re	BDP
*Ethylbenzene	U	4.66		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:00	SW8260B Re	BDP
*Toluene	U	4.66		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:00	SW8260B Re	BDP
*Xylenes (total)	U	14.0		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:00	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	80.5	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-6 7-8  
 Collection Date: 11/13/14 11:05

Lab ID: 14K0287-12  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.06		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:29	SW8260B Re	BDP
*Ethylbenzene	U	5.06		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:29	SW8260B Re	BDP
*Toluene	6.50	5.06		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:29	SW8260B Re	BDP
*Xylenes (total)	U	15.2		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:29	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	77.6	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-7 4-5  
 Collection Date: 11/13/14 11:10

Lab Order: 14K0287  
 Lab ID: 14K0287-13  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	37400	3400		µg/Kg dry	500	11/18/14 10:49	11/19/14 2:52	SW8260B Re	BDP
*Ethylbenzene	272000	6810		µg/Kg dry	1000	11/18/14 10:49	11/19/14 1:54	SW8260B Re	BDP
*Toluene	629000	34000		µg/Kg dry	5000	11/19/14 10:43	11/19/14 13:55	SW8260B Re	BDP
*Xylenes (total)	1200000	102000		µg/Kg dry	5000	11/19/14 10:43	11/19/14 13:55	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	73.4	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-7 6-7  
 Collection Date: 11/13/14 11:20

Lab ID: 14K0287-14  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	3180	317		µg/Kg dry	50	11/18/14 10:49	11/19/14 4:49	SW8260B Re	BDP
*Ethylbenzene	1430	317		µg/Kg dry	50	11/18/14 10:49	11/19/14 4:49	SW8260B Re	BDP
*Toluene	9720	317		µg/Kg dry	50	11/18/14 10:49	11/19/14 4:49	SW8260B Re	BDP
*Xylenes (total)	6210	950		µg/Kg dry	50	11/18/14 10:49	11/19/14 4:49	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	79.0	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-8 2-3  
 Collection Date: 11/13/14 11:30

Lab ID: 14K0287-15  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	7.14		µg/Kg dry	1	11/18/14 10:49	11/18/14 23:57	SW8260B Re	BDP
*Ethylbenzene	U	7.14		µg/Kg dry	1	11/18/14 10:49	11/18/14 23:57	SW8260B Re	BDP
*Toluene	U	7.14		µg/Kg dry	1	11/18/14 10:49	11/18/14 23:57	SW8260B Re	BDP
*Xylenes (total)	U	21.4		µg/Kg dry	1	11/18/14 10:49	11/18/14 23:57	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	81.1	0.100		%	1	11/20/14 13:17	11/21/14 12:15	ASTM D2974	JLS

**LABORATORY RESULTS**

**Client:** Midwest Environmental Consulting  
**Project:** Warsaw ITCO  
**Client Sample ID:** GP-8 6-7  
**Collection Date:** 11/13/14 11:35

**Lab Order:** 14K0287  
**Lab ID:** 14K0287-16  
**Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.96		µg/Kg dry	1	11/17/14 10:02	11/18/14 2:56	SW8260B Re	BDP
*Ethylbenzene	U	4.96		µg/Kg dry	1	11/17/14 10:02	11/18/14 2:56	SW8260B Re	BDP
*Toluene	5.52	4.96		µg/Kg dry	1	11/17/14 10:02	11/18/14 2:56	SW8260B Re	BDP
*Xylenes (total)	U	14.9		µg/Kg dry	1	11/17/14 10:02	11/18/14 2:56	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	80.4	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

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**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
Project: Warsaw ITCO

Lab Order: 14K0287

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**Notes and Definitions**

- R RPD outside acceptance limits.
- \* NELAC certified compound.
- U Analyte not detected (i.e. less than RL or MDL).

# Chain of Custody Record

Central IL - 1210 Capital Airport Drive - Springfield, IL 62707-8490 - Phone (217) 753-1148 - Facsimile (217) 753-1152  
 Chicago IL Office - 9114 Virginia Rd., Ste 112 - Lake in the Hills, IL 60156 - Phone (847) 651-2604 - Facsimile (847) 458-9680  
 Central/Southern IL Office - Phone (217) 414-7762 - Facsimile (217) 223-7922



Client		Michael Ten.						Analysis and/or Method Requested						Reporting		
Address		PO Box 614						BTEX						<input type="checkbox"/> Resid <input type="checkbox"/> Ind/Comm		
City, State, Zip Code		Tremont, IL 61568														
Phone / Facsimile		309-925-5551														
Project Name / Number		Wasaw ITO														
Project Location		Munee														
P.O. # or Invoice To		Job # 4820														
Contact Person		P. Sitzer														
Sample Description		Sampling		Matrix Code	Preserv Code	No. of Containers	Sample Type								<input type="checkbox"/> A <input type="checkbox"/> D <input type="checkbox"/> B <input type="checkbox"/> E <input type="checkbox"/> C <input type="checkbox"/> F	
		Date	Time				Comp	Grab							<input type="checkbox"/> Resid <input type="checkbox"/> Indust	
CP1, 2-3		11/13/14	9:30												SAMPLER COMMENTS	
CP1, 6-7			9:40													
CP2, 2-3			9:50													
CP2, 6-7			10:10													
CP3, 2-3			10:20													
CP3, 7-8			10:30													
CP4, 2-3			10:35													
CP4, 6-7			10:40													
CP5, 2-3			10:45													
CP5, 6-7			10:50													
CP6, 2-3			11:00													
CP6, 7-8			11:05													
Matrix Code		A - Aqueous		DW - Drinking Water		GW - Ground Water		NA - Non-Aqueous Liquid		S - Solid		O - Oil		X - Other (Specify)		
Preserv Code		0 - None		1 - HCl		2 - H2SO4		3 - HNO3		4 - NaOH		5 - 5035 Kit		X - Other (Specify)		
Relinquished By		Date		Time		Received By		Date		Time		Method of Shipment				
[Signature]		11/13/14				[Signature]		11-11-14		10:05		Hand				
[Signature]		11/14/14		10:00 AM		[Signature]		11/14/14		1300		Hand				
[Signature]		11/14/14		1300		[Signature]		11/14/14		1300		Hand				
Special Instructions:						Turnaround Time: Standard <input type="checkbox"/> Rush <input type="checkbox"/>		GC Level		On wet ice?		Temperature (°C)				
						Date Required:		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2.2				

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**Chain of Custody Record**

Central IL - 1210 Capital Airport Drive - Springfield, IL 62707-8490 - Phone (217) 753-1148 - Facsimile (217) 753-1152  
 Chicago IL Office - 9114 Virginia Rd., Ste 112 - Lake in the Hills, IL 60156 - Phone (847) 651-2604 - Facsimile (847) 458-9680  
 Central/Southern IL Office - Phone (217) 414-7762 - Facsimile (217) 223-7922



Client <b>Midwest Env.</b>		Analysis and/or Method Requested						Reporting							
Address <b>PO Box 614</b>		BTEX							TACO	<input type="checkbox"/> Resid <input type="checkbox"/> Ind/Comm					
City, State, Zip Code <b>Tremont, IL 61568</b>									CALM	<input type="checkbox"/> A	<input type="checkbox"/> D				
Phone / Facsimile <b>309-925-5551</b>										<input type="checkbox"/> B	<input type="checkbox"/> E				
Project Name / Number <b>Warsaw TCO</b>									RISC	<input type="checkbox"/> C	<input type="checkbox"/> F				
Project Location <b>Area Minier</b>										<input type="checkbox"/> Resid	<input type="checkbox"/> Indust				
P.O. # or Invoice To <b>Job # 9890</b>															Sampler Comments
Contact Person <b>P. S. I. Zev</b>															
Sample Description	Sampling		Matrix Code	Preserv Code	No. of Containers	Sample Type									
	Date	Time				Comp	Grab								
GP-7, 4-5	11/13/14	11:10													
GP-7, 6-7	↓	11:20													
GP-8, 2-3	↓	11:30													
GP-8, 6-7	↓	11:35													
Matrix Code		A - Aqueous	DW - Drinking Water	GW - Ground Water	NA - Non-Aqueous Liquid	S - Solid	O - Oil	X - Other (Specify)							
Preserv Code		0 - None	1 - HCl	2 - H2SO4	3 - HNO3	4 - NaOH	5 - 5035 Kit	X - Other (Specify)							
Relinquished By		Date	Time	Received By		Date	Time	Method of Shipment							
<i>[Signature]</i>		11/13/14		<i>[Signature]</i>		11/19/14	1005	Hand							
<i>[Signature]</i>		11/14/14	10:00 AM	<i>[Signature]</i>		11/14/13	1300	Hand							
<i>[Signature]</i>		11/14/14	1300	<i>[Signature]</i>											
Special Instructions:				Turnaround Time: Standard <input type="checkbox"/> Rush <input type="checkbox"/>		QC Level		On wet ice? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
				Date Required:		<input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4		Temperature (°C) 2.2							

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The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 -57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

## Illinois Environmental Protection Agency Leaking Underground Storage Tank Program Laboratory Certification for Chemical Analysis

### A. Site Identification

IEMA Incident # (6- or 8-digit): 981987      IEPA LPC# (10-digit): 1790455007  
Site Name: Warsaw ITCO  
Site Address (Not a P.O. Box): Route 122  
City: Minier      County: Tazewell      ZIP Code: 61759  
Leaking UST Technical File

### B. Sample Collector

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
2. Chain-of-custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

PS  
(initial)

PS  
(initial)

PS  
(initial)

PS  
(initial)

### C. Laboratory Representative

I certify that:

1. Proper chain-of-custody procedures were followed as documented on the chain-of-custody forms
2. Sample integrity was maintained by proper preservation.
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

ACT  
(initial)

ACT  
(initial)

ACT  
(initial)

ACT  
(initial)

5. Sample holding times were not exceeded.

AGJ  
(initial)

6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses.

AGJ  
(initial)

7. An accredited lab performed quantitative analysis using test methods identified in 35 IAC 186.180 (for samples collected on or after January 1, 2003).

AGJ  
(initial)

**D. Signatures**

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Sample Collector**

Name: Penny Sizer  
Title: Sn Geologist  
Company: M.E.C.R.S, Inc.  
Address: 22200 IL Rte. 9, P.O. Box 614  
City: Tremont  
State: Illinois  
ZIP Code: 61568  
Phone: (309) 925-5551  
Signature: [Signature]  
Date: 11/19/14

**Laboratory Representative**

Name: Ana Jensen  
Title: Project Manager  
Company: Prairie Analytical  
Address: 1210 Capital Airport Drive  
City: Springfield  
State: Illinois  
ZIP Code: 62707  
Phone: (217) 753-1148  
Signature: [Signature]  
Date: 12/19/14

**Appendix B**  
**Soil Boring Logs**

LUST Incident No.: 981987	Boring Number: <u>GP-1</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to MW-5</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	SILT LOAM (OL); Black, moist, firm			0	Sample collected at 2 to 3 feet.
2-3	BS	85%		2	SILTY CLAY (CL); Brown, w/gray mottling, moist, firm			0	
				3				0	
				4				0	Sample collected at 6 to 7 feet.
				5				0	
6-7	BS	100%		6				0	
				7	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			0	
				8				0	
				9					
				10					
				11					
				12					
				13					
				14					
				15					
				16					
				17					
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				19					
				20					
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				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig GeoProbe _____	Midwest Environmental Consulting & Remediation Services, Inc. <b>R0682</b>
▼ Depth While Drilling <u>7'</u>	Rotary Depth _____ Geologist <u>PLS</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

LUST Incident No.: 981987	Boring Number: <u>GP-2</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to B-7</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	SILT LOAM (OL); Black, moist, firm			0	Sample collected at 2 to 3 feet.
2-3	BS	90%		2	SILTY CLAY (CL); Brown, w/gray mottling, moist, firm			0	
				3				0	
				4					
				5					
6-7	BS	100%		6					Sample collected at 6 to 7 feet.
				7	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			0	
				8					
				9					
				10					
				11					
				12					
				13					
				14					
				15					
				16					
				17					
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				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data		Auger Depth _____ Rig GeoProbe _____	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling	7'	Rotary Depth _____ Geologist <u>PLS</u>	
▽ Depth After Drilling	_____	Driller/Co <u>Doug/Reynolds</u>	
Note: Boring backfilled unless otherwise noted			

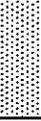
LUST Incident No.: 981987	Boring Number: <u>GP-3</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to B-3</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
2-3	BS	85%		1	SILT LOAM (OL): Black, moist, firm			0	Sample collected at 2 to 3 feet.
				2	SILTY CLAY (CL): Brown, w/gray mottling, moist, firm			0	
				3				0	
7-8	BS	90%		4				0	Sample Collected from 7 to 8 feet
				5				0	
				6				0	
				7	SILTY SAND (SM): Dark brown/gray, wet, fine to medium grained			0	
				8					
				9					
				10					
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Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig GeoProbe	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling _____ 8'	Rotary Depth _____ Geologist <u>PLS</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

LUST Incident No.: 981987	Boring Number: <u>GP-4</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to B-5</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
2-3	BS	85%		1	SILT LOAM (OL): Black, moist, firm			0	Sample collected at 2 to 3 feet.
				2	SILTY CLAY (CL): Brown, w/gray mottling, moist, firm			0	
6-7	BS	95%		3				0	Sample collected at 6 to 7 feet.
				4				0	
				5				0	
				6				0	
				7	SILTY SAND (SM): Dark brown/gray, wet, fine to medium grained			0	
				8				0	
				9				0	
				10					
				11					
				12					
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				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig GeoProbe	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>7'</u>	Rotary Depth _____ Geologist <u>ALG</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

LUST Incident No.: 981987	Boring Number: <u>GP-5</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to MW-4</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	Gravel Drive, gravel road base fill			0	Sample collected at 2 to 3 feet.
2-3	BS	80%		2	SILTY CLAY (CL); Brown, w/gray mottling, moist, firm			0	
				3				0	
				4				0	Sample collected at 6 to 7 feet.
6-7	BS	100%		6				0	
				7	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			0	
				8				0	
				9				0	
				10					
				11					
				12					
				13					
				14					
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				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>7</u>	Rotary Depth _____ Geologist <u>PLG</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

LUST Incident No.: 981987	Boring Number: <u>GP-6</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to B-2</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	Gravel Drive, gravel road base fill			0	
2-3	BS	85%		2	SILTY CLAY (CL); Brown, w/gray mottling, moist, firm			0	Sample collected at 2 to 3 feet.
				3					
				4					
				5					
7-8	BS	90%		7	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			0	Sample Collected from 7 to 8 feet
				8					
				9				0	
				10					
				11					
				12					
				13					
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				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>8'</u>	Rotary Depth _____ Geologist <u>PLG</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

LUST Incident No.: 981987	Boring Number: <u>GP-7</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to B-4</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks	
	BS	90%		1	Gravel Drive, gravel road base over gravelly clay fill material			0	Sample collected at 4 to 5 feet.	
				2	clayey sandy fill material			11		
				3						
4-5'				4	SILTY CLAY (CL); Black w/gray mottling, moist, firm strong odor			230		
				5						
6-7	BS	100%		6						Sample collected at 6 to 7 feet.
				7	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			58		
				8						
				9				0		
				10						
				11						
				12						
				13						
				14						
				15						
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Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>7'</u>	Rotary Depth _____ Geologist <u>PCS</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

LUST Incident No.: 981987	Boring Number: <u>GP-8</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to T-6</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	Gravel Drive, gravel road base fill			0	
2-3	BS	95%		2	Silty Clay Loam (OH); Black, moist hard			0	Sample collected at 2 to 3 feet.
				3	SILTY CLAY (CL); Brown, w/gray mottling, moist, firm			0	
				4				0	
6-7	BS	100%		6					Sample collected at 6 to 7 feet.
				7	wet clay			180	
				8	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			110	
				9					
				10					
				11					
				12					
				13					
				14					
				15					
				16					
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				25					
				26					
				27					
				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>7</u>	Rotary Depth _____ Geologist <u>PLS</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	

Note: Boring backfilled unless otherwise noted

## **Appendix C**

### **Soil and Groundwater Sampling Protocol**

## **SOIL SAMPLING PROTOCOL For Subsurface Investigations**

### **1. Sampling Methodology - Split Spoon Sampling**

- A. All sampling equipment to be used will be cleaned and decontaminated using deionized water prior to and between samples.
- B. Verification will be made that all boring equipment to include augers, split spoon samplers and associated equipment has been properly cleaned and decontaminated prior to initiating investigation.
- C. All boring and associated samplers will be decontaminated in accordance with the following schedule.
  - 1.) Augers and center plugs will be decontaminated between borings using a high pressure washer or steam cleaner.
  - 2.) Split Spoon Samplers will be decontaminated between samples using a warm water Alconox wash and triple rinsing.
- D. Samples representative of the interval retrieved will be removed and placed into new, glass jars with teflon lined lids\*. Proper care will be taken to minimize volatilization of possible contaminants from the sample during handling.
- E. The sample will be allowed to sit undisturbed for a period of time sufficient for vapor equilibrium to be reached. A headspace analysis of the sample will then be conducted using a portable photoionizer detector.
- F. A log of all borings will be recorded during sampling. The logs will include data regarding soil types and depths, anomalies, odor, HNU readings, and moisture contents.

### **2. Sample Storage, Handling and Transport**

- A. Samples for analysis will be immediately cooled using a thermally insulated cooler and ice. The samples will be transported, on ice, as soon as possible, to the laboratory or to the engineering office cooler to await transport to the laboratory.
- B. No sample will be allowed to remain in the possession of the geologist or laboratory for more than two weeks prior to analysis.
- C. A chain of custody record will be kept for all samples taken for laboratory analysis.

\*Encore sampling system will be substituted for glass jars when required.

## **GROUNDWATER SAMPLING PROTOCOL**

To be used when sampling groundwater monitoring wells for IEPA approved investigations.

### **1. Sampling Methodology - Bailer Method**

A. Verification will be made that all sampling equipment to include bailers, buckets, chords, water level meters, have been properly decontaminated prior to sampling initiation.

B. All equipment will be decontaminated in accordance with the following protocol:

1.) Bailers will be decontaminated between samples using Alconox wash, a 30% methanol/distilled water rinse, and a final triple rinse with distilled water.

2.) Water level probes and associated equipment will be decontaminated between readings using an Alconox wash and distilled water rinse.

3.) A new section of line will be used for bailing and sampling each individual well.

C. A record of the following will be made at the time of well sampling:

- 1.) Depth to water from top of well casing.
- 2.) Total well depth from top of well casing.
- 3.) Total vertical feet of water in well.
- 4.) Number of well volumes purged.
- 5.) Number of gallons purged.
- 6.) Sampling methods.
- 7.) Sample appearance.

D. Wells will be purged and sampled using the following method:

The total vertical feet of water in the 2" ID monitor well will be multiplied by 0.163 gal./ft. in order to determine the total volume of water in the well. A total of three well volumes will be purged from the well. Groundwater samples will then be withdrawn via a stainless steel bailer and collected in 40 milliliter, properly labeled vials. The samples will be immediately placed on ice for temporary storage until the samples can be transported to an IEPA certified laboratory.

## Appendix D

### $C_{sat}$ Calculations

S-29 For Benzene

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = \mathbf{2520 \text{ ppm}}$$

$$S = 1.80E+03 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 1.225 \text{ S19}$$

$$\Theta_w = 0.30 \text{ S20}$$

$$\Theta_a = 0.03 \text{ S21}$$

$$H' = 0.23 \text{ Table E}$$

S19

$$K_d = K_{oc} * f_{oc} = \mathbf{1.225}$$

$$K_{oc} = 50 \text{ Table E}$$

$$f_{oc} = 0.0245 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b / \rho_s = \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) : 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = .33 * (1/8)^{0.042}$$

$$\Theta_w = \mathbf{0.30}$$

$$S21 = \Theta_a = \eta - \Theta_w = \mathbf{0.03}$$

S-29 For Toluene

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = \mathbf{2,145 \text{ ppm}}$$

$$S = 5.30E+02 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 3.871 \text{ S19}$$

$$\Theta_w = 0.30 \text{ S20}$$

$$\Theta_a = 0.03 \text{ S21}$$

$$H' = 0.271 \text{ Table E}$$

S19

$$K_d = K_{oc} * f_{oc} = 3.871$$

$$K_{oc} = 158 \text{ Table E}$$

$$f_{oc} = 0.0245 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b/\rho_s = \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) = 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = 1.33 * (1/8)^{0.042}$$

$$\Theta_w = \mathbf{0.30}$$

$$S21 = \Theta_a = \eta - \Theta_w = \mathbf{0.03}$$

S-29 For Ethylbenzene

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = \mathbf{1363 \text{ ppm}}$$

$$S = 1.70\text{E}+02 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 7.84 \text{ S19}$$

$$\Theta_w = 0.30 \text{ S20}$$

$$\Theta_a = 0.03 \text{ S21}$$

$$H' = 0.324 \text{ Table E}$$

S19

$$K_d = K_{oc} * f_{oc} = \mathbf{7.84}$$

$$K_{oc} = 3.20\text{E}+02 \text{ Table E}$$

$$f_{oc} = 0.0245 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b/\rho_s = \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) : 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = 1.33 * (1/8)^{0.042}$$

$$\Theta_w = \mathbf{0.30}$$

$$S21 = \Theta_a = \eta - \Theta_w = \mathbf{0.03}$$

S-29 For Xylenes

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = \mathbf{1092 \text{ ppm}}$$

$$S = 1.10\text{E}+02 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 9.751 \text{ S19}$$

$$\Theta_w = 0.30 \text{ S20}$$

$$\Theta_a = 0.03 \text{ S21}$$

$$H' = 0.271 \text{ Table E}$$

S19

$$K_d = K_{\text{oc}} * f_{\text{oc}} = 9.751$$

$$K_{\text{oc}} = 3.98\text{E}+02 \text{ Table E}$$

$$f_{\text{oc}} = 0.0245 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b / \rho_s = \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) = 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = 1.33 * (1/8)^{0.042}$$

$$\Theta_w = \mathbf{0.30}$$

$$S21 = \Theta_a = \eta - \Theta_w = \mathbf{0.03}$$

# Appendix E

## Institutional Controls

### HAA and Groundwater Ordinance with MUO

# Village of Minier

Neill Keneipp  
Village President



Sandy Lancaster  
Village Clerk

110 W. Central • Box 350 • Minier, Illinois 61759  
Phone: 309/392-2442 • Fax: 309/392-2906

February 2, 2015

Penny Silzer  
Midwest Environmental Consulting &  
Remediation Services Inc.  
22200 IL. Rte. 9, P.O. Box 614  
Tremont, IL. 61568-0614

Dear Penny:  
Enclosed please find Ordinance #808, Ordinance #785, Ordinance #783 and Resolution #278 with an updated Certification for these documents.

If you have any other questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Sandy Lancaster". The signature is fluid and cursive, with the first name "Sandy" and last name "Lancaster" clearly legible.

Sandy Lancaster  
Village Clerk

Enclosure

R0699

### **CERTIFICATION OF ORDINANCE**

I SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that on January 04, 2011 the Corporate Authorities of the above municipality passed and approved Ordinance No. 783.

Ordinance No. 783, including the cover sheet thereof, was prepared and published in pamphlet form on the 04<sup>th</sup> day of January, 2011. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

I further certify that on March 15, 2011 the Corporate Authorities of the above municipality passed and approved Ordinance No. 785.

Ordinance No. 785, including the cover sheet thereof, was prepared and published in pamphlet form on the 15<sup>th</sup> day of March, 2011. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

I further certify that on March 29, 2013 the Corporate Authorities of the above Municipality passed and approved Ordinance No. 808.

Ordinance No. 808, including the cover sheet thereof, was prepared and published in pamphlet form on the 29<sup>th</sup> day of March, 2013. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

I further certify that on April 1, 2014 the Corporate Authorities of the above municipality passed and approve Resolution No. 278.

Resolution No. 278, including the cover sheet thereof, was prepared and published in pamphlet form on the 01<sup>st</sup> day of April, 2014. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

Dated at Minier, Illinois, this 02<sup>nd</sup> day of February, 2015.

(SEAL)

  
Sandy Lancaster, Village Clerk

**VILLAGE OF MINIER**

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**RESOLUTION NO. 278**

A RESOLUTION OF THE VILLAGE OF MINIER,  
ILLINOIS, AUTHORIZING ENTERING INTO A  
MEMORANDUM OF UNDERSTANDING

---

**ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS**

**THIS 1<sup>ST</sup> DAY OF APRIL, 2014**

---

**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 1<sup>st</sup> day of April, 2014.**

RESOLUTION NO. 278

A RESOLUTION OF THE VILLAGE OF MINIER, ILLINOIS, AUTHORIZING  
ENTERING INTO A MEMORANDUM OF UNDERSTANDING

WHEREAS, it is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois, enter into a Memorandum of Understanding with the Illinois Environmental Protection Agency; and

WHEREAS, pursuant to the Illinois Municipal Code, a municipality is authorized to enter into agreements with other governmental entities for lawful public purposes; and

WHEREAS, the Memorandum of Understanding is attached as Exhibit A.

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

SECTION 1. The foregoing recitals are incorporated herein as findings of the Village of Minier.

SECTION 2. The Village of Minier hereby determines that it is advisable, necessary, and in the interests of the public health, safety and welfare that the Municipality enter into a memorandum of understanding with the Illinois Environmental Protection Agency pursuant to the terms of the agreement that is attached as Exhibit A.

SECTION 3. The Village of Minier hereby approves and authorizes the Village president to execute the Memorandum of Understanding which is attached as Exhibit A.

SECTION 4. This Resolution is hereby published in pamphlet form by authority of the Village Board of the Village of Minier.

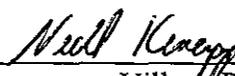
PASSED at a regular meeting of the Village Board of the Village of Minier held the 1<sup>st</sup> day of April, 2014.

AYES: Devine, Burt, LaDew, Crawford, Beccue & Needles

NAYS: None

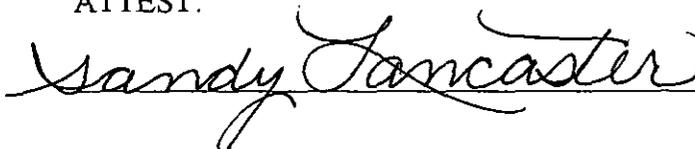
ABSENT: None

APPROVED this 1<sup>st</sup> day of April, 2014.



Village President

ATTEST:

 Village Clerk

**EXHIBIT A**  
**MEMORANDUM OF UNDERSTANDING**  
**BETWEEN THE VILLAGE OF MINIER AND THE ILLINOIS ENVIRONMENTAL**  
**PROTECTION AGENCY REGARDING THE USE OF A LOCAL GROUNDWATER OR**  
**WATER WELL ORDINANCE AS AN**  
**ENVIRONMENTAL INSTITUTIONAL CONTROL**

**I. PURPOSE AND INTENT**

- A. This Memorandum of Understanding ("MOU") between the Village of Minier and the Illinois Environmental Protection Agency ("Illinois EPA") is entered into for the purpose of satisfying the requirements of 35 Ill. Adm. Code 742.1015 for the use of groundwater or water well ordinances as environmental institutional controls. The Illinois EPA has reviewed the groundwater or water well ordinance of the Village of Minier (Attachment A) and determined that the ordinance prohibits the use of groundwater for potable purposes and/or the installation and use of new potable water supply wells by private entities but does not expressly prohibit those activities by the unit of local government itself. In such cases, 35 Ill. Adm. Code 742.1015(a) provides that the unit of local government may enter into an MOU with the Illinois EPA to allow the use of the ordinance as an institutional control.
- B. The intent of this Memorandum of Understanding is to specify the responsibilities that must be assumed by the unit of local government to satisfy the requirements for MOUs as set forth at 35 Ill. Adm. Code 742.1015(i).

**II. DECLARATIONS AND ASSUMPTION OF RESPONSIBILITY**

In order to ensure the long-term integrity of the groundwater or water well ordinance as an environmental institutional control and that risk to human health and the environment from contamination left in place in reliance on the groundwater or water well ordinance is effectively managed, the Village of Minier hereby assumes the following responsibilities pursuant to 35 Ill. Adm. Code 742.1015(d)(2) and (i):

- A. The Village of Minier will notify the Illinois EPA Bureau of Land of any proposed ordinance changes or requests for variance at least 30 days prior to the date the local government is scheduled to take action on the proposed change or request (35 Ill. Adm. Code 742.1015(i)(4));
- B. The Village of Minier will maintain a registry of all sites within its corporate limits that have received "No Further Remediation" determinations in reliance on the ordinance from the Illinois EPA (35 Ill. Adm. Code 742.1015(i)(5));
- C. The Village of Minier will review the registry of sites established under Paragraph II. B. prior to siting public potable water supply wells within the area covered by the ordinance (35 Ill. Adm. Code 742.1015(i)(6)(A));  
The Village of Minier will determine whether the potential source of potable water has been or may be affected by contamination left in place at the sites tracked and reviewed under paragraphs II. B. and C. (35 Ill. Adm. Code

742.1015(i)(6)(B)); and

- D. The Village of Minier will take action as necessary to ensure that the potential source of potable water is protected from contamination or treated before it is used as a potable water supply (35 Ill. Adm. Code 742.1015(i)(6)(C)).

NOTE: Notification under paragraph II. A. above or other communications concerning this MOU should be directed to:

**Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, Illinois 62794-9276**

### **III. SUPPORTING DOCUMENTATION**

The following documentation is required by 35 Ill. Adm. Code 742.1015(i) and is attached to this MOU:

- A. Attachment A: A copy of the groundwater or water well ordinance certified by the city clerk or other official as the current, controlling law (35 Ill. Adm. Code 742.1015(i)(3));
- B. Attachment B: Identification of the legal boundaries within which the ordinance is applicable (certification by city clerk or other official that the ordinance is applicable everywhere within the corporate limits; if ordinance is not applicable throughout the entire city or village, legal description and map of area showing sufficient detail to determine where ordinance is applicable) (35 Ill. Adm. Code 742.1015(i)(2));
- C. Attachment C: A statement of the authority of the unit of local government to enter into the MOU (council resolution, code of ordinances, inherent powers of mayor or other official signing MOU – attach copies) (35 Ill. Adm. Code 742.1015(i)(1)).

IN WITNESS WHEREOF, the lawful representatives of the parties have caused this MOU to be signed as follows:

**FOR: The Village of Minier**

BY: Neill Keneipp  
Neill Keneipp, Village President

DATE: 04/01/2014

**FOR: Illinois Environmental Protection Agency**

BY: \_\_\_\_\_  
Manager, Division of Remediation Management  
Bureau of Land

DATE: \_\_\_\_\_

**R0705**

**VILLAGE OF MINIER**

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**ORDINANCE NO. 783**

AN ORDINANCE OF THE VILLAGE OF MINIER,  
ILLINOIS AMENDING CHAPTER 9, ARTICLE 1,  
SECTION 9-1-16 OF THE VILLAGE CODE

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**ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS**

**THIS 4<sup>th</sup> DAY OF JANUARY, 2011**

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**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 4<sup>th</sup> day of January, 2011.**

**ORDINANCE NO. 783**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS  
AMENDING THE WATER SYSTEM ORDINANCE**

---

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

SECTION 1. It is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois ("Village"), amend Chapter 9, Article 1, Section 9-1-16 the Water System Ordinance; and

SECTION 2. Certain properties in the Village have been used over a period of time for commercial/industrial purposes; and

SECTION 3. Because of said use, concentrations of certain chemical constituents in the groundwater beneath the Village may exceed Class I groundwater quality standards for potable resource groundwater as forth in 35 Illinois Administrative Code 620, or Tier 1 residential remediation objectives as set forth in 35 Illinois Administrative Code 742; and

SECTION 4. The Village desires to limit potential threats to human health from groundwater contamination while facilitating the redevelopment and productive use of properties that are the source of said chemical constituents; and

SECTION 5. Section 9-1-16 of Chapter 9 of the Code of the Village provides a listing of all properties where the use of private water systems is prohibited; and

SECTION 6. Chapter 9, Article 1, Section 9-1-16 of the Village Code of the Village of Minier is hereby amended to add the language set forth below; and

**NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER, ILLINOIS,** that Section 9-1-16 of Chapter 9 of the Code of the Village is amended as follows:

9-16-16: PRIVATE WATER SYSTEMS PROHIBITED: No person having his residence or place of business within the territorial limits of the Village waterworks and sewerage system shall be permitted to secure water for such residence, or place of business, located in the Village, otherwise than through the water mains of the Village, whenever the water mains of the water system of the Village are adjacent to any subdivided lot, or parcel of real estate upon which said residence or place of business is located, unless such system existed prior to installation of the public water main.

Notwithstanding the preceding paragraph, the use of private water systems is expressly prohibited because of the possibility of ground water contamination at the following location:

A. 208 Route 122, Minier, IL 61759

A tract described as follows: Starting at the Northeast corner of Lot 16 in Livesay's Addition to the Village of Minier, thence North to the south line of the public highway; thence East 166' to the place of beginning; thence east 90'; thence South to the North line of Livesay's addition; thence West 90'; thence north to POB in the NW 1/4 of the NE 1/4 Section 22, TWP 23 N, R2E, Tazewell County, ILL (Also known as part of Lot 17).

PIN: 19-19-22-201-013

SECTION 7. All ordinances or parts of ordinances in conflict herewith are hereby repealed;  
and

SECTION 8. This ordinance is hereby published in pamphlet form by authority of the Village Board of the Village of Minier; and

PASSED at a regular meeting of the Village Board of the Village of Minier held the 4<sup>th</sup> day of January, 2011.

AYES: Devine, Burt, Crawford & Needles

NAYS: None

ABSENT: J. Beccue & M. Beccue

APPROVED this 4<sup>th</sup> day of January, 2011.

Neil Kenney  
Village President

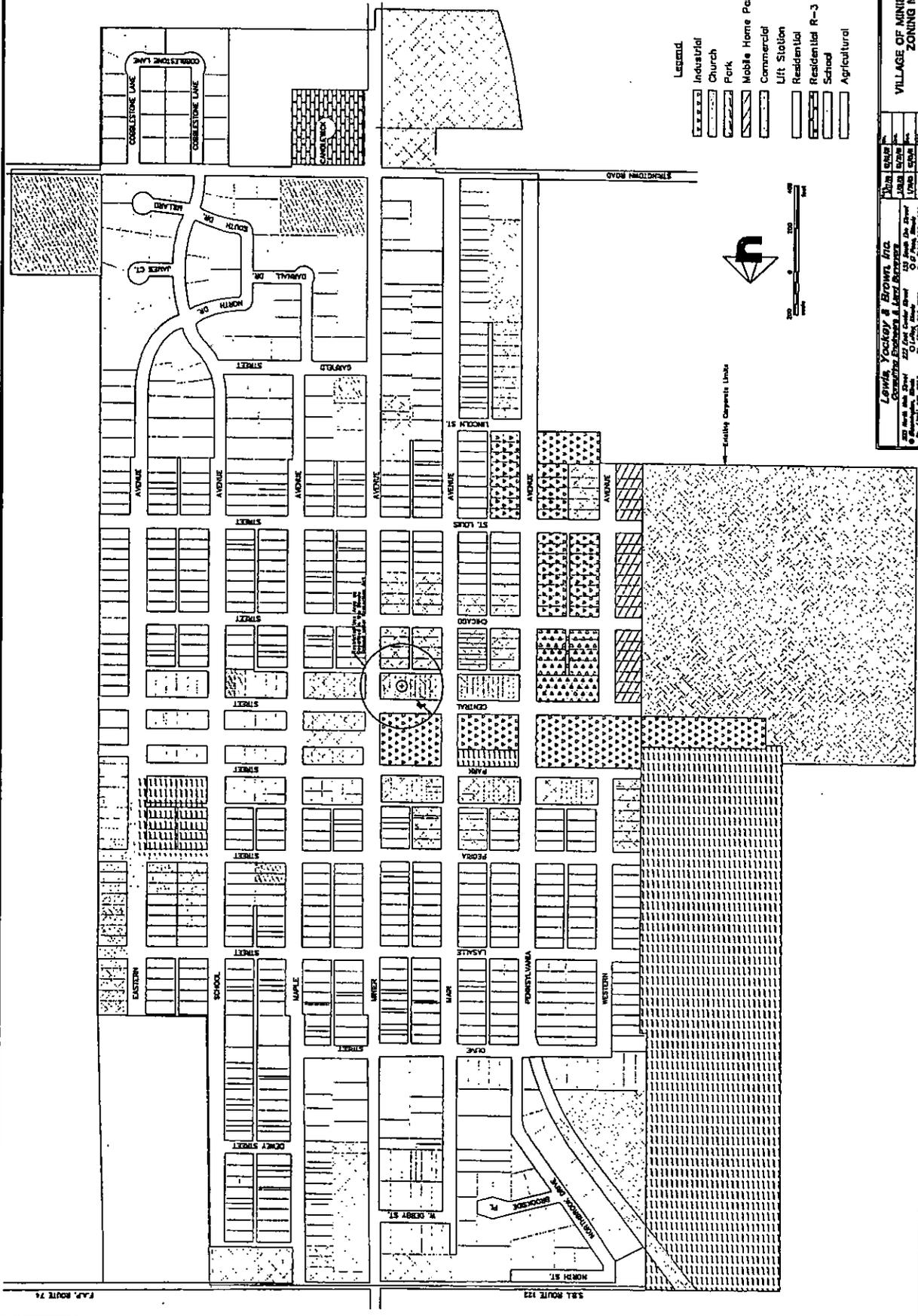
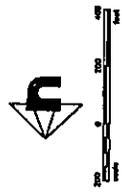
ATTEST:

Yandy Lancaster  
Village Clerk

VILLAGE OF MINIER, ILLINOIS  
ZONING MAP

**Plan Date:** 11/15/00  
**Plan No.:** 11/15/00  
**Scale:** 1" = 100'  
**Author:** Lewis, Yockey & Brown, Inc.  
**Checked:** [Signature]  
**Approved:** [Signature]  
**City Engineer:** [Signature]  
**City Clerk:** [Signature]  
**City Council:** [Signature]  
**City Manager:** [Signature]

- Legend:**
- Industrial
  - Church
  - Park
  - Mobile Home Park
  - Commercial
  - Lift Station
  - Residential R-3
  - School
  - Agricultural



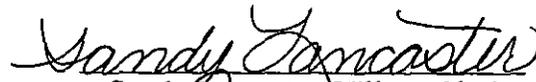
**CERTIFICATION**

I SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that the attached map is a true and correct legal boundary of the Village of Minier and that the Groundwater ordinance is applicable everywhere within the Village limits.

Dated at Minier, Illinois, this 15<sup>th</sup> day of March, 2011.

(SEAL)

  
Sandy Lancaster, Village Clerk

**VILLAGE OF MINIER**

---

**ORDINANCE NO. 785**

**AN ORDINANCE OF THE VILLAGE OF MINIER,  
ENTERING INTO A MEMORANDUM OF  
UNDERSTANDING WITH THE ILLINOIS  
ENVIRONMENTAL PROTECTION AGENCY**

---

**ADOPTED BY THE**

**VILLAGE BOARD**

**OF THE**

**VILLAGE OF MINIER, ILLINOIS**

**THIS 15TH DAY OF MARCH, 2011**

---

**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 15th day of March, 2011.**

ORDINANCE NO. 785

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS  
ENTERING INTO A MEMORANDUM OF UNDERSTANDING WITH  
THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

---

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

SECTION 1. Certain properties in the Village have been used over a period of time for commercial/industrial purposes; and

SECTION 2. Because of said use, concentrations of certain chemical constituents in the groundwater beneath the Village may exceed Class I groundwater quality standards for potable resource groundwater as forth in 35 Illinois Administrative Code 620, or Tier 1 residential remediation objectives as set forth in 35 Illinois Administrative Code 742; and

SECTION 3. The Village desires to limit potential threats to human health from groundwater contamination while facilitating the redevelopment and productive use of properties that are the source of said chemical constituents; and

SECTION 4. Section 9-1-16 of Chapter 9 of the Code of the Village provides a listing of all properties where the use of private water systems is prohibited; and

SECTION 5. It is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois ("Village"), to enter into a Memorandum of Understanding with the Illinois Environmental Protection Agency to memorialize the institutional controls established to insure that the public water system is safe from contaminants; and

SECTION 7. All ordinances or parts of ordinances in conflict herewith are hereby repealed; and

SECTION 8. This ordinance is hereby published in pamphlet form by authority of the Village Board of the Village of Minier; and

**NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER, ILLINOIS,** that the Village President may enter into and execute the Memorandum of Understanding with the Illinois Environmental Protection Agency attached hereto as Exhibit A.

PASSED at a regular meeting of the Village Board of the Village of Minier held the  
15th day of March, 2011.

AYES: Devine, Burt, Crawford & Needles

NAYS: None

ABSENT: J. Beccue & M. Beccue

APPROVED this 15th day of March, 2011.

Neill Kenegg  
Village President

ATTEST:

Kandy Tomcaster  
Village Clerk

**CERTIFICATION OF ORDINANCE**

I SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that on March 15, 2011 the Corporate Authorities of the above municipality passed and approved Ordinance No. 785.

Ordinance No. 785, including the cover sheet thereof, was prepared and published in pamphlet form on the 15<sup>th</sup> day of March, 2011. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

Dated at Minier, Illinois, this 15<sup>th</sup> day of March, 2011.

(SEAL)

  
Sandy Lancaster, Village Clerk

MEMORANDUM OF UNDERSTANDING BETWEEN  
VILLAGE OF MINIER AND THE ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY REGARDING THE USE OF A LOCAL GROUNDWATER OR  
WATER WELL ORDINANCE AS AN ENVIRONMENTAL INSTITUTIONAL CONTROL

I. PURPOSE AND INTENT

- A. This Memorandum of Understanding (“MOU”) between Village of Minier and the Illinois Environmental Protection Agency (“Illinois EPA”) is entered into for the purpose of satisfying the requirements of 35 Ill. Adm. Code 742.1015 for the use of groundwater or water well ordinances as environmental institutional controls. The Illinois EPA has reviewed the groundwater or water well ordinance of Village of Minier (Attachment A) and determined that the ordinance prohibits the use of groundwater for potable purposes and/or the installation and use of new potable water supply wells by private entities but does not expressly prohibit those activities by the unit of local government itself. In such cases, 35 Ill. Adm. Code 742.1015(a) provides that the unit of local government may enter into an MOU with the Illinois EPA to allow the use of the ordinance as an institutional control.
- B. The intent of this Memorandum of Understanding is to specify the responsibilities that must be assumed by the unit of local government to satisfy the requirements for MOUs as set forth at 35 Ill. Adm. Code 742.1015(i).

II. DECLARATIONS AND ASSUMPTION OF RESPONSIBILITY

In order to ensure the long-term integrity of the groundwater or water well ordinance as an environmental institutional control and that risk to human health and the environment from contamination left in place in reliance on the groundwater or water well ordinance is effectively managed, Village of Minier hereby assumes the following responsibilities pursuant to 35 Ill. Adm. Code 742.1015(d)(2) and (i):

- A. Village of Minier will notify the Illinois EPA Bureau of Land of any proposed ordinance changes or requests for variance at least 30 days prior to the date the local government is scheduled to take action on the proposed change or request (35 Ill. Adm. Code 742.1015(i)(4));
- B. Village of Minier will maintain a registry of all sites within its corporate limits that have received “No Further Remediation” determinations in reliance on the ordinance from the Illinois EPA (35 Ill. Adm. Code 742.1015(i)(5));
- C. Village of Minier will review the registry of sites established under paragraph II. B. prior to siting public potable water supply wells within the area covered by the ordinance (35 Ill. Adm. Code 742.1015(i)(6)(A));



- D. Village of Minier will determine whether the potential source of potable water has been or may be affected by contamination left in place at the sites tracked and reviewed under paragraphs II. B. and C. (35 Ill. Adm. Code 742.1015(i)(6)(B)); and
- E. Village of Minier will take action as necessary to ensure that the potential source of potable water is protected from contamination or treated before it is used as a potable water supply (35 Ill. Adm. Code 742.1015(i)(6)(C)).

NOTE: Notification under paragraph II. A. above or other communications concerning this MOU should be directed to:

Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, IL 62794-9276

### III. SUPPORTING DOCUMENTATION

The following documentation is required by 35 Ill. Adm. Code 742.1015(i) and is attached to this MOU:

- A. Attachment A: A copy of the groundwater or water well ordinance certified by the city clerk or other official as the current, controlling law (35 Ill. Adm. Code 742.1015(i)(3));
- B. Attachment B: Identification of the legal boundaries within which the ordinance is applicable (certification by city clerk or other official that the ordinance is applicable everywhere within the corporate limits; if ordinance is not applicable throughout the entire city or village, legal description and map of area showing sufficient detail to determine where ordinance is applicable) (35 Ill. Adm. Code 742.1015(i)(2));
- C. Attachment C: A statement of the authority of the unit of local government to enter into the MOU (council resolution, code of ordinances, inherent powers of mayor or other official signing MOU -- attach copies) (35 Ill. Adm. Code 742.1015(i)(1)).

IN WITNESS WHEREOF, the lawful representatives of the parties have caused this MOU to be signed as follows:

FOR: Village of Minier  
(Name of city or village)

BY: Neill Keneipp  
(Name and title of signatory)  
Neill Keneipp, Village President

DATE: 3/15/11

FOR: Illinois Environmental Protection Agency

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
Manager, Division of Remediation Management  
Bureau of Land

**VILLAGE OF MINIER**

---

**ORDINANCE NO. 808**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS PROHIBITING THE  
USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE  
INSTALLATION OR THE USE OF POTABLE WATER SUPPLY WELLS OR BY ANY  
OTHER METHOD**

---

**ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS**

**THIS 19th DAY OF MARCH 2013**

---

**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 19th day of March, 2013.**

**ORDINANCE NO. 808**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS PROHIBITING THE  
USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE  
INSTALLATION OR THE USE OF POTABLE WATER SUPPLY WELLS OR BY ANY  
OTHER METHOD**

---

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE  
VILLAGE OF MINIER, ILLINOIS:

WHEREAS, certain properties in the Village of Minier ("Village"), Illinois have been used  
over a period of time for commercial/industrial purposes; and

WHEREAS, because of said use, concentrations of certain chemical constituents in the  
groundwater beneath the Village may exceed Class I groundwater quality standards for potable  
resource groundwater as set forth in 35 Illinois Administrative Code 620 or Tier 1 remediation  
objectives as set forth in 35 Illinois Administrative Code 742; and

WHEREAS, the Village to limit potential threats to human health from groundwater  
contamination while facilitating the redevelopment and productive use of properties that are  
the source of said chemical constituents;

**NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER,  
ILLINOIS:**

**Section One.** Use of groundwater as a potable water supply prohibited.

Except for such uses or methods in existence before the effective date of  
this ordinance, the use or attempt to use as a potable water supply  
groundwater from within the corporate limits of the Village of Minier, as a  
potable water supply, by the installation or drilling of wells or by any other  
method is hereby prohibited. This prohibition does not include the Village  
of Minier.

**Section Two.** Penalties.

Any person violating the provisions of this ordinance shall be subject to a fine of  
up to \$250.00 for each violation.

**Section Three.** Definitions.

"Person" is any individual, partnership, co-partnership, firm, company, limited

liability company, corporation, association, joint stock company, trust, estate, political subdivision, or any other legal entity, or their legal representatives, agents or assigns.

"Potable water" is any water used for human or domestic consumption, including, but not limited to, water used for drinking, bathing, swimming, washing dishes, or preparing foods.

**Section Four. Memorandum of Understanding.**

The President of the Village of Minier was previously authorized and directed to enter into a Memorandum of Understanding on or about January 4, 2011 with the Illinois Environmental Protection Agency ("Illinois EPA") in which the Village of Minier assumes responsibility for tracking all sites that have received no further remediation determinations from the Illinois EPA, notifying the Illinois EPA of changes to this ordinance, and taking certain precautions when siting public potable water supply wells.

**Section Five. Repealer.**

All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed insofar as they are in conflict with this ordinance.

**Section Six. Severability.**

If any provision of this ordinance or its application to any person or under any circumstances is adjudged invalid, such adjudication shall not affect the validity of the ordinance as a whole or of any portion not adjudged invalid.

**Section Seven. Effective date.**

This ordinance shall be in full force and effect from and after its passage, approval and publication as required by law.

PASSED at a regular meeting of the Village Board of the Village of Minier held the 19th day of March, 2013.

AYES: Devine, Burt, LaDew, Crawford, Beccue & Needles

NAYS: None

ABSENT: None

APPROVED this 19th day of March, 2013.

*Neil Kenney*  
\_\_\_\_\_  
Village President

ATTEST:

*Sandy Lancaster*  
\_\_\_\_\_  
Village Clerk



# Illinois Department of Transportation

Office of Chief Counsel  
2300 South Dirksen Parkway / Springfield, Illinois / 62764

October 4, 2013

Midwest Environmental Consulting & Remediation Services, Inc.  
Attn: Penny Silzer  
PO Box 614  
Tremont, IL 61568-0614

Re: TACO Agreement: HAA 1342 in Minier, IL

Dear Ms. Silzer:

I have enclosed a fully executed original Highway Authority Agreement for the above site.

Please submit the agreement to the Illinois Environmental Protection Agency for their approval.

Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Michael Prater'.

Michael Prater  
Assistant Chief Counsel

Enclosure

R0722

### HIGHWAY AUTHORITY AGREEMENT

This Agreement is entered into this 6<sup>th</sup> day of September, 2013 pursuant to 35 Ill. Adm. Code 742.1020 by and between the Warsaw ITCO "Owner/Operator" and Illinois Department of Transportation "Highway Authority," collectively known as the "Parties."

**WHEREAS**, Warsaw ITCO is the owner or operator of one or more leaking underground storage tanks presently or formerly located at *IL Route 122, Minier, Illinois* ("the Site");

**WHEREAS**, as a result of one or more releases of contaminants from the above referenced underground storage tanks "the Release(s)", soil and/or groundwater contamination at the Site exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742;

**WHEREAS**, the soil and/or groundwater contamination exceeding Tier 1 residential remediation objectives extends or may extend into the Highway Authority's right-of-way;

**WHEREAS**, the Owner/Operator is conducting corrective action in response to the Release(s);

**WHEREAS**, the Parties desire to prevent groundwater beneath the Highway Authority's right-of-way that exceeds Tier 1 remediation objectives from use as a supply of potable or domestic water and to limit access to soil within the right-of-way that exceeds Tier 1 residential remediation objectives so that human health and the environment are protected during and after any access;

**NOW, THEREFORE**, the Parties agree as follows:

1. The recitals set forth above are incorporated by reference as if fully set forth herein.
2. The Illinois Emergency Management Agency has assigned incident number **981987** to the Release(s).
3. Attached as Exhibit A is a scaled map(s) prepared by the Owner/Operator that shows the Site and surrounding area and delineates the current and estimated future extent of soil and groundwater contamination above the applicable Tier 1 residential remediation objectives as a result of the Release(s).
4. Attached as Exhibit B is a table(s) prepared by the Owner/Operator that lists each contaminant of concern that exceeds its Tier 1 residential remediation objective, its Tier 1 residential remediation objective and its concentrations within the zone where Tier 1 residential remediation objectives are exceeded. The locations of the concentrations listed in Exhibit B are identified on the map(s) in Exhibit A.
5. Attached as Exhibit C is a scaled map prepared by the Owner/Operator showing the area of the Highway Authority's right-of-way that is governed by this agreement ("Right-of-Way"). Because Exhibit C is not a surveyed plat, the Right-of-Way boundary may be an approximation of the actual Right-of-Way lines.
6. The Highway Authority stipulates it has jurisdiction over the Right-of-Way that gives it sole control over the use of the groundwater and access to the soil located within or beneath the Right-of-Way.
7. The Highway Authority agrees to prohibit within the Right-of-Way all potable and domestic uses of groundwater exceeding Tier 1 residential remediation objectives.

8. The Highway Authority further agrees to limit access by itself and others to soil within the Right-of-Way exceeding Tier 1 residential remediation objectives. Access shall be allowed only if human health (including worker safety) and the environment are protected during and after any access. The Highway Authority may construct, reconstruct, improve, repair, maintain and operate a highway upon the Right-of-Way, or allow others to do the same by permit. In addition, the Highway Authority and others using or working in the Right-of-Way under permit have the right to remove soil or groundwater from the Right-of-Way and dispose of the same in accordance with applicable environmental laws and regulations. The Highway Authority agrees to issue all permits for work in the Right-of-Way, and make all existing permits for work in the Right-of-Way, subject to the following or a substantially similar condition:

As a condition of this permit the permittee shall request the office issuing this permit to identify sites in the Right-of-Way where a Highway Authority Agreement governs access to soil that exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742. The permittee shall take all measures necessary to protect human health (including worker safety) and the environment during and after any access to such soil.

9. This agreement shall be referenced in the Agency's no further remediation determination issued for the Release(s).
10. The Agency shall be notified of any transfer of jurisdiction over the Right-of-Way at least 30 days prior to the date the transfer takes effect. This agreement shall be null and void upon the transfer unless the transferee agrees to be bound by this agreement as if the transferee were an original party to this agreement. The transferee's agreement to be bound by the terms of this agreement shall be memorialized at the time of transfer in a writing ("Rider") that references this Highway Authority Agreement and is signed by the Highway Authority, or subsequent transferor, and the transferee.
11. This agreement shall become effective as a Highway Authority Agreement on the date the Agency issues a no further remediation determination for the Release(s). It shall remain effective as a Highway Authority Agreement until the Right-of-Way is demonstrated to be suitable for unrestricted use and the Agency issues a new no further remediation determination to reflect there is no longer a need for this agreement, or until the agreement is otherwise terminated or voided.
12. In addition to any other remedies that may be available, the Agency may bring suit to enforce the terms of this agreement or may, in its sole discretion, declare this agreement null and void if any of the Parties or any transferee violates any term of this agreement. The Parties or transferee shall be notified in writing of any such declaration.
13. This agreement shall be null and void as a Highway Authority Agreement if a court of competent jurisdiction strikes down any part or provision of the agreement.
14. This agreement supersedes any prior written or oral agreements or understandings between the Parties on the subject matter addressed herein. It may be altered, modified or amended only upon the written consent and agreement of the Parties.
15. Any notices or other correspondence regarding this agreement shall be sent to the Parties at following addresses:

Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, IL 62974-9276

If to Owner/Operator:

John Warsaw  
P. O. Box 886  
Minier, Illinois 61759

If to Department:

Illinois Department of Transportation  
Region Three Engineer  
Attn: District Four Environmental Studies Unit  
401 Main Street  
Peoria, Illinois 61602

And to:

Midwest Environmental Consulting  
Attn: Penny Silzer  
PO Box 614  
Tremont, Illinois 61568

And to:

Illinois Department of Transportation  
Attn: Assistant Chief Counsel  
2300 S. Dirksen Parkway, Room 313  
Springfield, Illinois 62764

16. This Agreement is not binding upon the Department until it is executed by the undersigned representative of the Department. Prior to execution by the undersigned representative of the Department this Agreement constitutes an offer by Owner/Operator. The duly authorized representatives of Owner/Operator have signed this Agreement and this Agreement is binding upon them, their successors and assigns.
17. The IEPA and Illinois Attorney General "AG" must review and approve this Agreement, and this Agreement shall be referenced in the IEPA's "No Further Remediation" determination in the chain of title for the Site in the county where the Site is located. This Agreement shall be null and void as a Highway Authority Agreement should the IEPA or AG not approve it or should it not be referenced in the "No Further Remediation" determination, provided, however, that this Agreement shall be effective between the Owner/Operator and the Department immediately upon signature by their representatives.
18. The Owner/Operator agrees to defend, indemnify and hold harmless the Department, and other highway authorities, if any, maintaining the highway Right-of-Way by an agreement with the Department, and the Department's agents, contractors or employees for all obligations asserted against or costs incurred by them, including reasonable attorney's fees and court costs, associated with the release of Contaminants from the Site, regardless whether said obligations or costs were caused by the negligence, but not the gross negligence, of them.
19. As an additional consideration, Owner/Operator agrees to reimburse the Department for reasonable costs to protect human health and the environment, including, but not limited to, identifying, investigating, handling, storing and disposing of contaminated soil and/or groundwater in the Right-of-Way as a result of the release of contaminants at this Site. It has been determined that the Department has not incurred any reimbursable costs at the time this Agreement is executed by the undersigned representative of the Department. If future costs are incurred, a cashier's check made payable to "Treasurer, State of Illinois" shall be tendered to the Department of Transportation upon demand by the Department.
20. Violation of the terms of this Agreement by Owner/Operator, or their successors in interest, may be grounds for voidance of this Agreement as a Highway Authority Agreement. Violation of the terms of this Agreement by the Department will not void this Agreement, unless the IEPA has determined that the violation is grounds for voiding this Agreement as a Highway Authority Agreement and the Department has not cured the violation within such time as IEPA has granted to cure the violation.

21. This Agreement is in settlement of claims the Department may have arising from the release of Contaminants into the Right-of-Way associated with IEMA incident number 981987.
22. Prior to accessing or granting access to the soil as provided in Paragraph 8 herein, the Department will first give Owner/Operator written notice, unless there is an immediate threat to the health or safety to any individual or to the public, that it intends to perform a site investigation in the Right-of-Way and remove or dispose of contaminated soil or groundwater to the extent necessary for its work. Failure to give notice is not a violation of this Agreement. The removal or disposal shall be based upon the site investigation (which may be modified by field conditions during excavation). A copy of the site investigation report will be provided to Owner/Operator. If practicable, as reasonably determined by the Department, the Department may provide Owner/Operator with an opportunity to perform the Site investigation and to remove and dispose of the contaminated soil and/or groundwater necessary for the Department's work in advance of that work.

The Owner/Operator shall reimburse the reasonable costs incurred by the Department to perform the site investigation and to dispose of any contaminated soil or groundwater, provided, however, that if notice to Owner/Operator has not been given and there was no immediate threat to health or safety, reimbursement for those costs shall be limited to \$10,000.00. There is a rebuttable presumption that the Contaminants found in the highway Right-of-Way arose from the release of Contaminants from the Site. Should Owner/Operator not reimburse the reasonable costs under the conditions set forth herein, this Agreement shall be null and void, at the Department's option, upon written notice to Owner/Operator by the Department that those costs have not been reimbursed. Owner/Operator may cure that problem within twenty working days by making payment, or may seek to enjoin that result.

23. The Department's sole responsibility under this Agreement with respect to others using the highway Right-of-Way under permit from the Department is to include the following, or similar language, in the future standard permit provisions and to make an effort to notify its current permit holders of the following:

As a condition of this permit the permittee shall request the office issuing this permit to identify sites in the Right-of-Way where a Highway Authority Agreement governs access to soil that exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742. The permittee shall take all measures necessary to protect human health (including worker safety) and the environment during and after any access to such soil.

Owner/Operator hereby releases the Department from liability for breach of this Agreement by others under permit and agrees to defend and indemnify the Department against claims that may arise from others under permit causing a breach of this Agreement. Owner/ Operator agrees that its personnel, if any, at the Site who are aware of this Agreement will notify anyone they know is excavating in the Right-of-Way about this Agreement.

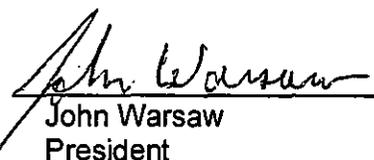
24. Should the Department breach this Agreement, Owner/Operator's sole remedy is for an action for damages in the Illinois Court of Claims. Any and all claims for damages against the Department, its agents, contractors, employees or its successors in interest arising at any time for a breach of paragraphs 7 and 8 of this Agreement are limited to an aggregate maximum of \$20,000.00. No other breach by the Department, its agents, contractors, employees and its successors in interest of a provision of this Agreement is actionable in either law or equity by Owner/Operator against the Department or them and Owner/Operator hereby releases the Department, its agents, contractors, employees and its successors in interest for any cause of action it may have against them, other than as allowed in this paragraph, arising under this Agreement or environmental laws, regulations or common law governing the contaminated soil or groundwater in the highway Right-of-Way. Should the Department convey, vacate or transfer jurisdiction of that highway Right-of-Way, Owner/Operator

may pursue an action under this Agreement against the successors in interest, other than a State agency, in a court of law.

25. This Agreement is entered into by the Department in recognition of laws passed by the General Assembly and regulations adopted by the Pollution Control Board which encourage a tiered-approach to remediating environmental contamination. This Agreement is entered into by the Department in the spirit of those laws and under its right and obligations as a highway authority.

Should any provisions of this Agreement be struck down as beyond the authority of the Department, however, this Agreement shall be null and void.

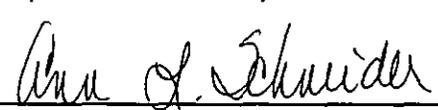
**IN WITNESS WHEREOF**, Owner/Operator, Warsaw ITCO, has caused this Agreement to be signed by its duly authorized representative.

BY:   
John Warsaw  
President

DATE: 15 August 2013

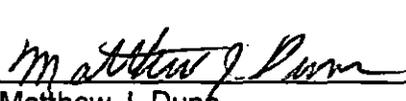
IN WITNESS WHEREOF, the Department has caused this Agreement to be signed by its Secretary.

Illinois Department of Transportation

BY:   
Ann L. Schneider  
Secretary

DATE: 9/6/13

This Agreement is approved on behalf of the Office of the Illinois Attorney General.

BY:   
Matthew J. Dunn  
Assistant Attorney General  
Chief, Division of Environmental/Asbestos Litigation

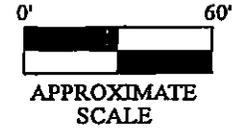
DATE: 9/30/13

**Exhibit: A**

Agricultural

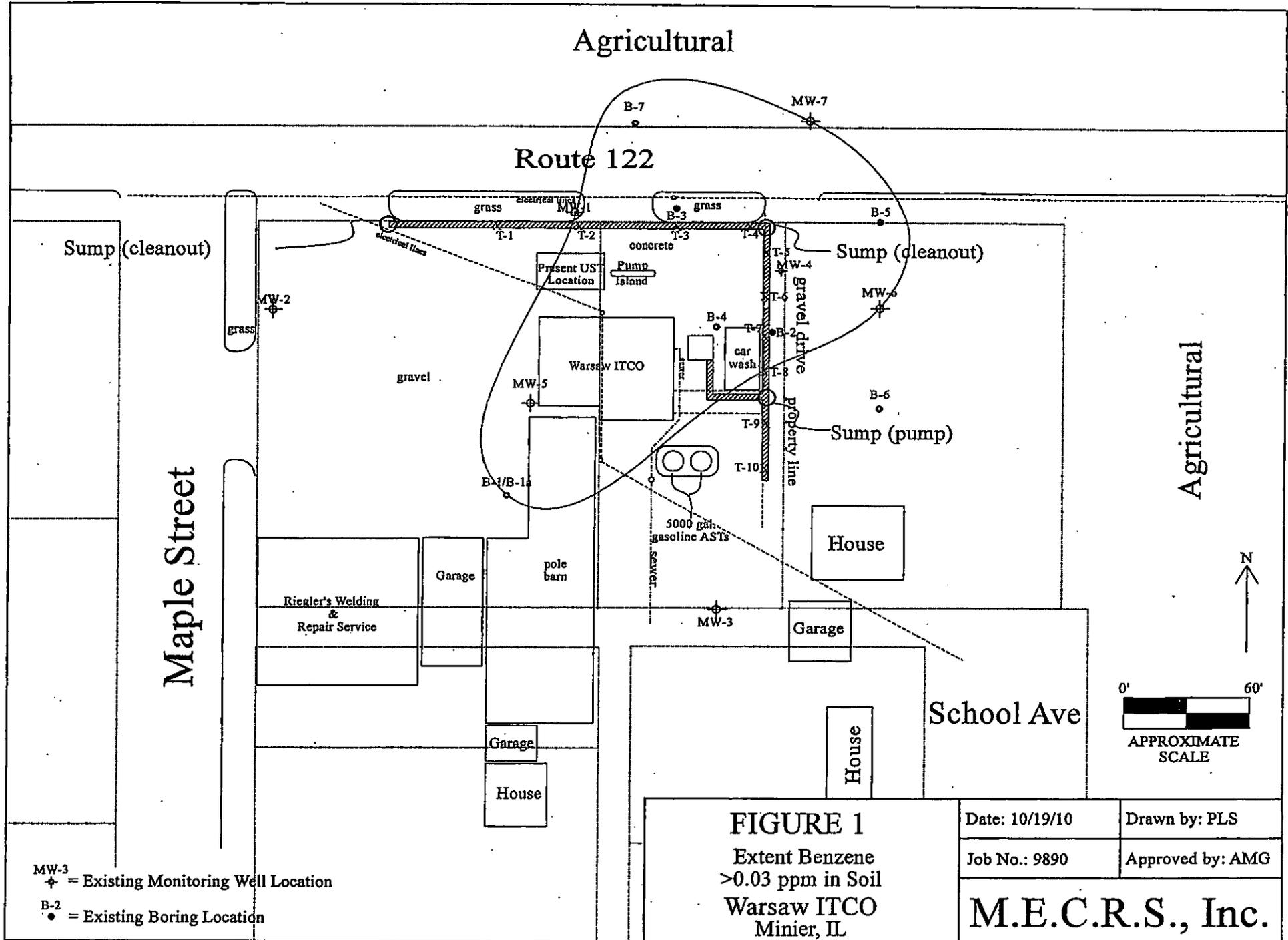
Route 122

Agricultural



HAA 1342

Page 7 of 13



MW-3  
 + = Existing Monitoring Well Location  
 B-2  
 • = Existing Boring Location

**FIGURE 1**  
 Extent Benzene  
 >0.03 ppm in Soil  
 Warsaw ITCO  
 Minier, IL

Date: 10/19/10	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**

R0729

Agricultural

Route 122

Extent Benzene in GW > 0.005 ppm

Agricultural

Sump (cleanout)

Sump (cleanout)

Sump (pump)

Maple Street

Warsaw ITCO

House

Riegler's Welding & Repair Service

Garage

pole barn

Garage

School Ave

Garage

House

House

FIGURE 2

Extent Benzene Contamination  
In Groundwater

Warsaw ITCO  
Minier, IL

Date: 10/19/10

Drawn by: PLS

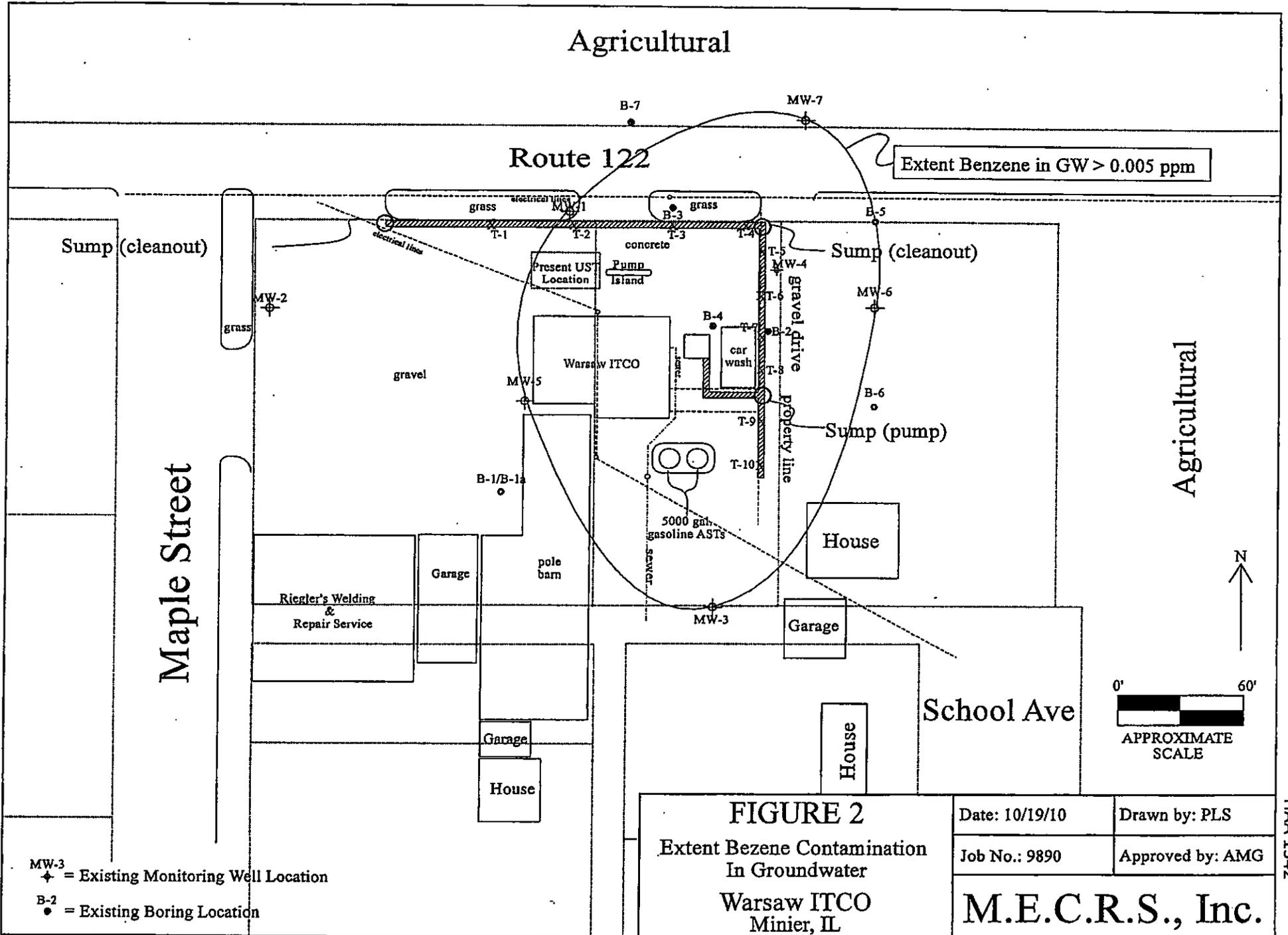
Job No.: 9890

Approved by: AMG

M.E.C.R.S., Inc.

R0730

- MW-3  
+ = Existing Monitoring Well Location
- B-2  
• = Existing Boring Location



**Exhibit: B**

**TABLE 1.**  
**Soil Analytical Results**  
**Warsaw-ITCO**  
**Minier, IL**

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/2000	<0.002	<0.002	<0.002	<0.005	<0.011
B-2, 4-6'	5/3/2000	0.810	1.300	1.700	6.500	10.310
B-2, 6-8'	5/3/2000	0.600	0.220	0.420	1.900	3.140
B-2, 8-10'	5/3/2000	21.0	41.0	47.0	190.0	299.0
B-3, 6-8'	5/3/2000	0.400	0.120	0.210	0.460	1.190
B-3, 8-10'	5/3/2000	2.300	2.100	21	110	135.400
MW-1, 6-8'	5/4/2000	<0.002	<0.002	<0.002	<0.005	<0.011
MW-2, 8-10'	5/3/2000	<0.002	<0.002	<0.002	<0.005	<0.011
MW-3, 8-10'	5/3/2000	<0.002	<0.002	0.006	<0.005	<0.0147
MW-4, 4-6'	5/4/2000	0.230	0.220	0.870	2.500	3.820
MW-4, 6-8'	5/4/2000	0.300	1.200	5.400	20.000	26.900
B-4, 0.5-2.5'	8/23/2001	0.0081 M	0.019 M	0.0447 M	0.0772 M	0.149 M
B-4, 4-6'	8/23/2001	11.6 ME	42.7 ME	9.72 ME	38.0 ME	102.02 ME
B-5, 6-8'	8/23/2001	0.049	0.186 E	0.038	0.130	0.403
B-6, 4-6'	8/23/2001	0.020	0.053	0.031	0.090	0.194
B-6, 8-10'	8/23/2001	0.007	0.012	<0.0024	0.011	<0.0323
B-7, 8-10'	8/23/2001	0.0167 M	0.0615 M	0.0139 M	0.0395 M	0.1316 M
B-7, 12-14'	8/23/2001	0.754	<0.0613	<0.0613	<0.153	<1.0296
MW-5, 8-10'	8/23/2001	0.494 M	4.75 M	5.89 M	7.57 M	18.704 M
MW-6, 6-8'	8/23/2001	0.007	0.012	0.006	0.011	0.037
MW-7, 4-6'	8/23/2001	0.012	0.025	0.011	0.020	0.068
MW-7, 8-10	8/23/2001	0.0155 M	0.0202 M	0.007	0.012	0.054
T-1	10/20/2003	<0.0026	0.0032	<0.0026	<0.0065	<0.0149
T-2	10/20/2003	<0.0026	<0.0026	<0.0026	<0.0065	<0.0143
T-3	10/20/2003	<0.0024	0.0051	0.0051	0.0142	<0.0268
T-4	10/20/2003	<0.0024	<0.0024	<0.0024	<0.0059	<0.0131
T-5	10/20/2003	0.0034	0.0408	0.3600	0.9470	1.3512
T-6	10/20/2003	0.0853	0.6350	1.8400	7.1400	9.7003
T-7	10/20/2003	0.0855	0.0438	1.1200	2.4600	3.7093
T-8	10/20/2003	<0.0025	0.0066	0.0189	0.0568	<0.0848
T-9	10/20/2003	<0.0024	<0.0024	<0.0024	<0.0061	<0.0133
T-10	10/20/2003	<0.0025	<0.0025	<0.0025	<0.0062	<0.0137

## Notes:

1. All results in mg/kg (parts per million, ppm).
2. IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
0.03	12	13	150

3. All bolded values are above Tier 1 Residential Cleanup Objectives
4. M = Matrix interferences identified.
5. E = Estimated - Value outside linear calibration curve.

Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois

HAA 1342

Sample #	Date	DTW	GWE	Benzene	Toluene	E-Benzene	Xylenes	Total BTEX
<b>MW-1</b> Elevation Top of Casing = 99.62								
SC	5/12/2000	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3
1	10/24/2000	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4
2	8/23/2001	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E
3	11/13/2001	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.41	94.21	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.65	94.97	NS	NS	NS	NS	NS
<b>MW-2</b> Elevation Top of Casing = 99.28								
SC	5/9/2000	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7
3	11/13/2001	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.12	94.16	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.38	94.90	NS	NS	NS	NS	NS
<b>MW-3</b> Elevation Top of Casing = 100								
SC	5/9/2000	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
3	11/13/2001	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.37	94.63	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.34	95.66	NS	NS	NS	NS	NS
<b>MW-4</b> Elevation Top of Casing = 99.84								
SC	5/9/2000	5.90	93.94	2,600	12,000	4,500	18,000	37,100
1	10/24/2000	7.80	92.04	2,300	5,200	4,000	13,000	24,500
2	8/23/2001	6.67	93.17	2,290 M	2,380 M	8,150	23,600 E	36,420 E
3	11/13/2001	6.11	93.73	1,910	3,960	3,360	10,000	19,230
4	2/14/2002	5.00	94.84	1,100	1,200	2,900	5,500	10,700
5	1/24/2005	4.47	95.37	NS	NS	NS	NS	NS
<b>MW-5</b> Elevation Top of Casing = 99.57								
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9
3	11/13/2001	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.86	1.4	2.2	1.5	4.5	9.6
5	1/24/2005	3.89	95.68	NS	NS	NS	NS	NS
<b>MW-6</b> Elevation Top of Casing = 99.57								
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5
3	11/13/2001	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.66	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	WELL ICED OVER		NS	NS	NS	NS	NS
<b>MW-7</b> Elevation Top of Casing = 100.07 WELL DESTROYED AT TIME OF 1/25/05 DTW MEASUREMENT								
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	7.28	92.79	<2.0	<2.0	<2.0	5.9	<11.9
3	11/13/2001	6.23	93.84	117 E	<2.0	<2.0	<5.0	<126 E
4	2/14/2002	5.52	94.55	7	<1.0	<1.0	<3.0	<12.0
5	1/24/2005	--	--	NS	NS	NS	NS	NS

- All results reported in ug/kg (i.e. parts per billion, ppb)
- IEPA Tier 1 Cleanup Objectives (ug/kg):
- = No data available
- MDL = Method Detection Limit
- DTW = Depth to Water
- GWE = Groundwater Elevation referenced to datum point
- NA/NS = Not analyzed/not sampled this event
- E = Estimated - value outside linear range
- M = Matrix interferences identified.

Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

Date	Average DTW
5/9/2000	5.85
10/24/2000	7.78
8/23/2001	6.09
11/13/2001	6.01
2/14/2002	5.12
1/24/2005	4.35
Cumulative DTW Average	5.87

**Exhibit: C**

Agricultural

Route 122

Agricultural

Maple Street

School Ave



Sump (cleanout)

Sump (cleanout)

Sump (pump)

Present US Location  
Pump Island

Warsaw ITCO

car wash

House

Riegler's Welding & Repair Service

Garage

pole barn

Garage

Garage

House

House

**FIGURE 3**  
Highway Authority  
Agreement Area  
Warsaw ITCO  
Minier, IL

Date: 10/19/10  
Job No.: 9890  
Drawn by: PLS  
Approved by: AMG

**M.E.C.R.S., Inc.**

MW-3  
+ = Existing Monitoring Well Location  
B-2  
• = Existing Boring Location

# Appendix F

## Budget Amendment

# General Information for the Budget and Billing Forms

LPC#: 1790455007 County: Tazewell  
City: Minier Site Name: Warsaw, Howard (Warsaw ITCO)  
Site Address: Ill. Rte. 122  
IEMA Incident No: 981987  
IEMA Notification Date: August 11, 1998  
Date this form was prepared: January 27, 2015

This form is being submitted as a (check one if applicable):

- Budget Proposal
- Budget Amendment (Budget Amendments must include only the costs over the previous budget.)
- Billing Package

Please provide the name(s) and date(s) of report(s) documenting the costs as requested:

Name(s): \_\_\_\_\_

Date (s): \_\_\_\_\_

This package is being submitted for the site activities indicated below:

### 35 Ill. Adm. Code 734:

- Early Action
- Free Produce Removal After Early Action
- Site Investigation.....Stage 1:  Stage 2:  Stage 3:   
Actual Costs
- Corrective Action

### 35 Ill. Adm. Code 732:

- Early Action
- Free Produce Removal After Early Action
- Site Classification
- Low Priority Corrective Action
- High Priority Corrective Action

### 35 Ill. Adm. Code 731

- Site Investigation
- Corrective Action

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**IEPA/BOL**

# General Information for the Budget and Billing Forms

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund.

Pay to the order of: John Warsaw

Send in care of: Midwest Environmental Consulting & Remediation Services, Inc

Address: PO Box 614

City: Tremont State: IL Zip: 61568

The payee is the: Owner:  Operator:  (Check one or both)

Signature of the owner or operator of the UST(s) (required)

W-9 must be submitted.

Click [here](#) to print off a W-9 Form.

Number of petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101  101 or more:

Number of USTs at the site: 10 (Number of USTs includes USTs presently at the site and USTs that have been removed).

Number of incidents reported to the IEMA for this site: 1

Incidents Numbers assigned to the site due to releases from USTs: 981987

Please list all tanks that have ever been located at the site and tanks that are presently located at the site.

Product Stored in UST	Size (gallons)	Did UST have a release?	Incident No.	Type of Release Tank Leak / Overfill / Piping Leak
gasoline	500	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
gasoline	500	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
gasoline	2,000	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
diesel	2,500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		

# Budget Summary

Chose the applicable regulation:  734  732

<b>734</b>	Free Product	Stage 1 Site Investigation	Stage 2 Site Investigation	Stage 3 Site Investigation	Corrective Action
Drilling and Monitoring Well Costs Form					\$1,968.30
Analytical Costs Form					\$1,420.10
Remediation and Disposal Costs Form					\$0.00
UST Removal and Abandonment Costs Form					\$0.00
Paving, Demolition, and Well Abandonment Costs Form					\$0.00
Consulting Personnel Costs Form					\$9,670.43
Consultant's Materials Costs Form					\$185.90
Handling Charges Form	Handling charges will be determined at the time a billing package is submitted to the Illinois EPA. The amount of allowable charges will be determined in accordance with the				
<b>Total</b>					<b>\$13,244.73</b>

# Drilling and Monitoring Well Costs Form

## 1. Drilling

Number of Borings to Be Drilled	Type HSA / PUSH / Injection	Depth (feet) of Each Boring	Total Feet Drilled	Reason for Drilling
2	PUSH	15.00	30.00	collect groundwater sample with temporary well
4	PUSH	15.00	60.00	define extent of Xylenes above C <sub>sat</sub>
			0.00	
			0.00	
			0.00	
			0.00	

Subpart H minimum payment amounts applies.

	Total Feet	Rate per Foot (\$)	Total Cost (\$)
Total Feet via HSA:	90.00	\$21.87	\$1,968.30
Total Feet via PUSH:			\$0.00
Total Feet for Injection via PUSH:			\$0.00
Total Drilling Costs:			\$1,968.30

## 2. Monitoring / Recovery Wells

Number of Wells	Type of Well HSA / PUSH / 4" - 6" Recovery / 8" Recovery	Diameter of Well (inches)	Depth of Well (feet)	Total Feet of Wells to Be Installed (\$)
				0.00
				0.00
				0.00
				0.00
				0.00

Well Installation	Total Feet	Rate per Foot (\$)	Total Cost (\$)
Total Feet via HSA:			\$0.00
Total Feet via PUSH:			\$0.00
Total Feet of 4" or 6" Recovery:			\$0.00
Total Feet of 8" or Greater Recovery:			\$0.00
Total Well Costs:			\$0.00

<b>Total Drilling and Monitoring Well Costs:</b>	<b>\$1,968.30</b>
--	-------------------

## Analytical Costs Form

Laboratory Analysis	Number of Samples		Cost (\$) per Analysis		Total per Parameter
<b>Chemical Analysis</b>					
BTEX Soil with MTBE EPA 8260	8	x	\$103.26	=	\$826.08
BTEX Water with MTBE EPA 8260	2	x	\$98.41	=	\$196.82
COD (Chemical Oxygen Demand)		x	\$32.71	=	\$0.00
Corrosivity		x	\$16.36	=	\$0.00
Flash Point or Ignitability Analysis EPA 1010		x	\$35.99	=	\$0.00
Fraction Organic Carbon Content ( $f_{oc}$ ) ASTM-D 2974-00		x	\$41.44	=	\$0.00
Fat, Oil, & Grease (FOG)		x	\$65.43	=	\$0.00
LUST Pollutants Soil - analysis must include volatile, base/neutral, polynuclear aromatics and metals list in Section 732. Appendix B and 734. Appendix B.		x	\$755.72	=	\$0.00
Dissolved Oxygen (DO)		x	\$26.17	=	\$0.00
Paint Filter (Free Liquids)		x	\$15.27	=	\$0.00
PCB / Pesticides (combination)		x	\$37.08	=	\$0.00
PCBs		x	\$165.76	=	\$0.00
Pesticides		x	\$165.76	=	\$0.00
pH		x	\$15.27	=	\$0.00
Phenol		x	\$37.08	=	\$0.00
Polynuclear Aromatics PNAs or PAH SOIL EPA 8270		x	\$176.80	=	\$0.00
Polynuclear Aromatics PNA, PAH WATER EPA 8270		x	\$176.80	=	\$0.00
Reactivity		x	\$74.15	=	\$0.00
SVOC - Soil (Semi-Volatile Organic Compounds)		x	\$341.33	=	\$0.00
SVOC - Water (Semi-Volatile Organic Compounds)		x	\$341.33	=	\$0.00
TKN (Total Kjeldahl) "nitrogen"		x	\$47.98	=	\$0.00
TPH (Total Petroleum Hydrocarbons)		x	\$133.04	=	\$0.00
VOC (Volatile Organic Compound) - Soil (Non-Aqueous)		x	\$190.84	=	\$0.00
VOC (Volatile Organic Compound) - Water		x	\$184.29	=	\$0.00
Soil gas, BTEX	1	x	\$300.00	=	\$300.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
<b>Geo-Technical</b>					
Bulk Density ( $\rho_b$ ) ASTM D4292 / D2937		x	\$23.99	=	\$0.00
Ex-Situ Hydraulic Conductivity / Permeability		x	\$278.08	=	\$0.00
Moisture Content (w) ASTM D2216-90 / D4643-87		x	\$13.09	=	\$0.00
Porosity		x	\$32.71	=	\$0.00
Rock Hydraulic Conductivity Ex-Situ		x	\$381.67	=	\$0.00
Sieve / Particle Size Analysis ASTM D422-63 / D1140-54		x	\$158.12	=	\$0.00
Soil Classification ASTM D2488-90 / D2487-90		x	\$74.15	=	\$0.00
Soil Particle Density ( $\rho_s$ ) ASTM D854-92		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00

## Analytical Costs Form

Metals Analysis					
Soil preparation fee for Metals Soil TCLP (one fee per soil sample)		x	\$86.15	=	\$0.00
Soil preparation fee for Metals Total Soil (one fee per soil sample)		x	\$17.45	=	\$0.00
Water Preparation fee for Metals in Water (one fee per water sample)		x	\$12.00	=	\$0.00
Arsenic TCLP Soil		x	\$17.45	=	\$0.00
Arsenic Total Soil		x	\$17.45	=	\$0.00
Arsenic Water		x	\$19.63	=	\$0.00
Barium TCLP Soil		x	\$10.90	=	\$0.00
Barium Total Soil		x	\$10.90	=	\$0.00
Barium Water		x	\$13.09	=	\$0.00
Cadmium TCLP Soil		x	\$17.45	=	\$0.00
Cadmium Total Soil		x	\$17.45	=	\$0.00
Cadmium Water		x	\$19.63	=	\$0.00
Chromium TCLP Soil		x	\$10.90	=	\$0.00
Chromium Total Soil		x	\$10.90	=	\$0.00
Chromium Water		x	\$13.09	=	\$0.00
Cyanide TCLP Soil		x	\$30.53	=	\$0.00
Cyanide Total Soil		x	\$37.08	=	\$0.00
Cyanide Water		x	\$37.08	=	\$0.00
Iron TCLP Soil		x	\$10.90	=	\$0.00
Iron Total Soil		x	\$10.90	=	\$0.00
Iron Water		x	\$13.09	=	\$0.00
Lead TCLP Soil		x	\$17.45	=	\$0.00
Lead Total Soil		x	\$17.45	=	\$0.00
Lead Water		x	\$19.63	=	\$0.00
Mercury TCLP Soil		x	\$20.72	=	\$0.00
Mercury Total Soil		x	\$10.90	=	\$0.00
Mercury Water		x	\$28.35	=	\$0.00
Selenium TCLP Soil		x	\$17.45	=	\$0.00
Selenium Total Soil		x	\$17.45	=	\$0.00
Selenium Water		x	\$16.36	=	\$0.00
Silver TCLP Soil		x	\$10.90	=	\$0.00
Silver Total Soil		x	\$10.90	=	\$0.00
Silver Water		x	\$13.09	=	\$0.00
Metals TCLP Soil (a combination of all RCRA metals)		x	\$112.32	=	\$0.00
Metals Total Soil (a combination of all RCRA metals)		x	\$102.51	=	\$0.00
Metals Water (a combination of all RCRA metals)		x	\$129.77	=	\$0.00
Other					
EnCore Sampler, purge-and-trap sampler or equivalent sampling device	8	x	\$12.15	=	\$97.20
Sample Shipping per sampling event <sup>1</sup>		x	\$54.52	=	\$0.00

<sup>1</sup>A sampling event, at a minimum, is all samples (soil and groundwater) collected in a calendar day.

Total Analytical Costs: \$1,420.10

R0742

**Consulting Personnel Costs Form**

Employee Name	Personnel Title*	Hours	Rate *	Total \$
Remediation Category	Task			
Allan Green	Senior Project Manager	25	\$121.49	\$3,037.25
CA	project oversight, planning, permits, subcontractors			
Penny Silzer	Project Manager	45	\$109.34	\$4,920.30
CA	oversight of field activities, sample collection and preparation, report prep. Reim			
Andrew Fetterolf	Technician IV	6.00	\$72.88	\$437.28
CA	purge and sample groundwater monitoring wells, collect depth to water in all wells			
Penny Silzer	Sr. Geologist, PG	5	\$133.64	\$668.20
CA	review and certify reports and reimbursements			
Gaye Lynn Green	Sr. Acct Technician	5	\$66.81	\$334.05
CA	reimbursement forms			
Gaye Lynn Green	Sr. Admin. Assistant	5	\$54.67	\$273.35
CA	format, finalize, copy and submit reports and reimbursements			
				\$0.00
				\$0.00

\*Refer to the applicable Maximum Payment Amounts document.

<b>Total of Consulting Personnel Costs</b>	<b>\$9,670.43</b>
--	-------------------

**Consultant's Materials Costs Form**

Consulting Materials Costs:

Materials, Equipment, or Field Purchases	Time or Amount Use	Rate (\$)	Units	Total Cost
Remediation Category	Description/Justification			
Company Vehicle Mileage	105.00	\$0.58	/mile	\$60.90
CA - field	site visits and mobilization to and from site			
Well Sampling Equipment	1.00	\$25.00	/day	\$25.00
CA - field	for sampling groundwater monitoring wells			
PID	1	\$100.00	/day	\$100.00
CA- Field	soil sample screening			
				\$0.00
				\$0.00
				\$0.00
				\$0.00

**Total Consultant's Material's Costs: \$185.90**

# Owner/Operator and Licensed Professional Engineer/Geologist Budget Certification Form

I hereby certify that I intend to seek payment from the UST Fund for costs incurred while performing corrective action activities for Leaking UST incident 981987. I further certify that the costs set forth in this budget are necessary activities and are reasonable and accurate to the best of my knowledge and belief. I also certify that the costs included in this budget are not for corrective action in excess of the minimum requirements of 415 ILCS 5/57 and no costs are included in this budget which are not described in the corrective action plan, and no costs exceed Subpart H: Maximum Payment Amounts, Appendix D Sample Handling and Analysis amounts, and Appendix E Personnel Titles and Rates of 35 Ill. Adm. Code 732 or 734. I further certify that costs ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code Section 732.606 or 734.630 are not included in the budget proposal or amendment. Such ineligible costs include but are not limited to:

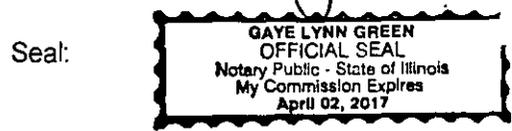
- Costs associated with ineligible tanks.
- Costs associated with site restoration (e.g., pump islands, canopies).
- Costs associated with utility replacement (e.g., sewers, electrical, telephone, etc).
- Costs incurred prior to IEMA notification.
- Costs associated with planned tank pulls.
- Legal fees or costs.
- Costs incurred prior to July 28, 1989.
- Costs associated with installation of new USTs or the repair of existing USTs.

Owner/Operator: John Warsaw  
 Authorized Representative: John Warsaw Title: Owner

Signature: [Signature] Date: 14 Feb 2015

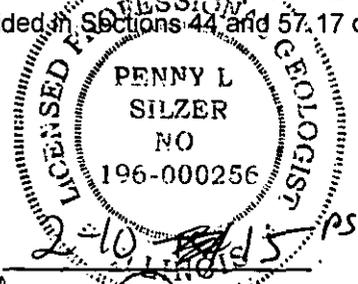
Subscribed and sworn to before me the 14th day of February, 2015.  
*(Budget Proposals and Budget Amendments must be notarized when the certification is signed.)*

[Signature]  
 (Notary Public)



In addition, I certify under penalty of law that all activities that are the subject of this plan, budget or report were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan, budget, or report and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in the plan, budget, or report has been completed in accordance with the Environmental Protection Act [415 ILCS5], 35 Ill. Adm. Code 732-734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

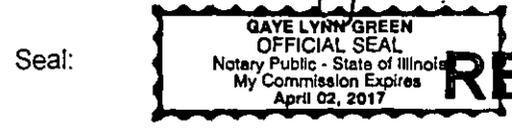
L.P.E./L.P.G.: Penny Silzer L.P.E./L.P.G. Seal:



L.P.E./L.P.G. Signature: [Signature] Date: 2-10-15

Subscribed and sworn to before me the 10th day of February, 2015.

[Signature]  
 (Notary Public)



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The Illinois EPA is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder.

**IEPA/BOL**  
R0745

LPC#1790455007 Tazewell County  
Warsaw, Howard  
Incident #981987  
Leaking UST Technical File

**Midwest Environmental Consulting & Remediation Services Inc.**

22200 Illinois Route 9 • P.O. Box 614  
Tremont, IL 61568-0614  
Phone : (309) 925-5551 • Fax : (309) 925-5606

February 9, 2015

Mr. Jim Ransdell  
Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

IEPA-DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

Re: LPC #1790455007 – Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 981987  
LUST Technical File

APR 29 2015

REVIEWER: JKS

Dear Mr. Ransdell:

Attached please find the Corrective Action Plan and Budget Amendment for the subject site.

If you have any questions or comments, please contact our office.

Sincerely,

Midwest Environmental Consulting and Remediation Services, Inc.



Allan M. Green  
President

PLS/gle  
cc: Mr. Howard Warsaw  
Attachments  
Job No. 9890

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MAR 10 2015

**IEPA/BOL**

Leaking Underground Storage Tank Program  
High Priority Corrective Action Plan Amendment

**Incident Location:** Warsaw - ITCO  
Route 122  
Minier, Illinois – Tazewell Co.

**Prepared for:** John Warsaw  
PO Box 886  
Minier, Illinois 61759

**Prepared by:** Midwest Environmental Consulting  
and Remediation Services, Inc.  
22200 Illinois Route 9  
Post Office Box 614  
Tremont, Illinois 61568-0614  
Contact: Allan Green – President

**For Review by:** Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
Contact: Mr. Jim Ransdell

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R0747

# High Priority Site Investigation Corrective Action Plan

## TABLE OF CONTENTS

### FORMS

IEPA Corrective Action Plan Form

### SECTIONS

- Section 1. Introduction
- Section 2. Results of the Investigation Completed to Date
- Section 3. Anticipated Cleanup Methods
- Section 4. Additional Investigation Required

### TABLES

- Table 1 Soil Analytical Data
- Table 2 Groundwater Analytical Data

### FIGURES

- Figure 1 Area map
- Figure 2 Monitoring Well and Soil Boring Location Map
- Figure 3 Potentiometric Surface Map
- Figure 4 Proposed Boring Location Map
- Figure 5 Extent of Contamination

### APPENDICES

- Appendix A Laboratory Data Reports
- Appendix B Soil Boring Logs
- Appendix C Soil and Groundwater Sampling Protocol
- Appendix D  $C_{sat}$  Calculations
- Appendix E Institutional Controls – HAA and Groundwater Ordinance with MOU
- Appendix F Budget Amendment

**IEPA Corrective Action Plan Form**

*MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC.*

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MAR 1-0 2015

**IEPA/BOL**  
R0749



# Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 – 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation, orally or in writing, in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/44 and 57.17). This form has been approved by the Forms Management Center.

## Leaking Underground Storage Tank Program Corrective Action Plan

### A. Site Identification

IEMA Incident # (6- or 8-digit): 981987 IEPALPC# (10-digit): 1790455007  
Site Name: Warsaw, Howard (Warsaw ITCO)  
Site Address (Not a P.O. Box): Route 122  
City: Minier County: Tazewell ZIP Code: 61759

### B. Site Information

- Will the owner or operator seek reimbursement from the Underground Storage Tank Fund?  Yes  No
- If yes, is the budget attached?  Yes  No
- Is this an amended plan?  Yes  No
- Identify the material(s) released: gasoline
- This Corrective Action Plan is submitted pursuant to:
  - 35 Ill. Adm. Code 731.166   
The material released was:
    - petroleum
    - hazardous substance (see Environmental Protection Act Section 3.215)
  - 35 Ill. Adm. Code 732.404
  - 35 Ill. Adm. Code 734.335

### C. Proposed Methods of Remediation

- Soil excavation, TACO
- Groundwater excavation, TACO

### D. Soil and Groundwater Investigation Results

(for incidents subject to 35 Ill. Adm. Code 731 only or 732 that were classified using Method One or Two, if not previously provided)

Provide the following:

- Description of investigation activities performed to define the extents of soil and/or groundwater contamination;
- Analytical results, chain-of-custody forms, and laboratory certifications;
- Tables comparing analytical results to applicable remediation objectives;

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MAR 10 2015  
**IEPA/BOL**

4. Boring logs;
5. Monitoring well logs; and
6. Site maps meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440 and showing:
  - a. Soil sample locations;
  - b. Monitoring well locations; and
  - c. Plumes of soil and groundwater contamination.

## **E. Technical Information - Corrective Action Plan**

Provide the following:

1. Executive summary identifying the objectives of the corrective action plan and the technical approach to be utilized to meet such objectives;
  - a. The major components (e.g., treatment, containment, removal) of the corrective action plan;
  - b. The scope of the problems to be addressed by the proposed corrective action; and
  - c. A schedule for implementation and completion of the plan;
2. Identification of the remediation objectives proposed for the site;
3. A description of the remedial technologies selected:
  - a. The feasibility of implementing the remedial technologies;
  - b. Whether the remedial technologies will perform satisfactorily and reliably until the remediation objectives are achieved; and
  - c. A schedule of when the technologies are expected to achieve the applicable remediation objectives;
4. A confirmation sampling plan that describes how the effectiveness of the corrective action activities will be monitored during their implementation and after their completion;
5. A description of the current and projected future uses of the site;
6. A description of engineered barriers or institutional controls that will be relied upon to achieve remediation objectives:
  - a. an assessment of their long-term reliability;
  - b. operating and maintenance plans; and
  - c. maps showing area covered by barriers and institutional controls;
7. The water supply well survey:
  - a. Map(s) showing locations of community water supply wells and other potable wells and the setback zone for each well;
  - b. Map(s) showing regulated recharge areas and wellhead protection areas;
  - c. Map(s) showing the current extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
  - d. Map(s) showing the modeled extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
  - e. Tables listing the setback zone for each community water supply well and other potable water supply wells;
  - f. A narrative identifying each entity contacted to identify potable water supply wells, the name and title of each person contacted, and any field observations associated with any wells identified; and
  - g. A certification from a Licensed Professional Engineer or Licensed Professional Geologist that the survey was conducted in accordance with the requirements and that documentation submitted includes information obtained as a result of the survey (certification of this plan satisfies this requirement);

8. Appendices:
  - a. References and data sources report that are organized; and
  - b. Field logs, well logs, and reports of laboratory analyses;
9. Site map(s) meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440;
10. Engineering design specifications, diagrams, schematics, calculations, manufacturer's specifications, etc.;
11. A description of bench/pilot studies;
12. Cost comparison between proposed method of remediation and other methods of remediation;
13. For the proposed Tier 2 or 3 remediation objectives, provide the following:
  - a. The equations used;
  - b. A discussion of how input variables were determined;
  - c. Map(s) depicting distances used in equations; and
  - d. Calculations; and
14. Provide documentation to demonstrate the following for alternative technologies:
  - a. The proposed alternative technology has a substantial likelihood of successfully achieving compliance with all applicable regulations and remediation objectives;
  - b. The proposed alternative technology will not adversely affect human health and safety or the environment;
  - c. The owner or operator will obtain all Illinois EPA permits necessary to legally authorize use of the alternative technology;
  - d. The owner or operator will implement a program to monitor whether the requirements of subsection (14)(a) have been met;
  - e. Within one year from the date of Illinois EPA approval, the owner or operator will provide to the Illinois EPA monitoring program results establishing whether the proposed alternative technology will successfully achieve compliance with the requirements of subsection (14)(a); and
  - f. Demonstration that the cost of alternative technology will not exceed the cost of conventional technology and is not substantially higher than at least two other alternative technologies, if available and technically feasible.

## **F. Exposure Pathway Exclusion**

Provide the following:

1. A description of the tests to be performed in determining whether the following requirements will be met:
  - a. Attenuation capacity of the soil will not be exceeded for any of the organic contaminants;
  - b. Soil saturation limit will not be exceeded for any of the organic contaminants;
  - c. Contaminated soils do not exhibit any of the reactivity characteristics of hazardous waste per 35 Ill. Adm. Code 721.123;
  - d. Contaminated soils do not exhibit a pH  $\leq 2.0$  or  $\geq 12.5$ ; and
  - e. Contaminated soils which contain arsenic, barium, cadmium, chromium, lead, mercury, or selenium (or their associated salts) do not exhibit any of the toxicity characteristics of hazardous waste per 35 Ill. Adm. Code 721.124.
2. A discussion of how any exposure pathways are to be excluded.

## G. Signatures

All plans, budgets, and reports must be signed by the owner or operator and list the owner's or operator's full name, address, and telephone number.

### UST Owner or Operator

Name Warsaw ITCO  
Contact John Warsaw  
Address PO Box 886  
City Minier  
State IL  
Zip Code 61759  
Phone 309-392-2626  
Signature *John Warsaw*  
Date 14 Feb 2015

### Consultant

Company Midwest Environmental Consulting  
Contact Allan Green  
Address Po Box 614  
City Tremont  
State IL  
Zip Code 61568  
Phone 309-925-5551  
Signature *Allan Green*  
Date 2/10/15

I certify under penalty of law that all activities that are the subject of this plan were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in this plan has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 Ill. Adm. Code 731, 732 or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

### Licensed Professional Engineer or Geologist

Name Penny Silzer  
Company Midwest Environmental  
Address PO Box 614  
City Tremont  
State IL  
Zip Code 61568  
Phone 309-925-5551  
Ill. Registration No. 196-000256  
License Expiration Date 03/31/2015  
Signature *Penny Silzer*  
Date 2-10-15

### L.P.E. or L.P.G. Seal



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# Corrective Action Plan



Agency ID: 170000783472

Media File Type LAND

Bureau ID: 1790455007

Site Name: Warsaw, Howard

Site Address1: Rte 122

Site Address2:

Site City: Minier

State: IL

Zip: 61759-

**This record has been determined to  
be partially or wholly exempt from  
public disclosure**

**Exemption Type:**

**Redaction**

**Exempt Doc #: 5**

**Document Date: 3 /10/2015**

**Staff: JKS**

**Document Description: CORRECTIVE ACTION PLAN AND BUDGET AMMENDMENT: SUMMARY**

**Category ID: 21A**

**Category Description: LEAKING UST TECHNICAL**

**Exempt Type: Redaction**

**Permit ID:**

**Date of Determination:**

**4 /29/2015**

## Section 1. Introduction

The subject site is currently a gasoline service station located on Route 122 in Minier, Illinois. The area is developed for commercial, residential and agricultural use. An area map is provided in Figure 1.

Three underground storage tanks (USTs) were removed from the site on July 6, 1999. The three tanks (1-2,000 gallon, 2-500 gallon) were used for gasoline. Details of the UST removal/free product removal activities can be found in the Report of Early Action/ Amended 45-Day Report dated August 31, 1999 and the Free Product Removal Report dated August 26, 1999, previously submitted to IEPA. During tank removal activities, an exploratory excavation was dug in order to investigate the extent of contamination. Free product was noted entering the excavation from the native silty clay sidewalls. Upon this discovery, free product recovery activities were initiated. A significant amount of free product was recovered during free product recovery activities. Approximately 690 yds<sup>3</sup> of gasoline saturated/contaminated soil was removed, and approximately 58,570 gallons of free product/gasoline contaminated groundwater was recovered. Approximately 500 gallons of free product gasoline was separated from the recovered water. Analytical data collected from the excavation indicated significant concentrations of contaminants of concern remained on site.

Between May 2000 and August 2001, Midwest Environmental Consulting and Remediation Services, Inc. (MECRS) installed seven groundwater monitoring wells (MW-1 through MW-7) and drilled seven soil borings (B-1 through B-7). Additional soil samples were collected from a recovery trench installed in October 2003 (T-1 through T-10).

Midwest proposed to close the site based on institutional controls. A Highway Authority Agreement (HAA) was received from the Illinois Department of Transportation (IDOT) in September 2013. A groundwater use restriction ordinance with an memorandum of understanding (MOU) was obtained from the Village of Minier. [REDACTED] of the site, refused to sign the Environmental Land Use Control (ELUC). The HAA and the groundwater ordinance with the MOU are included in Appendix E.

In November 2014, additional soil samples were collected at the site to determine the current concentrations of COCs in the subsurface. Significant concentrations of xylenes, above the soil saturation limit were detected in one boring. The results of this investigation are presented herein. Additional groundwater sampling from wells MW-4 and MW-7 was proposed as part of the investigation approved in the CAP dated March 3, 2014. Neither well could be located and groundwater samples were not collected. Current groundwater analytical data is essential to calculate the groundwater model. The proposal to collect groundwater samples is presented herein.

The budget for CAP investigation costs incurred and those costs anticipated for additional investigation and preparation of the CAP is attached for IEPA approval.

## **Section 2. Results of the Investigation Completed to Date**

The subsurface materials encountered during advancement of boring B-1 consisted of: silty clay (OL) from ground surface to 1.5 feet bgs; silty clay (CL-ML) from 1.5 to 7 feet bgs; silty sand (SM) from 7 to 10 feet bgs; grading to sandy gravel (GP) from 10 to 13 feet bgs; clayey silt (ML) from 13 to 16 feet bgs; and silty clay till (CL-ML) from 16 feet bgs to the end of the boring at 26 feet bgs. A significant water-bearing zone was encountered between approximately 9 feet bgs and 13 ft bgs. Groundwater was initially encountered at an approximate depth of 9 feet bgs in most of the borings. Static water level depth appears to range from 5 to 6 feet bgs.

On November 13, 2014, eight geoprobe borings were completed at the site. Soil analytical data collected indicates concentrations of BTEX in one boring, GP-7, above Tier 1 CUOs. Boring GP-7 is located on-site, southeast of the dispenser island. Soil analytical data collected at the perimeter of the site from borings GP-3, GP-5, GP-6 and GP-8 demonstrate that the contaminants have not migrated off-site in soil to the property located east of the site. Based on the current soil analytical data, an Environmental Land Use Control is not necessary for the property located east of the site.

Midwest proposed to collect water samples from wells MW-4 and MW-7. Data from these wells was to be used to assess current groundwater conditions and to calculate the groundwater models. Neither of these wells could be located. In order to calculate the groundwater model, groundwater analytical data from these areas is necessary.

The extent of soil and groundwater contamination has been defined. COCs appear to have migrated from the possible source areas towards the north and east.

Soil and groundwater analytical data collected to date are presented in Tables 1 and 2. Soil boring and monitoring well locations are shown in Figure 2. The most recent potentiometric surface map for the most recent sampling event is presented in Figure 3. Laboratory data reports are presented in Appendix A. Soil boring logs are presented in Appendix B. Sampling protocol is presented in Appendix C.

### Section 3. Anticipated Cleanup Methods

In order to eliminate exposure pathways through the use of engineered barriers and/or institutional controls, the soil saturation limits ( $C_{sat}$ ) for the respective contaminants of concern (COCs) must not be exceeded by concentrations of the COCs in the soil samples collected. Benzene, toluene, ethylbenzene and xylenes (BTEX) constituents are the COCs. The table below shows the maximum concentrations of BTEX detected in comparison to the soil saturation limit for each COC:

COC	Maximum Concentration Detected	Soil Saturation Limit $C_{sat}$
Benzene	37.4 ppm	580 ppm
Toluene	<b>629 ppm</b>	290 ppm
Ethylbenzene	<b>272 ppm</b>	150 ppm
Xylenes	<b>1,200 ppm</b>	110 ppm

Toluene, ethylbenzene and xylenes all exceed the soil saturation limits as listed in Appendix A, Table. A.

Soil saturation limits were calculated for all constituents using equation S29. Input parameters and calculations are provided in Appendix D. The table below shows the maximum concentrations of BTEX detected in comparison to the calculated soil saturation limit for each COC:

COC	Maximum Concentration Detected	Calculated Soil Saturation Limit S29
Benzene	37.4 ppm	2,520 ppm
Toluene	629 ppm	2,145 ppm
Ethylbenzene	272 ppm	1,363 ppm
Xylenes	<b>1,200 ppm</b>	1,092 ppm

Xylenes concentrations exceed the calculated soil saturation limit. In order to eliminate exposure pathways and/or to calculate Tier 2 CUOs, the concentration of xylenes in soil must be reduced.

Site specific soil and groundwater parameters were determined and submitted to the IEPA in previous reports. The following site specific parameters were used or will be used in future TACO calculations:

Parameter	Value
Soil Bulk Density	1.77 gm/cm <sup>3</sup>
Soil Particle Density	2.66 gm/gm
Moisture Content	17.1%
Hydraulic Conductivity	3.14 x 10 <sup>-4</sup> cm/sec
$f_{oc}$	2.55%

## **Section 4. Additional Investigation Required**

### **1. Groundwater Data**

Since the groundwater had not been sampled since 2005, Midwest proposed to collect groundwater samples monitoring wells MW-4 and MW-7. Neither of these wells could be located. Current groundwater analytical data from these areas is necessary to calculate a meaningful groundwater model based on representative groundwater data. To collect the necessary groundwater samples, Midwest proposes to use the GeoProbe rig to install temporary wells (PB1 and PB2), one within 5 feet of well MW-4 and one within 5 feet of MW-7. A boring will be drilled to 10' bgs. A one inch diameter, slotted PVC casing will be installed in the boring. Groundwater will be allowed to accumulate in the boring. A groundwater sample will be collected with a clean, small diameter disposable bailer. Once the groundwater sample has been collected, the casing will be pulled and the boring will be backfilled with bentonite pellets. The groundwater sample will be analyzed for BTEX.

Depth to water measurements will be collected from all on-site groundwater monitoring wells that can be located for determination of groundwater flow direction. Groundwater data collected will be used to calculate the groundwater model and to determine which institutional controls are necessary for the site.

### **2. Definition of the Extent of Soil Xylenes concentrations exceed the $C_{sat}$**

Xylenes concentrations in excess of the  $C_{sat}$  was detected at 4 to 5 feet in boring GP-7. Midwest proposes to excavate the shallow contaminated soil to remove the soil with excessive concentrations of Xylenes. Prior to excavating, Midwest proposes to better define the extent of Xylenes in excess of the  $C_{sat}$  in the soil. A minimum of four additional geoprobe borings (PB3 through PB6) are proposed, one boring approximately 20 feet in each direction from GP-7, to better define the proposed excavation area.

The soil borings will be sampled continuously and screened with the photoionization detection meter (PID). One soil sample will be collected from each five-foot interval of each boring. Each sample will be collected from the location within the five-foot interval that is the most contaminated based on the PID readings. If an area of contamination cannot be identified within a five-foot interval, the sample will be collected from the center of the boring. Soil samples will not be collected from beneath the first encountered groundwater as established while drilling.

### **3. Soil Gas Sample**

One soil gas sample will be collected from soil adjacent to proposed boring PB-4. This area was chosen because it is adjacent to both the building and the former tank pit. The area around GP-7 was not selected because it is anticipated that the area around GP-7 will be excavated. A heavy-gauge decontaminated steel probe with an expendable tip will be advanced to three feet bgs. Once the desired depth is reached, a ¼ inch outside diameter post-run tubing of Teflon® will be connected to the expendable point holder. The rods will be pulled up three to six inches to create a cavity to collect the soil sample. The rods will be sealed at the surface with bentonite to prevent air from entering around the rods. The tubing will be purged of three volumes of air prior to collection of the soil gas sample. A helium tracer gas will be used during the sampling to

confirm that there are no leaks around the soil gas sampling train. Soil gas samples will be collected in clean laboratory certified Tedlar Bags or Summa canisters and submitted to the lab to be analyzed for BTEX.

Proposed soil boring locations area shown in Figure 4. The soil data collected during the proposed investigation will be used to determine the volume of shallow soil where concentrations of xylenes exceed the soil saturation limit. It is anticipated that the shallow soil where concentrations of xylenes exceed the soil saturation limit will be excavated. Once the concentrations of xylenes have been reduced to below the soil saturation limit, a TACO evaluation of the site will be completed. The TACO evaluation will include elimination of exposure pathways where appropriate and determination of Tier 2 CUOs and groundwater modeling if needed.

The budget for the proposed scope of work is attached in Appendix F.

**Table 1**  
**Soil Analytical Data**

**TABLE 1.**  
**Soil Analytical Results**  
**Warsaw-ITCO**  
**Minier, IL**

Sample ID:	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
B-2, 4-6'	5/3/2000	810	1,300	1,700	6,500	10,310
B-2, 6-8'	5/3/2000	600	220	420	1,900	3,140
B-2, 8-10'	5/3/2000	21,000	41,000	47,000	190,000	299,000
B-3, 6-8'	5/3/2000	400	120	210	460	1,190
B-3, 8-10'	5/3/2000	2,300	2,100	31,000	110,000	145,400
MW-1, 6-8'	5/4/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-2, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-3, 8-10'	5/3/2000	<2.0	<2.0	6	<5.0	<14.7
MW-4, 4-6'	5/4/2000	230	220	870	2,500	3,820
MW-4, 6-8'	5/4/2000	300	1,200	5,400	20,000	26,900
B-4, 0.5-2.5'	8/23/2001	8.1 M	19.0 M	44.7 M	77.2 M	149 M
B-4, 4-6'	8/23/2001	11,600 ME	42,700 ME	9,720 ME	38,000 ME	102,020 ME
B-5, 6-8'	8/23/2001	49	186 E	38	130	403
B-6, 4-6'	8/23/2001	19.5	53.4	31.3	89.8	194.0
B-6, 8-10'	8/23/2001	7.1	12.3	<2.4	10.9	<32.3
B-7, 8-10'	8/23/2001	16.7 M	61.5 M	13.9 M	39.5 M	131.6 M
B-7, 12-14'	8/23/2001	754.0	<61.3	<61.3	<153	<1,029.6
MW-5, 8-10'	8/23/2001	494 M	4,750 M	5,890 M	7,570 M	18,704 M
MW-6, 6-8'	8/23/2001	6.5	12.4	6.3	11.3	36.5
MW-7, 4-6'	8/23/2001	11.7	25.1	10.8	20.0	67.6
MW-7, 8-10	8/23/2001	15.5 M	20.2 M	6.8	11.8	54.3
T-1	10/20/2003	<2.6	3.2	<2.6	<6.5	<14.9
T-2	10/20/2003	<2.6	<2.6	<2.6	<6.5	<14.3
T-3	10/20/2003	<2.4	5.1	5.1	14.2	<26.8
T-4	10/20/2003	<2.4	<2.4	<2.4	<5.9	<13.1
T-5	10/20/2003	3.4	40.8	360.0	947.0	1,351.2
T-6	10/20/2003	85.3	635.0	1,840.0	7,140.0	9,700.3
T-7	10/20/2003	85.5	43.8	1,120.0	2,460.0	3,709.3
T-8	10/20/2003	<2.5	6.6	18.9	56.8	<84.8
T-9	10/20/2003	<2.4	<2.4	<2.4	<6.1	<13.3
T-10	10/20/2003	<2.5	<2.5	<2.5	<6.2	<13.7
GP-1, 2-3'	11/13/2014	<4.99	<4.99	<4.99	<15.0	<30
GP-1, 6-7'	11/13/2014	<5.28	<5.28	<5.28	<15.8	<32
GP-2, 2-3'	11/13/2014	<5.28	<5.28	<5.28	<15.8	<32
GP-2, 6-7'	11/13/2014	<16.0	<16.0	<16.0	<48.0	<96
GP-3, 2-3'	11/13/2014	<5.12	<5.12	<5.12	<15.4	<31
GP-3, 7-8'	11/13/2014	<5.11	5.29	<5.11	<15.3	<31
GP-4, 2-3'	11/13/2014	<5.20	<5.20	<5.20	<15.6	<32
GP-4, 6-7'	11/13/2014	<4.35	5.00	<4.35	<13.1	<27
GP-5, 2-3'	11/13/2014	<4.83	<4.83	<4.83	<14.5	<29
GP-5, 6-7'	11/13/2014	<4.64	<4.64	<4.64	<13.9	<28
GP-6, 2-3'	11/13/2014	<4.66	<4.66	<4.66	<14.0	<28
GP-6, 7-8'	11/13/2014	<5.06	6.50	<5.06	<15.2	<32
GP-7, 4-5'	11/13/2014	37,400	629,000	272,000	1,200,000	2,138,400
GP-7, 6-7'	11/13/2014	3,180	9,720	143	6,210	19,253
GP-8, 2-3'	11/13/2014	<7.14	<7.14	<7.14	<21.4	<43
GP-8, 6-7'	11/13/2014	<4.96	5.52	<4.96	<14.9	<30

Notes:

1. All results in parts per billion (ppb).
2. IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
30	12,000	13,000	5,600

3. All bolded values are above Tier 1 Residential Cleanup Objectives
4. M = Matrix interferences identified
5. E = Estimated

Sample #	foc	pH	Moisture	Soil Bulk Density	Soil Particle Density
Subsurface	2.55%	7.3	17.1%	1.77 gm/cm <sup>3</sup>	2.66

R0762

**TABLE 1. ANALYTICAL RESULTS  
WARSAW - ITCO  
MINIER, ILLINOIS**

Analytes/ Sample ID: SAMPLE DATE	BENZENE 30 ppb	TOLUENE 12,000 ppb	ETHYL- BENZENE 13,000 ppb	TOTAL XYLENES 5,600 ppb	TOTAL BTEX
F-1 7/6/1999	9,400	46,900	11,100	62,400	129,800
F-2 7/6/1999	BELOW DL	17	20	159	<197.1
NW-1 7/23/1999	BELOW DL	7	31	246	<285.7
NW-2 7/23/1999	2	3	13	38	56
SW-1 7/23/1999	1,440	24,600	14,500	96,600	137,140
SW-2 7/23/1999	259	3,010	6,250	33,700	43,219
EW-1 7/23/1999	31	10	62	192	295
EW-2 7/23/1999	176	3,570	4,020	30,000	37,766
F-1 7/23/1999	7,240	6,540	45,400	219,000	278,280
F-2 7/23/1999	1,810	8,460	9,130	45,400	64,900
NW-3 7/28/1999	37	25	265	1,270	1,597
SW-3 7/28/1999	3,040	1,290	25,900	123,000	153,230
F-3 7/28/1999	763	<125	239	6,270	<7397
WW-1 7/28/1999	796	2,530	21,200	91,500	116,026
WW-2 7/28/1999	21	10	399	3,710	4,140
W-1 (liquid) 7/27/1999	2,730	4,260	1,190	7,660	15,840

**Table 2**  
**Groundwater Analytical Data**

**Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois**

Sample #	Date	DTW	GWE	Benzene	Toluene	E-benzene	Xylenes	Total BTEX	
<b>MW-1</b>		Elevation Top of Casing = 99.62							
SC	5/12/2000	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3	
1	10/24/2000	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4	
2	8/23/2001	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E	
3	11/13/2001	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.41	94.21	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.65	94.97	NS	NS	NS	NS	NS	
<b>MW-2</b>		Elevation Top of Casing = 99.28							
SC	5/9/2000	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/2000	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/2001	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7	
3	11/13/2001	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.12	94.16	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.38	94.90	NS	NS	NS	NS	NS	
<b>MW-3</b>		Elevation Top of Casing = 100							
SC	5/9/2000	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/2000	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/2001	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
3	11/13/2001	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.37	94.63	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.34	95.66	NS	NS	NS	NS	NS	
<b>MW-4</b>		Elevation Top of Casing = 99.84							
SC	5/9/2000	5.90	93.94	2,600	12,000	4,500	18,000	37,100	
1	10/24/2000	7.80	92.04	2,300	5,200	4,000	13,000	24,500	
2	8/23/2001	6.67	93.17	2,290 M	2,380 M	8,150	23,600 E	36,420 E	
3	11/13/2001	6.11	93.73	1,910	3,960	3,360	10,000	19,230	
4	2/14/2002	5.00	94.84	1,100	1,200	2,900	5,500	10,700	
5	1/24/2005	4.47	95.37	NS	NS	NS	NS	NS	
<b>MW-5</b>		Elevation Top of Casing = 99.57							
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9	
3	11/13/2001	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	4.71	94.86	1.4	2.2	1.5	4.5	9.6	
5	1/24/2005	3.89	95.68	NS	NS	NS	NS	NS	
<b>MW-6</b>		Elevation Top of Casing = 99.37							
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5	
3	11/13/2001	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	4.71	94.66	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	WELL ICED OVER		NS	NS	NS	NS	NS	
<b>MW-7</b>		Elevation Top of Casing = 100.07			WELL DESTROYED AT TIME OF 1/25/05 DTW MEASUREMENT				
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	7.28	92.79	<2.0	<2.0	<2.0	5.9	<11.9	
3	11/13/2001	6.23	93.84	117 E	<2.0	<2.0	<5.0	<126 E	
4	2/14/2002	5.52	94.55	7	<1.0	<1.0	<3.0	<12.0	
5	1/24/2005	--	--	NS	NS	NS	NS	NS	

1. All results reported in ug/kg (i.e. parts per billion, ppb)
2. IEPA Tier 1 Cleanup Objectives (ug/kg):

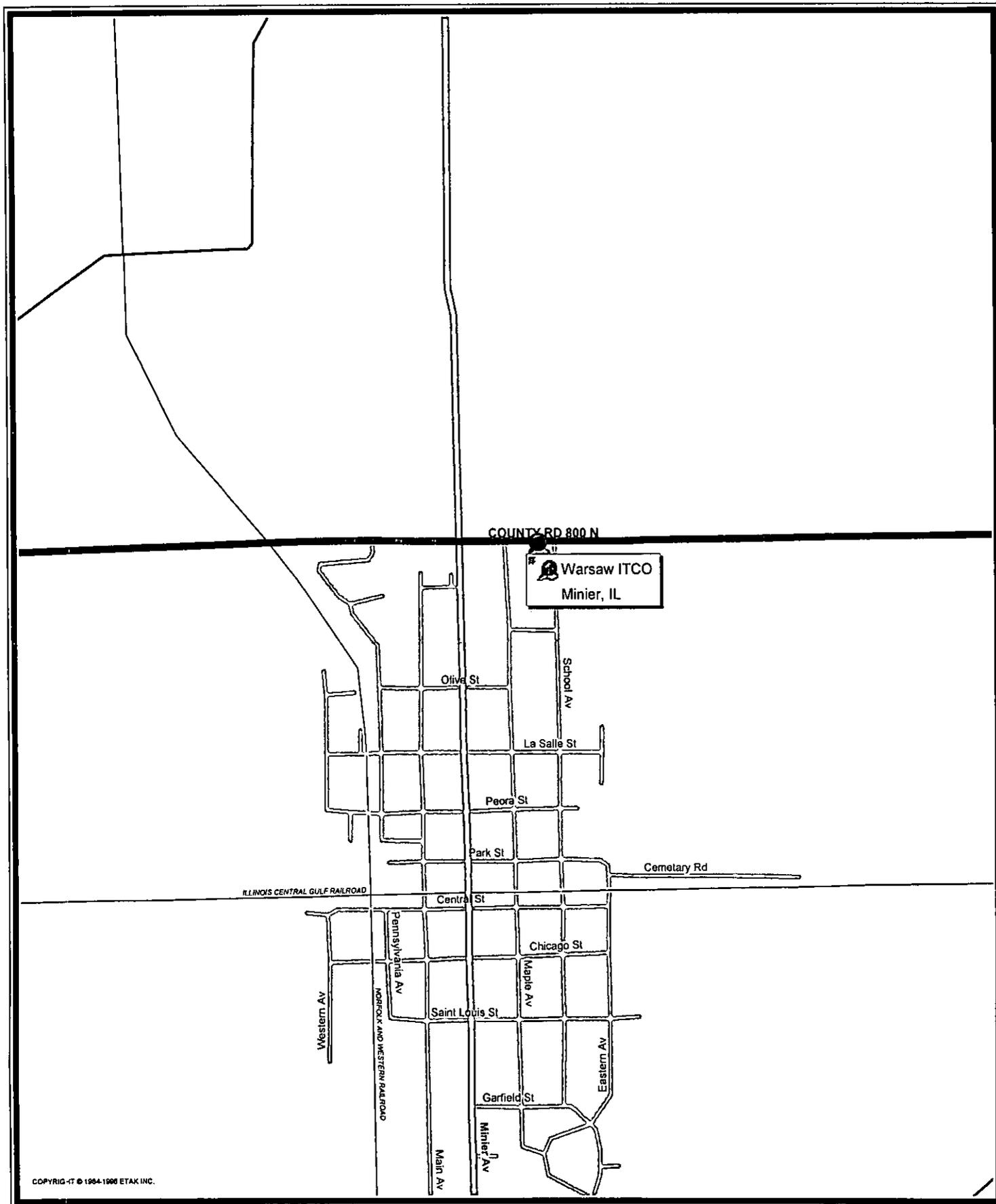
Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

3. -- = No data available
4. MDL = Method Detection Limit
5. DTW = Depth to Water
6. GWE = Groundwater Elevation referenced to datum point
7. NA/NS = Not analyzed/not sampled this event
8. E = Estimated - value outside linear range
9. M = Matrix interferences identified.

**R0765**

**Figure 1**  
**Area Map**

Figure 1. Warsaw ITCO Location Map, Minier, IL



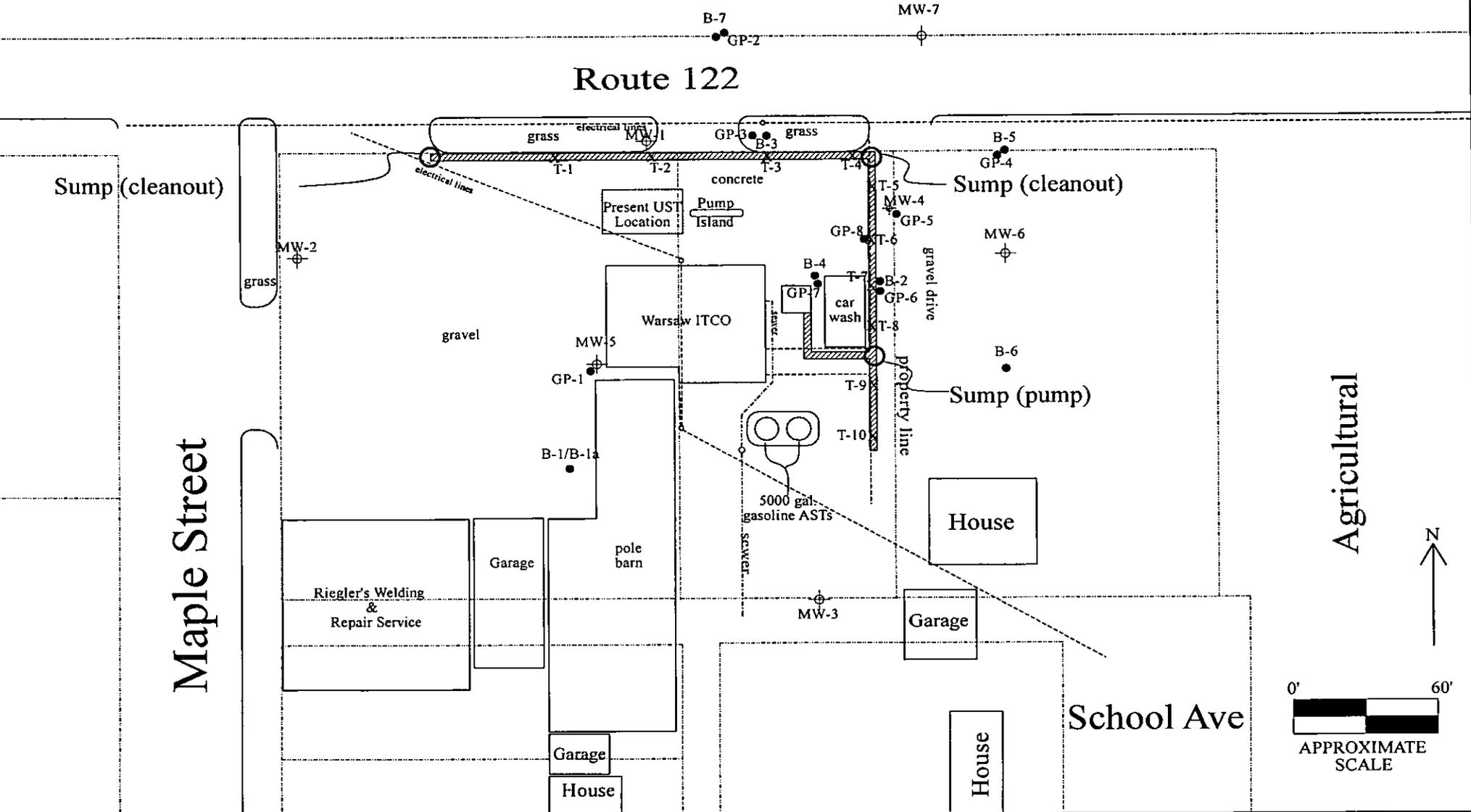
**Figure 2**  
**Monitoring Well and Soil Boring Location Map**

Agricultural

Route 122

Maple Street

Agricultural



**Figure 2**  
**Monitoring Well & Soil Boring Locations**  
**Warsaw ITCO**  
**Minier, IL**

Date: 1/27/15

Drawn by: PLS

Job No.: 9890

Approved by: AMG

**M.E.C.R.S., Inc.**  
**R0769**

- ⊙ = Proposed Soil Boring Location
- MW-3  
+ = Existing Monitoring Well Location
- B-2  
● = Existing Boring Location

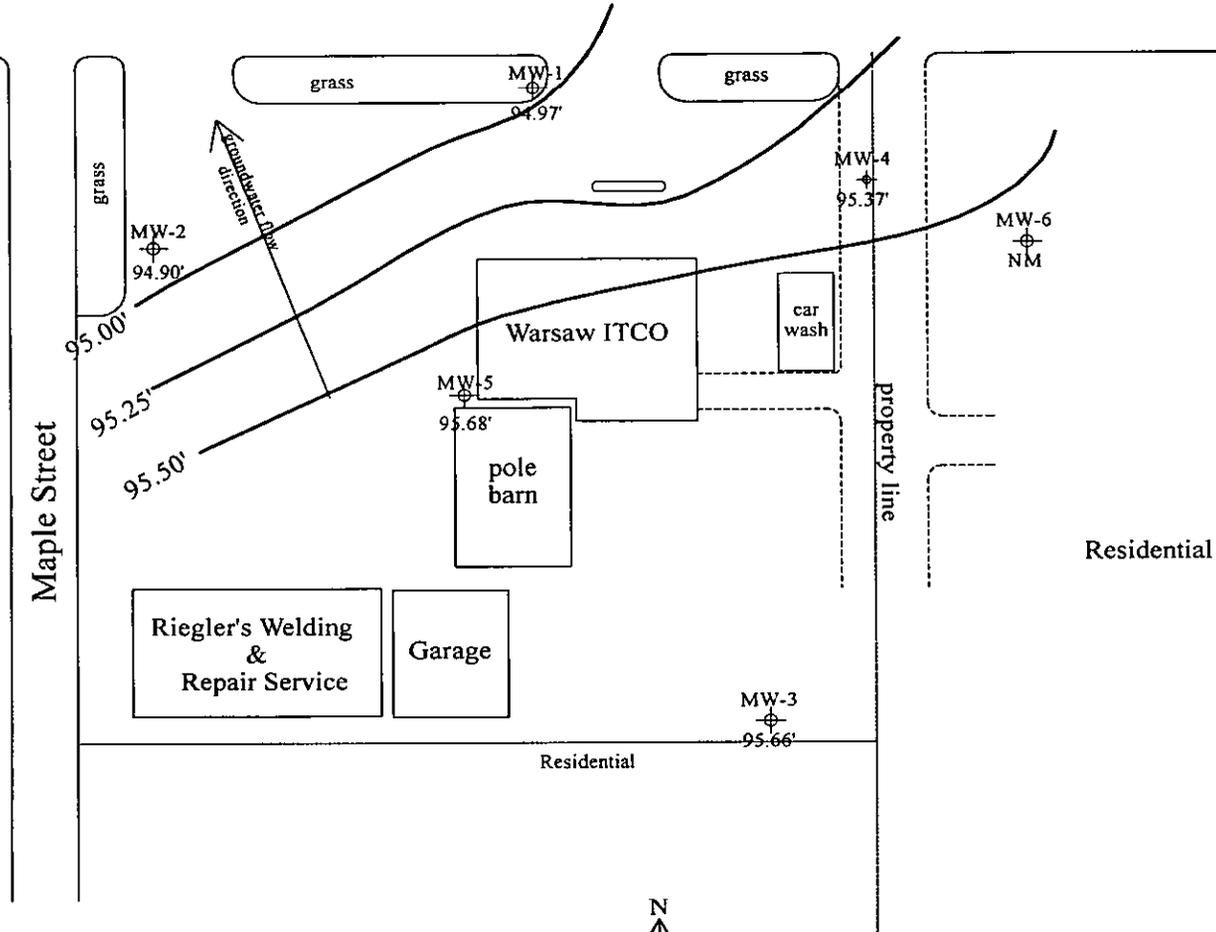
**Figure 3**

**Piezometric Surface Map 01/24/05**

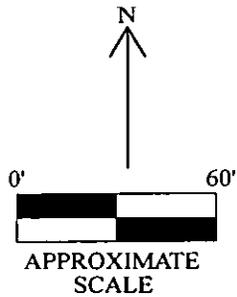
# Agricultural

MW-7  
 ⊕  
 DESTROYED

## Route 122



MW-3  
 ⊕ = Existing Monitoring Well Location  
 B-2  
 ● = Existing Boring Location



**FIGURE 3**  
 Piezometric Surface  
 Map - 1/24/05  
 Warsaw - ITCO  
 Minier, IL

Date: 1/24/05

Drawn by: TKB

Job No.: 9890

Approved by: AMG

**M.E.C.R.S., Inc.**

R0771

**Figure 4**

**Proposed Soil Boring Location Map**

- ⊗ = Proposed Soil Boring Location
- ⊕ = Existing Monitoring Well Location
- = Existing Boring Location
- = Excavation Sample Location
- X = Trench Sample Locations

# Route 122

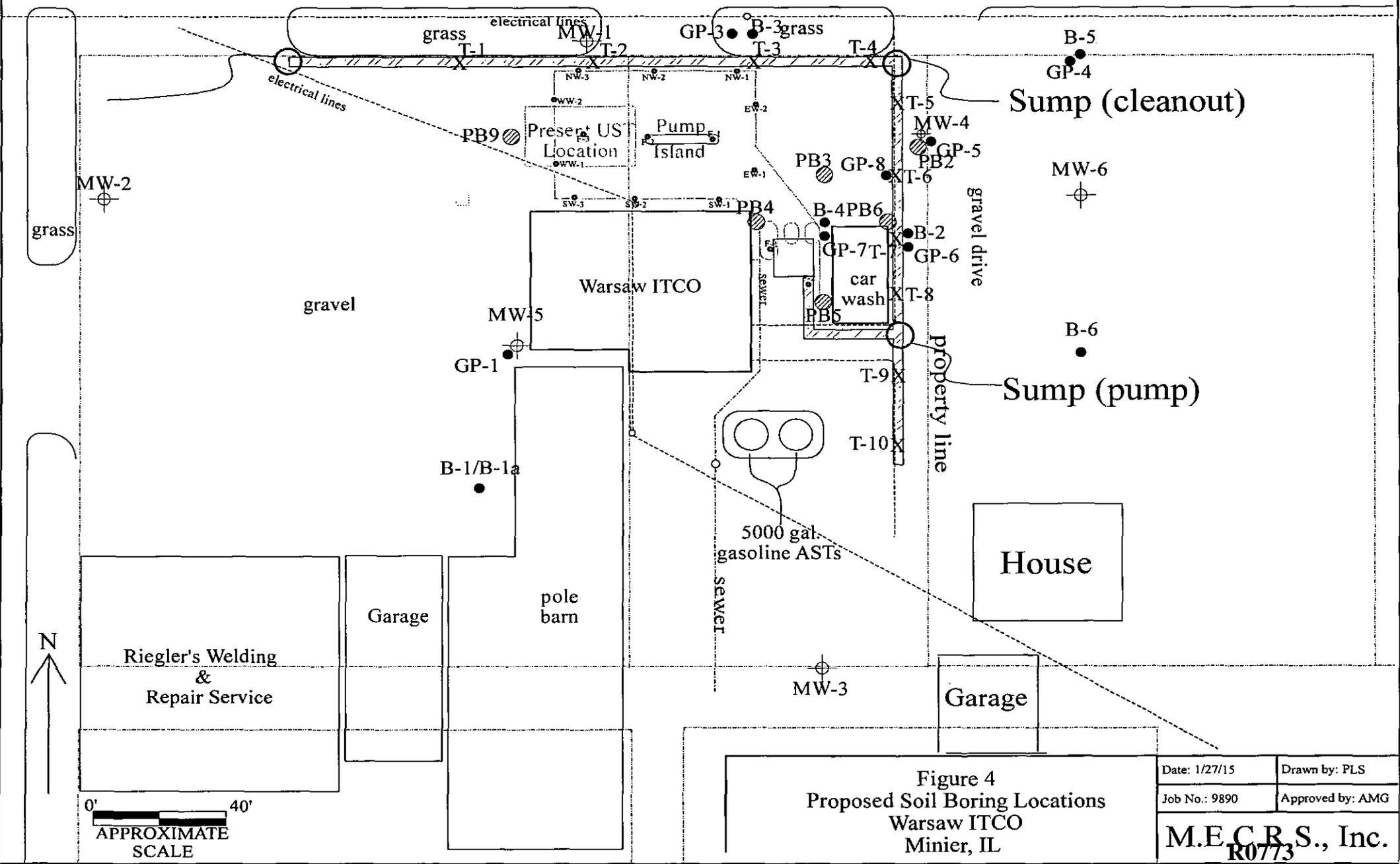


Figure 4  
Proposed Soil Boring Locations  
Warsaw ITCO  
Minier, IL

Date: 1/27/15	Drawn by: PLS
Job No.: 9890	Approved by: AMG
M.E.C.R.S., Inc.	
R0773	

## Figure 5

### Extent of Contamination

# Agricultural

Route 122

Extent Benzene in GW > 0.005 ppm

Sump (cleanout)

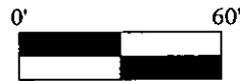
Extent Benzene > 0.03 ppm

Sump (cleanout)

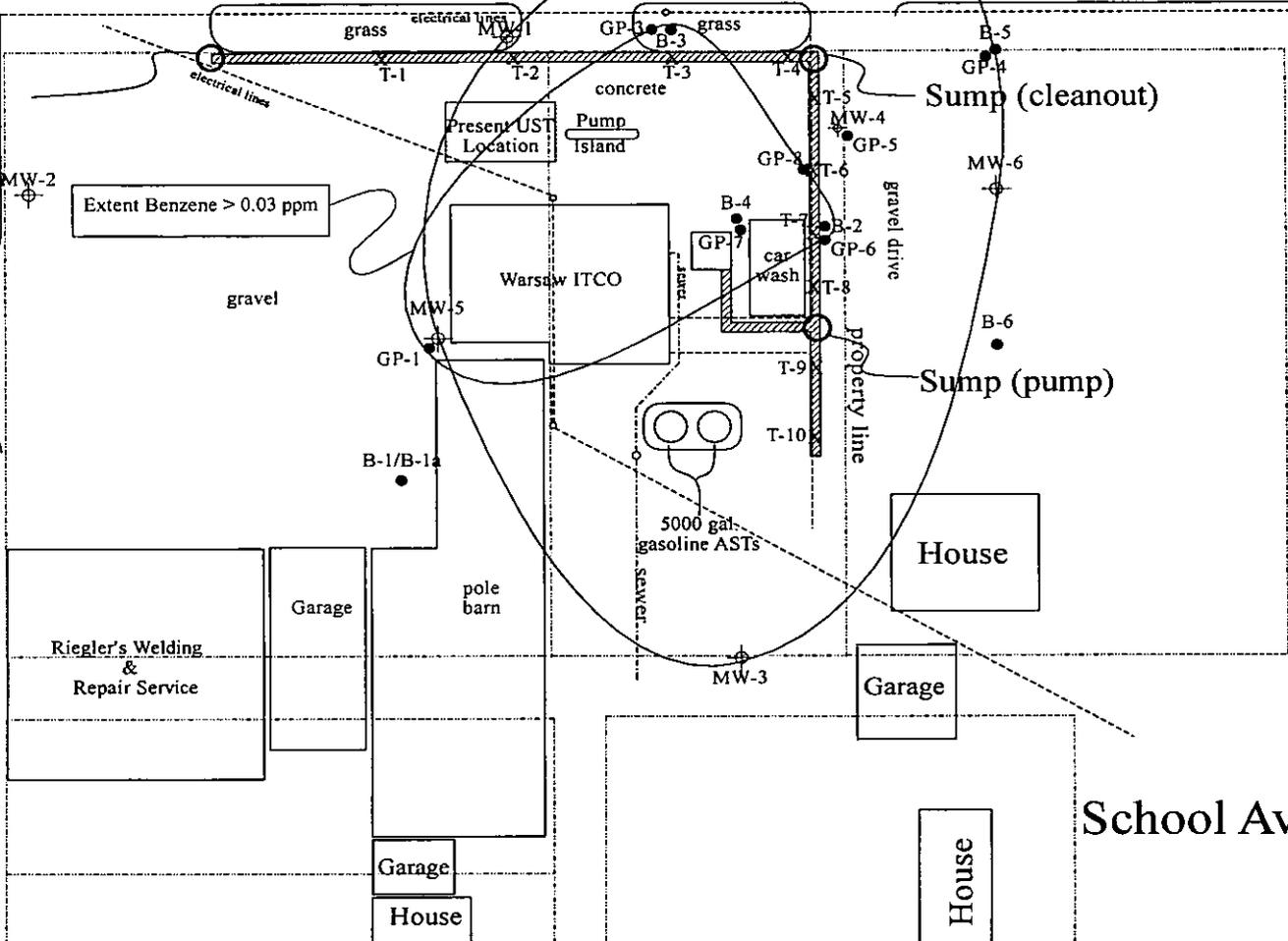
Sump (pump)

Maple Street

Agricultural



APPROXIMATE SCALE



- ⊙ = Proposed Soil Boring Location
- MW-3 ⊕ = Existing Monitoring Well Location
- B-2 ● = Existing Boring Location

**Figure 5**  
**Extent Contamination**  
**Warsaw ITCO**  
**Minier, IL**

Date: 1/27/15	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**  
**R0775**

**Appendix A**  
**Laboratory Data Reports**



Tuesday, December 9, 2014

Ms. Penny Silzer  
Midwest Environmental Consulting  
PO Box 614  
Tremont, IL 61568-0614  
TEL: (309) 925-5551  
FAX: (309) 925-5606

RE: Warsaw ITCO

PAS WO: 14K0287

Prairie Analytical Systems, Inc. received 16 sample(s) on 11/14/2014 for the analyses presented in the following report.

All applicable quality control procedures met method specific acceptance criteria unless otherwise noted.

This report shall not be reproduced, except in full, without the prior written consent of Prairie Analytical Systems, Inc.

If you have any questions, please feel free to contact me at (217) 753-1148.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ana L. Jensen".

Ana L. Jensen For Kristen A. Potter  
Project Manager

**Certifications:** NELAP/NELAC - IL #100323

---

1210 Capital Airport Drive	*	Springfield, IL 62707	*	1.217.753.1148	*	1.217.753.1152 Fax
9114 Virginia Road Suite #112	*	Lake in the Hills, IL 60156	*	1.847.651.2604	*	1.847.458.0538 Fax

## LABORATORY RESULTS

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-1 2-3  
 Collection Date: 11/13/14 9:30

Lab Order: 14K0287  
 Lab ID: 14K0287-01  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.99		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:07	SW8260B Re	BDP
*Ethylbenzene	U	4.99		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:07	SW8260B Re	BDP
*Toluene	U	4.99		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:07	SW8260B Re	BDP
*Xylenes (total)	U	15.0		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:07	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	77.7	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-1 6-7  
 Collection Date: 11/13/14 9:40

Lab ID: 14K0287-02  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:36	SW8260B Re	BDP
*Ethylbenzene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:36	SW8260B Re	BDP
*Toluene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:36	SW8260B Re	BDP
*Xylenes (total)	U	15.8		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:36	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	78.8	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-2 2-3  
 Collection Date: 11/13/14 9:50

Lab ID: 14K0287-03  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:05	SW8260B Re	BDP
*Ethylbenzene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:05	SW8260B Re	BDP
*Toluene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:05	SW8260B Re	BDP
*Xylenes (total)	U	15.8		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:05	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	81.0	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-2 6-7  
 Collection Date: 11/13/14 10:10

Lab Order: 14K0287  
 Lab ID: 14K0287-04  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	16.0		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:35	SW8260B Re	BDP
*Ethylbenzene	U	16.0		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:35	SW8260B Re	BDP
*Toluene	U	16.0		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:35	SW8260B Re	BDP
*Xylenes (total)	U	48.0		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:35	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	79.3	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-3 2-3  
 Collection Date: 11/13/14 10:20

Lab ID: 14K0287-05  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.12		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:04	SW8260B Re	BDP
*Ethylbenzene	U	5.12		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:04	SW8260B Re	BDP
*Toluene	U	5.12		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:04	SW8260B Re	BDP
*Xylenes (total)	U	15.4		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:04	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	77.5	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-3 7-8  
 Collection Date: 11/13/14 10:30

Lab ID: 14K0287-06  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.11		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:34	SW8260B Re	BDP
*Ethylbenzene	U	5.11		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:34	SW8260B Re	BDP
*Toluene	5.29	5.11		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:34	SW8260B Re	BDP
*Xylenes (total)	U	15.3		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:34	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	80.3	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-4 2-3  
 Collection Date: 11/13/14 10:35

Lab Order: 14K0287  
 Lab ID: 14K0287-07  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.20		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:03	SW8260B Re	BDP
*Ethylbenzene	U	5.20		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:03	SW8260B Re	BDP
*Toluene	U	5.20		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:03	SW8260B Re	BDP
*Xylenes (total)	U	15.6		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:03	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	79.5	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-4 6-7  
 Collection Date: 11/13/14 10:40

Lab ID: 14K0287-08  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.35		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:32	SW8260B Re	BDP
*Ethylbenzene	U	4.35		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:32	SW8260B Re	BDP
*Toluene	5.00	4.35		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:32	SW8260B Re	BDP
*Xylenes (total)	U	13.1		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:32	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	83.4	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-5 2-3  
 Collection Date: 11/13/14 10:45

Lab ID: 14K0287-09  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.83		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:02	SW8260B Re	BDP
*Ethylbenzene	U	4.83		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:02	SW8260B Re	BDP
*Toluene	U	4.83		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:02	SW8260B Re	BDP
*Xylenes (total)	U	14.5		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:02	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	79.7	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-5 6-7  
 Collection Date: 11/13/14 10:50

Lab Order: 14K0287  
 Lab ID: 14K0287-10  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.64		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:31	SW8260B Re	BDP
*Ethylbenzene	U	4.64		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:31	SW8260B Re	BDP
*Toluene	U	4.64		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:31	SW8260B Re	BDP
*Xylenes (total)	U	13.9		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:31	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	85.5	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-6 2-3  
 Collection Date: 11/13/14 11:00

Lab ID: 14K0287-11  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.66		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:00	SW8260B Re	BDP
*Ethylbenzene	U	4.66		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:00	SW8260B Re	BDP
*Toluene	U	4.66		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:00	SW8260B Re	BDP
*Xylenes (total)	U	14.0		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:00	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	80.5	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-6 7-8  
 Collection Date: 11/13/14 11:05

Lab ID: 14K0287-12  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.06		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:29	SW8260B Re	BDP
*Ethylbenzene	U	5.06		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:29	SW8260B Re	BDP
*Toluene	6.50	5.06		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:29	SW8260B Re	BDP
*Xylenes (total)	U	15.2		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:29	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	77.6	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-7 4-5  
 Collection Date: 11/13/14 11:10

Lab Order: 14K0287  
 Lab ID: 14K0287-13  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	37400	3400		µg/Kg dry	500	11/18/14 10:49	11/19/14 2:52	SW8260B Re	BDP
*Ethylbenzene	272000	6810		µg/Kg dry	1000	11/18/14 10:49	11/19/14 1:54	SW8260B Re	BDP
*Toluene	629000	34000		µg/Kg dry	5000	11/19/14 10:43	11/19/14 13:55	SW8260B Re	BDP
*Xylenes (total)	1200000	102000		µg/Kg dry	5000	11/19/14 10:43	11/19/14 13:55	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	73.4	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-7 6-7  
 Collection Date: 11/13/14 11:20

Lab ID: 14K0287-14  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	3180	317		µg/Kg dry	50	11/18/14 10:49	11/19/14 4:49	SW8260B Re	BDP
*Ethylbenzene	1430	317		µg/Kg dry	50	11/18/14 10:49	11/19/14 4:49	SW8260B Re	BDP
*Toluene	9720	317		µg/Kg dry	50	11/18/14 10:49	11/19/14 4:49	SW8260B Re	BDP
*Xylenes (total)	6210	950		µg/Kg dry	50	11/18/14 10:49	11/19/14 4:49	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	79.0	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-8 2-3  
 Collection Date: 11/13/14 11:30

Lab ID: 14K0287-15  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	7.14		µg/Kg dry	1	11/18/14 10:49	11/18/14 23:57	SW8260B Re	BDP
*Ethylbenzene	U	7.14		µg/Kg dry	1	11/18/14 10:49	11/18/14 23:57	SW8260B Re	BDP
*Toluene	U	7.14		µg/Kg dry	1	11/18/14 10:49	11/18/14 23:57	SW8260B Re	BDP
*Xylenes (total)	U	21.4		µg/Kg dry	1	11/18/14 10:49	11/18/14 23:57	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	81.1	0.100		%	1	11/20/14 13:17	11/21/14 12:15	ASTM D2974	JLS

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-8 6-7  
 Collection Date: 11/13/14 11:35

Lab Order: 14K0287  
 Lab ID: 14K0287-16  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.96		µg/Kg dry	1	11/17/14 10:02	11/18/14 2:56	SW8260B Re	BDP
*Ethylbenzene	U	4.96		µg/Kg dry	1	11/17/14 10:02	11/18/14 2:56	SW8260B Re	BDP
*Toluene	5.52	4.96		µg/Kg dry	1	11/17/14 10:02	11/18/14 2:56	SW8260B Re	BDP
*Xylenes (total)	U	14.9		µg/Kg dry	1	11/17/14 10:02	11/18/14 2:56	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	80.4	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

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**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
Project: Warsaw ITCO

Lab Order: 14K0287

---

**Notes and Definitions**

- R RPD outside acceptance limits.
- \* NELAC certified compound.
- U Analyte not detected (i.e. less than RL or MDL).

# Chain of Custody Record

Central IL - 1210 Capital Airport Drive - Springfield, IL 62707-8490 - Phone (217) 753-1148 - Facsimile (217) 753-1152  
 Chicago IL Office - 9114 Virginia Rd., Ste 112 - Lake in the Hills, IL 60155 - Phone (847) 651-2604 - Facsimile (847) 458-9680  
 Central/Southern IL Office - Phone (217) 414-7762 - Facsimile (217) 223-7922



Client <b>Michaelsten</b>		Analysis and/or Method Requested						Reporting						
Address <b>PO Box 614</b>		BTEX							TACO	<input type="checkbox"/> Resid <input type="checkbox"/> Ind/Comm				
City, State, Zip Code <b>Wrentham, MA 01568</b>									GALM	<input type="checkbox"/> A	<input type="checkbox"/> D			
Phone / Facsimile <b>309-925-5551</b>										<input type="checkbox"/> B	<input type="checkbox"/> E			
Project Name / Number <b>Wasaw LTD</b>									RISC	<input type="checkbox"/> C	<input type="checkbox"/> F			
Project Location <b>Munee</b>										<input type="checkbox"/> Resid	<input type="checkbox"/> Indust			
P.O. # or Invoice To <b>Job # 4820</b>									Sampler Comments					
Contact Person <b>P Sitzer</b>														
Sample Description	Sampling		Matrix Code	Preserv Code	No. of Containers	Sample Type								
	Date	Time				Comp	Grab							
CP1, 2-3	11/13/14	9:30												
CP1, 6-7		9:40												
CP2, 2-3		9:50												
CP2, 6-7		10:10												
CP3, 2-3		10:20												
CP3, 7-8		10:30												
CP4, 2-3		10:35												
CP4, 6-7		10:40												
CP5, 2-3		10:45												
CP5, 6-7		10:50												
CP6, 2-3		11:00												
CP6, 7-8		11:05												
Matrix Code	A - Aqueous	DW - Drinking Water	GW - Ground Water	NA - Non-Aqueous Liquid	S - Solid	O - Oil	X - Other (Specify)							
Preserv Code	0 - None	1 - HCl	2 - H2SO4	3 - HNO3	4 - NaOH	5 - 5035 Kit	X - Other (Specify)							
Relinquished By	Date	Time	Received By	Date	Time	Method of Shipment								
<i>[Signature]</i>	11/13/14		<i>[Signature]</i>	11-11-14	10:05	Hand								
<i>[Signature]</i>	11/14/14	10:00 AM	<i>[Signature]</i>	11/14/14	1300	Hand								
<i>[Signature]</i>	11/14/14	1300	<i>[Signature]</i>											
Special Instructions:	Turnaround Time: Standard <input type="checkbox"/> Rush <input type="checkbox"/>			GC Level	On wet ice?	Temperature (°C)								
	Date Required:			<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2. 2								

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# Chain of Custody Record

Central IL - 1210 Capital Airport Drive - Springfield, IL 62707-8490 - Phone (217) 753-1148 - Facsimile (217) 753-1152  
 Chicago IL Office - 9114 Virginia Rd., Ste 112 - Lake in the Hills, IL 60156 - Phone (847) 651-2604 - Facsimile (847) 458-9680  
 Central/Southern IL Office - Phone (217) 414-7762 - Facsimile (217) 223-7922



Client		<del>Midwest Env.</del>						Analysis and/or Method Requested						Reporting	
Address		PO Box 614						BTEX						<input type="checkbox"/> Resid <input type="checkbox"/> Ind/Comm	
City, State, Zip Code		Tremont, IL 61568												<input type="checkbox"/> A <input type="checkbox"/> D <input type="checkbox"/> B <input type="checkbox"/> E <input type="checkbox"/> C <input type="checkbox"/> F	
Phone / Facsimile		309-925-5551												<input type="checkbox"/> Resid <input type="checkbox"/> Indust	
Project Name / Number		Warsaw TCO												Sampler Comments	
Project Location		The Miner													
P.O. # or Invoice To		Job # 9890													
Contact Person		P. S. Izer													
Sample Description	Sampling		Matrix Code	Preserv Code	No. of Containers	Sample Type									
	Date	Time				Comp	Grab								
GP-7, 4-5	11/13/14	11:10													
GP-7, 6-7	↓	11:20													
GP-8, 2-3	↓	11:30													
GP-8, 6-7	↓	11:35													
Matrix Code		A - Aqueous		DW - Drinking Water		GW - Ground Water		NA - Non-Aqueous Liquid		S - Solid		O - Oil		X - Other (Specify)	
Preserv Code		0 - None		1 - HCl		2 - H2SO4		3 - HNO3		4 - NaOH		5 - 5035 Kit		X - Other (Specify)	
Relinquished By			Date		Time		Received By			Date		Time		Method of Shipment	
[Signature]			11/13/14				[Signature]			11/19/14		1005		Hand	
[Signature]			11/14/14		10:00 AM		[Signature]			11/14/13		1300		Hand	
[Signature]			11/14/14		1300		[Signature]								
Special Instructions:							Turnaround Time: Standard <input type="checkbox"/> Rush <input type="checkbox"/>			QC Level		On wet ice?		Temperature (°C)	
							Date Required:			<input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2.2	

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The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 -57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

## Illinois Environmental Protection Agency Leaking Underground Storage Tank Program Laboratory Certification for Chemical Analysis

### A. Site Identification

IEMA Incident # (6- or 8-digit): 981987      IEPA LPC# (10-digit): 1790455007  
Site Name: Warsaw ITCO  
Site Address (Not a P.O. Box): Route 122  
City: Minier      County: Tazewell      ZIP Code: 61759  
Leaking UST Technical File

### B. Sample Collector

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
2. Chain-of-custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

PS  
(initial)

PS  
(initial)

PS  
(initial)

PS  
(initial)

### C. Laboratory Representative

I certify that:

1. Proper chain-of-custody procedures were followed as documented on the chain-of-custody forms
2. Sample integrity was maintained by proper preservation.
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

ACT  
(initial)

ACT  
(initial)

ACT  
(initial)

ACT  
(initial)

5. Sample holding times were not exceeded.

AGJ  
(initial)

6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses.

AGJ  
(initial)

7. An accredited lab performed quantitative analysis using test methods identified in 35 IAC 186.180 (for samples collected on or after January 1, 2003).

AGJ  
(initial)

**D. Signatures**

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Sample Collector**

Name: Penny Sizer  
Title: Sn Geologist  
Company: M.E.C.R.S, Inc.  
Address: 22200 IL Rte. 9, P.O. Box 614  
City: Tremont  
State: Illinois  
ZIP Code: 61568  
Phone: (309) 925-5551  
Signature: [Signature]  
Date: 11/19/14

**Laboratory Representative**

Name: Ana Jensen  
Title: Project Manager  
Company: Prairie Analytical  
Address: 1210 Capital Airport Drive  
City: Springfield  
State: Illinois  
ZIP Code: 62707  
Phone: (217) 753-1148  
Signature: [Signature]  
Date: 12/19/14

**Appendix B**  
**Soil Boring Logs**

LUST Incident No.: 981987	Boring Number: <u>GP-1</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to MW-5</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	SILT LOAM (OL); Black, moist, firm			0	Sample collected at 2 to 3 feet.
2-3	BS	85%		2	SILTY CLAY (CL); Brown, w/gray mottling, moist, firm			0	
				3				0	
				4				0	Sample collected at 6 to 7 feet.
				5				0	
6-7	BS	100%		6				0	
				7	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			0	
				8				0	
				9					
				10					
				11					
				12					
				13					
				14					
				15					
				16					
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				19					
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				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig GeoProbe _____	Midwest Environmental Consulting & Remediation Services, Inc. <b>R0790</b>
▼ Depth While Drilling <u>7'</u>	Rotary Depth _____ Geologist <u>PLS</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

LUST Incident No.: 981987	Boring Number: <u>GP-2</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to B-7</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	SILT LOAM (OL); Black, moist, firm			0	
2-3	BS	90%		2	SILTY CLAY (CL); Brown, w/gray mottling, moist, firm			0	Sample collected at 2 to 3 feet.
				3				0	
				4				0	
6-7	BS	100%		6				0	Sample collected at 6 to 7 feet.
				7				0	
				8	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			0	
				9				0	
				10					
				11					
				12					
				13					
				14					
				15					
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				25					
				26					
				27					
				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data		Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>7'</u>	Rotary Depth _____ Geologist <u>PLS</u>		
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>		
	Note: Boring backfilled unless otherwise noted		

LUST Incident No.: 981987 Boring Number: GP-3 Page 1 of 1

Site Name: Warsaw ITCO Boring Location: Next to B-3 Date: Start 11/13/14  
 Address: Rt 122 Finish 11/13/14  
Minier, IL

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
2-3	BS	85%		1	SILT LOAM (OL): Black, moist, firm			0	Sample collected at 2 to 3 feet.
				2	SILTY CLAY (CL): Brown, w/gray mottling, moist, firm			0	
				3				0	
7-8	BS	90%		4				0	Sample Collected from 7 to 8 feet
				5				0	
				6				0	
				7				0	
				8	SILTY SAND (SM): Dark brown/gray, wet, fine to medium grained			0	
				9					
				10					
				11					
				12					
				13					
				14					
				15					
				16					
				17					
				18					
				19					
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				24					
				25					
				26					
				27					
				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data		Auger Depth _____ Rig GeoProbe		Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling _____	Rotary Depth _____	Geologist <u>PLS</u>		
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>			
Note: Boring backfilled unless otherwise noted				

LUST Incident No.: 981987	Boring Number: <u>GP-4</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to B-5</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
2-3	BS	85%		1	SILT LOAM (OL): Black, moist, firm			0	Sample collected at 2 to 3 feet.
				2	SILTY CLAY (CL): Brown, w/gray mottling, moist, firm			0	
6-7	BS	95%		3				0	
				4				0	
				5				0	
				6				0	
				7	SILTY SAND (SM): Dark brown/gray, wet, fine to medium grained			0	
				8				0	
				9				0	
				10					
				11					
				12					
				13					
				14					
				15					
				16					
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				18					
				19					
				20					
				21					
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				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig GeoProbe	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>7'</u>	Rotary Depth _____ Geologist <u>ALG</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

LUST Incident No.: 981987	Boring Number: <u>GP-5</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to MW-4</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	Gravel Drive, gravel road base fill			0	Sample collected at 2 to 3 feet.
2-3	BS	80%		2	SILTY CLAY (CL); Brown, w/gray mottling, moist, firm			0	
				3				0	
				4				0	Sample collected at 6 to 7 feet.
6-7	BS	100%		6				0	
				7	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			0	
				8				0	
				9				0	
				10					
				11					
				12					
				13					
				14					
				15					
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				25					
				26					
				27					
				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>7</u>	Rotary Depth _____ Geologist <u>PLG</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

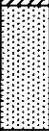
LUST Incident No.: 981987	Boring Number: <u>GP-6</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to B-2</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	Gravel Drive, gravel road base fill			0	
2-3	BS	85%		2	SILTY CLAY (CL); Brown, w/gray mottling, moist, firm			0	Sample collected at 2 to 3 feet.
				3					
				4					
				5					
7-8	BS	90%		7	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			0	Sample Collected from 7 to 8 feet
				8					
				9				0	
				10					
				11					
				12					
				13					
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Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>8'</u>	Rotary Depth _____ Geologist <u>PLG</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

LUST Incident No.: 981987	Boring Number: <u>GP-7</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to B-4</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
	BS	90%		1	Gravel Drive, gravel road base over gravelly clay fill material			0	Sample collected at 4 to 5 feet.
				2	clayey sandy fill material			11	
				3					
4-5'				4	SILTY CLAY (CL); Black w/gray mottling, moist, firm strong odor		230		
				5					
6-7	BS	100%		6				Sample collected at 6 to 7 feet.	
						7	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained		
				8					
				9					
				10					
				11					
				12					
				13					
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				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>7'</u>	Rotary Depth _____ Geologist <u>PCS</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

LUST Incident No.: 981987	Boring Number: <u>GP-8</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to T-6</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	Gravel Drive, gravel road base fill			0	
				2	Silty Clay Loam (OH); Black, moist hard			0	Sample collected at 2 to 3 feet.
2-3	BS	95%		3	SILTY CLAY (CL); Brown, w/gray mottling, moist, firm			0	
				4				0	
				5					Sample collected at 6 to 7 feet.
6-7	BS	100%		6					
				7	wet clay			180	
				8	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			110	
				9					
				10					
				11					
				12					
				13					
				14					
				15					
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				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>7</u>	Rotary Depth _____ Geologist <u>PLS</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	

Note: Boring backfilled unless otherwise noted

## **Appendix C**

### **Soil and Groundwater Sampling Protocol**

## **SOIL SAMPLING PROTOCOL For Subsurface Investigations**

### **1. Sampling Methodology - Split Spoon Sampling**

- A. All sampling equipment to be used will be cleaned and decontaminated using deionized water prior to and between samples.
- B. Verification will be made that all boring equipment to include augers, split spoon samplers and associated equipment has been properly cleaned and decontaminated prior to initiating investigation.
- C. All boring and associated samplers will be decontaminated in accordance with the following schedule.
  - 1.) Augers and center plugs will be decontaminated between borings using a high pressure washer or steam cleaner.
  - 2.) Split Spoon Samplers will be decontaminated between samples using a warm water Alconox wash and triple rinsing.
- D. Samples representative of the interval retrieved will be removed and placed into new, glass jars with teflon lined lids\*. Proper care will be taken to minimize volatilization of possible contaminants from the sample during handling.
- E. The sample will be allowed to sit undisturbed for a period of time sufficient for vapor equilibrium to be reached. A headspace analysis of the sample will then be conducted using a portable photoionizer detector.
- F. A log of all borings will be recorded during sampling. The logs will include data regarding soil types and depths, anomalies, odor, HNU readings, and moisture contents.

### **2. Sample Storage, Handling and Transport**

- A. Samples for analysis will be immediately cooled using a thermally insulated cooler and ice. The samples will be transported, on ice, as soon as possible, to the laboratory or to the engineering office cooler to await transport to the laboratory.
- B. No sample will be allowed to remain in the possession of the geologist or laboratory for more than two weeks prior to analysis.
- C. A chain of custody record will be kept for all samples taken for laboratory analysis.

\*Encore sampling system will be substituted for glass jars when required.

## **GROUNDWATER SAMPLING PROTOCOL**

To be used when sampling groundwater monitoring wells for IEPA approved investigations.

### **1. Sampling Methodology - Bailer Method**

A. Verification will be made that all sampling equipment to include bailers, buckets, chords, water level meters, have been properly decontaminated prior to sampling initiation.

B. All equipment will be decontaminated in accordance with the following protocol:

1.) Bailers will be decontaminated between samples using Alconox wash, a 30% methanol/distilled water rinse, and a final triple rinse with distilled water.

2.) Water level probes and associated equipment will be decontaminated between readings using an Alconox wash and distilled water rinse.

3.) A new section of line will be used for bailing and sampling each individual well.

C. A record of the following will be made at the time of well sampling:

- 1.) Depth to water from top of well casing.
- 2.) Total well depth from top of well casing.
- 3.) Total vertical feet of water in well.
- 4.) Number of well volumes purged.
- 5.) Number of gallons purged.
- 6.) Sampling methods.
- 7.) Sample appearance.

D. Wells will be purged and sampled using the following method:

The total vertical feet of water in the 2" ID monitor well will be multiplied by 0.163 gal./ft. in order to determine the total volume of water in the well. A total of three well volumes will be purged from the well. Groundwater samples will then be withdrawn via a stainless steel bailer and collected in 40 milliliter, properly labeled vials. The samples will be immediately placed on ice for temporary storage until the samples can be transported to an IEPA certified laboratory.

## Appendix D

### $C_{sat}$ Calculations

S-29 For Benzene

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = \mathbf{2520 \text{ ppm}}$$

$$S = 1.80E+03 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 1.225 \text{ S19}$$

$$\Theta_w = 0.30 \text{ S20}$$

$$\Theta_a = 0.03 \text{ S21}$$

$$H' = 0.23 \text{ Table E}$$

S19

$$K_d = K_{oc} * f_{oc} = \mathbf{1.225}$$

$$K_{oc} = 50 \text{ Table E}$$

$$f_{oc} = 0.0245 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b / \rho_s = \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) = 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = .33 * (1/8)^{0.042}$$

$$\Theta_w = \mathbf{0.30}$$

$$S21 = \Theta_a = \eta - \Theta_w = \mathbf{0.03}$$

S-29 For Toluene

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = \mathbf{2,145 \text{ ppm}}$$

$$S = 5.30E+02 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 3.871 \text{ S19}$$

$$\Theta_w = 0.30 \text{ S20}$$

$$\Theta_a = 0.03 \text{ S21}$$

$$H' = 0.271 \text{ Table E}$$

S19

$$K_d = K_{oc} * f_{oc} = 3.871$$

$$K_{oc} = 158 \text{ Table E}$$

$$f_{oc} = 0.0245 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b / \rho_s = \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) = 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = 1.33 * (1/8)^{0.042}$$

$$\Theta_w = \mathbf{0.30}$$

$$S21 = \Theta_a = \eta - \Theta_w = \mathbf{0.03}$$

S-29 For Ethylbenzene

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = \mathbf{1363 \text{ ppm}}$$

$$S = 1.70\text{E}+02 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 7.84 \text{ S19}$$

$$\Theta_w = 0.30 \text{ S20}$$

$$\Theta_a = 0.03 \text{ S21}$$

$$H' = 0.324 \text{ Table E}$$

S19

$$K_d = K_{oc} * f_{oc} = \mathbf{7.84}$$

$$K_{oc} = 3.20\text{E}+02 \text{ Table E}$$

$$f_{oc} = 0.0245 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b/\rho_s = \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) : 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = 1.33 * (1/8)^{0.042}$$

$$\Theta_w = \mathbf{0.30}$$

$$S21 = \Theta_a = \eta - \Theta_w = \mathbf{0.03}$$

S-29 For Xylenes

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = \mathbf{1092 \text{ ppm}}$$

$$S = 1.10\text{E}+02 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 9.751 \text{ S19}$$

$$\Theta_w = 0.30 \text{ S20}$$

$$\Theta_a = 0.03 \text{ S21}$$

$$H' = 0.271 \text{ Table E}$$

S19

$$K_d = K_{\text{oc}} * f_{\text{oc}} = 9.751$$

$$K_{\text{oc}} = 3.98\text{E}+02 \text{ Table E}$$

$$f_{\text{oc}} = 0.0245 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b / \rho_s = \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) : 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = 1.33 * (1/8)^{0.042}$$

$$\Theta_w = \mathbf{0.30}$$

$$S21 = \Theta_a = \eta - \Theta_w = \mathbf{0.03}$$

# Appendix E

## Institutional Controls

### HAA and Groundwater Ordinance with MUO

# Village of Minier

Neill Keneipp  
Village President



Sandy Lancaster  
Village Clerk

110 W. Central • Box 350 • Minier, Illinois 61759  
Phone: 309/392-2442 • Fax: 309/392-2906

February 2, 2015

Penny Silzer  
Midwest Environmental Consulting &  
Remediation Services Inc.  
22200 IL. Rte. 9, P.O. Box 614  
Tremont, IL. 61568-0614

Dear Penny:  
Enclosed please find Ordinance #808, Ordinance #785, Ordinance #783 and Resolution #278 with an updated Certification for these documents.

If you have any other questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Sandy Lancaster". The signature is fluid and cursive, with the first name "Sandy" and last name "Lancaster" clearly legible.

Sandy Lancaster  
Village Clerk

Enclosure

R0807

### **CERTIFICATION OF ORDINANCE**

I SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that on January 04, 2011 the Corporate Authorities of the above municipality passed and approved Ordinance No. 783.

Ordinance No. 783, including the cover sheet thereof, was prepared and published in pamphlet form on the 04<sup>th</sup> day of January, 2011. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

I further certify that on March 15, 2011 the Corporate Authorities of the above municipality passed and approved Ordinance No. 785.

Ordinance No. 785, including the cover sheet thereof, was prepared and published in pamphlet form on the 15<sup>th</sup> day of March, 2011. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

I further certify that on March 29, 2013 the Corporate Authorities of the above Municipality passed and approved Ordinance No. 808.

Ordinance No. 808, including the cover sheet thereof, was prepared and published in pamphlet form on the 29<sup>th</sup> day of March, 2013. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

I further certify that on April 1, 2014 the Corporate Authorities of the above municipality passed and approve Resolution No. 278.

Resolution No. 278, including the cover sheet thereof, was prepared and published in pamphlet form on the 01<sup>st</sup> day of April, 2014. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

Dated at Minier, Illinois, this 02<sup>nd</sup> day of February, 2015.

(SEAL)

  
Sandy Lancaster, Village Clerk

**VILLAGE OF MINIER**

---

**RESOLUTION NO. 278**

A RESOLUTION OF THE VILLAGE OF MINIER,  
ILLINOIS, AUTHORIZING ENTERING INTO A  
MEMORANDUM OF UNDERSTANDING

---

**ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS**

**THIS 1<sup>ST</sup> DAY OF APRIL, 2014**

---

**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 1<sup>st</sup> day of April, 2014.**

**RESOLUTION NO. 278**

**A RESOLUTION OF THE VILLAGE OF MINIER, ILLINOIS, AUTHORIZING  
ENTERING INTO A MEMORANDUM OF UNDERSTANDING**

---

WHEREAS, it is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois, enter into a Memorandum of Understanding with the Illinois Environmental Protection Agency; and

WHEREAS, pursuant to the Illinois Municipal Code, a municipality is authorized to enter into agreements with other governmental entities for lawful public purposes; and

WHEREAS, the Memorandum of Understanding is attached as Exhibit A.

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

SECTION 1. The foregoing recitals are incorporated herein as findings of the Village of Minier.

SECTION 2. The Village of Minier hereby determines that it is advisable, necessary, and in the interests of the public health, safety and welfare that the Municipality enter into a memorandum of understanding with the Illinois Environmental Protection Agency pursuant to the terms of the agreement that is attached as Exhibit A.

SECTION 3. The Village of Minier hereby approves and authorizes the Village president to execute the Memorandum of Understanding which is attached as Exhibit A.

SECTION 4. This Resolution is hereby published in pamphlet form by authority of the Village Board of the Village of Minier.

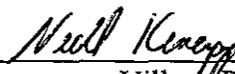
PASSED at a regular meeting of the Village Board of the Village of Minier held the 1<sup>st</sup> day of April, 2014.

AYES: Devine, Burt, LaDew, Crawford, Beccue & Needles

NAYS: None

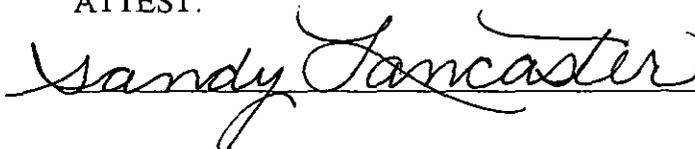
ABSENT: None

APPROVED this 1<sup>st</sup> day of April, 2014.



Village President

ATTEST:

 Village Clerk

**EXHIBIT A**  
**MEMORANDUM OF UNDERSTANDING**  
**BETWEEN THE VILLAGE OF MINIER AND THE ILLINOIS ENVIRONMENTAL**  
**PROTECTION AGENCY REGARDING THE USE OF A LOCAL GROUNDWATER OR**  
**WATER WELL ORDINANCE AS AN**  
**ENVIRONMENTAL INSTITUTIONAL CONTROL**

**I. PURPOSE AND INTENT**

- A. This Memorandum of Understanding ("MOU") between the Village of Minier and the Illinois Environmental Protection Agency ("Illinois EPA") is entered into for the purpose of satisfying the requirements of 35 Ill. Adm. Code 742.1015 for the use of groundwater or water well ordinances as environmental institutional controls. The Illinois EPA has reviewed the groundwater or water well ordinance of the Village of Minier (Attachment A) and determined that the ordinance prohibits the use of groundwater for potable purposes and/or the installation and use of new potable water supply wells by private entities but does not expressly prohibit those activities by the unit of local government itself. In such cases, 35 Ill. Adm. Code 742.1015(a) provides that the unit of local government may enter into an MOU with the Illinois EPA to allow the use of the ordinance as an institutional control.
- B. The intent of this Memorandum of Understanding is to specify the responsibilities that must be assumed by the unit of local government to satisfy the requirements for MOUs as set forth at 35 Ill. Adm. Code 742.1015(i).

**II. DECLARATIONS AND ASSUMPTION OF RESPONSIBILITY**

In order to ensure the long-term integrity of the groundwater or water well ordinance as an environmental institutional control and that risk to human health and the environment from contamination left in place in reliance on the groundwater or water well ordinance is effectively managed, the Village of Minier hereby assumes the following responsibilities pursuant to 35 Ill. Adm. Code 742.1015(d)(2) and (i):

- A. The Village of Minier will notify the Illinois EPA Bureau of Land of any proposed ordinance changes or requests for variance at least 30 days prior to the date the local government is scheduled to take action on the proposed change or request (35 Ill. Adm. Code 742.1015(i)(4));
- B. The Village of Minier will maintain a registry of all sites within its corporate limits that have received "No Further Remediation" determinations in reliance on the ordinance from the Illinois EPA (35 Ill. Adm. Code 742.1015(i)(5));
- C. The Village of Minier will review the registry of sites established under Paragraph II. B. prior to siting public potable water supply wells within the area covered by the ordinance (35 Ill. Adm. Code 742.1015(i)(6)(A));  
The Village of Minier will determine whether the potential source of potable water has been or may be affected by contamination left in place at the sites tracked and reviewed under paragraphs II. B. and C. (35 Ill. Adm. Code

742.1015(i)(6)(B)); and

- D. The Village of Minier will take action as necessary to ensure that the potential source of potable water is protected from contamination or treated before it is used as a potable water supply (35 Ill. Adm. Code 742.1015(i)(6)(C)).

NOTE: Notification under paragraph II. A. above or other communications concerning this MOU should be directed to:

**Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, Illinois 62794-9276**

### **III. SUPPORTING DOCUMENTATION**

The following documentation is required by 35 Ill. Adm. Code 742.1015(i) and is attached to this MOU:

- A. Attachment A: A copy of the groundwater or water well ordinance certified by the city clerk or other official as the current, controlling law (35 Ill. Adm. Code 742.1015(i)(3));
- B. Attachment B: Identification of the legal boundaries within which the ordinance is applicable (certification by city clerk or other official that the ordinance is applicable everywhere within the corporate limits; if ordinance is not applicable throughout the entire city or village, legal description and map of area showing sufficient detail to determine where ordinance is applicable) (35 Ill. Adm. Code 742.1015(i)(2));
- C. Attachment C: A statement of the authority of the unit of local government to enter into the MOU (council resolution, code of ordinances, inherent powers of mayor or other official signing MOU – attach copies) (35 Ill. Adm. Code 742.1015(i)(1)).

IN WITNESS WHEREOF, the lawful representatives of the parties have caused this MOU to be signed as follows:

**FOR: The Village of Minier**

BY: Neill Keneipp  
Neill Keneipp, Village President

DATE: 04/01/2014

**FOR: Illinois Environmental Protection Agency**

BY: \_\_\_\_\_  
Manager, Division of Remediation Management  
Bureau of Land

DATE: \_\_\_\_\_

**R0813**

**VILLAGE OF MINIER**

---

**ORDINANCE NO. 783**

AN ORDINANCE OF THE VILLAGE OF MINIER,  
ILLINOIS AMENDING CHAPTER 9, ARTICLE 1,  
SECTION 9-1-16 OF THE VILLAGE CODE

---

**ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS**

**THIS 4<sup>th</sup> DAY OF JANUARY, 2011**

---

**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 4<sup>th</sup> day of January, 2011.**

**ORDINANCE NO. 783**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS  
AMENDING THE WATER SYSTEM ORDINANCE**

---

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

SECTION 1. It is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois ("Village"), amend Chapter 9, Article 1, Section 9-1-16 the Water System Ordinance; and

SECTION 2. Certain properties in the Village have been used over a period of time for commercial/industrial purposes; and

SECTION 3. Because of said use, concentrations of certain chemical constituents in the groundwater beneath the Village may exceed Class I groundwater quality standards for potable resource groundwater as forth in 35 Illinois Administrative Code 620, or Tier 1 residential remediation objectives as set forth in 35 Illinois Administrative Code 742; and

SECTION 4. The Village desires to limit potential threats to human health from groundwater contamination while facilitating the redevelopment and productive use of properties that are the source of said chemical constituents; and

SECTION 5. Section 9-1-16 of Chapter 9 of the Code of the Village provides a listing of all properties where the use of private water systems is prohibited; and

SECTION 6. Chapter 9, Article 1, Section 9-1-16 of the Village Code of the Village of Minier is hereby amended to add the language set forth below; and

**NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER, ILLINOIS,** that Section 9-1-16 of Chapter 9 of the Code of the Village is amended as follows:

9-16-16: PRIVATE WATER SYSTEMS PROHIBITED: No person having his residence or place of business within the territorial limits of the Village waterworks and sewerage system shall be permitted to secure water for such residence, or place of business, located in the Village, otherwise than through the water mains of the Village, whenever the water mains of the water system of the Village are adjacent to any subdivided lot, or parcel of real estate upon which said residence or place of business is located, unless such system existed prior to installation of the public water main.

Notwithstanding the preceding paragraph, the use of private water systems is expressly prohibited because of the possibility of ground water contamination at the following location:

A. 208 Route 122, Minier, IL 61759

A tract described as follows: Starting at the Northeast corner of Lot 16 in Livesay's Addition to the Village of Minier, thence North to the south line of the public highway; thence East 166' to the place of beginning; thence east 90'; thence South to the North line of Livesay's addition; thence West 90'; thence north to POB in the NW 1/4 of the NE 1/4 Section 22, TWP 23 N, R2E, Tazewell County, ILL (Also known as part of Lot 17).

PIN: 19-19-22-201-013

SECTION 7. All ordinances or parts of ordinances in conflict herewith are hereby repealed; and

SECTION 8. This ordinance is hereby published in pamphlet form by authority of the Village Board of the Village of Minier; and

PASSED at a regular meeting of the Village Board of the Village of Minier held the 4<sup>th</sup> day of January, 2011.

AYES: Devine, Burt, Crawford & Needles

NAYS: None

ABSENT: J. Beccue & M. Beccue

APPROVED this 4<sup>th</sup> day of January, 2011.

Neil Kenney  
Village President

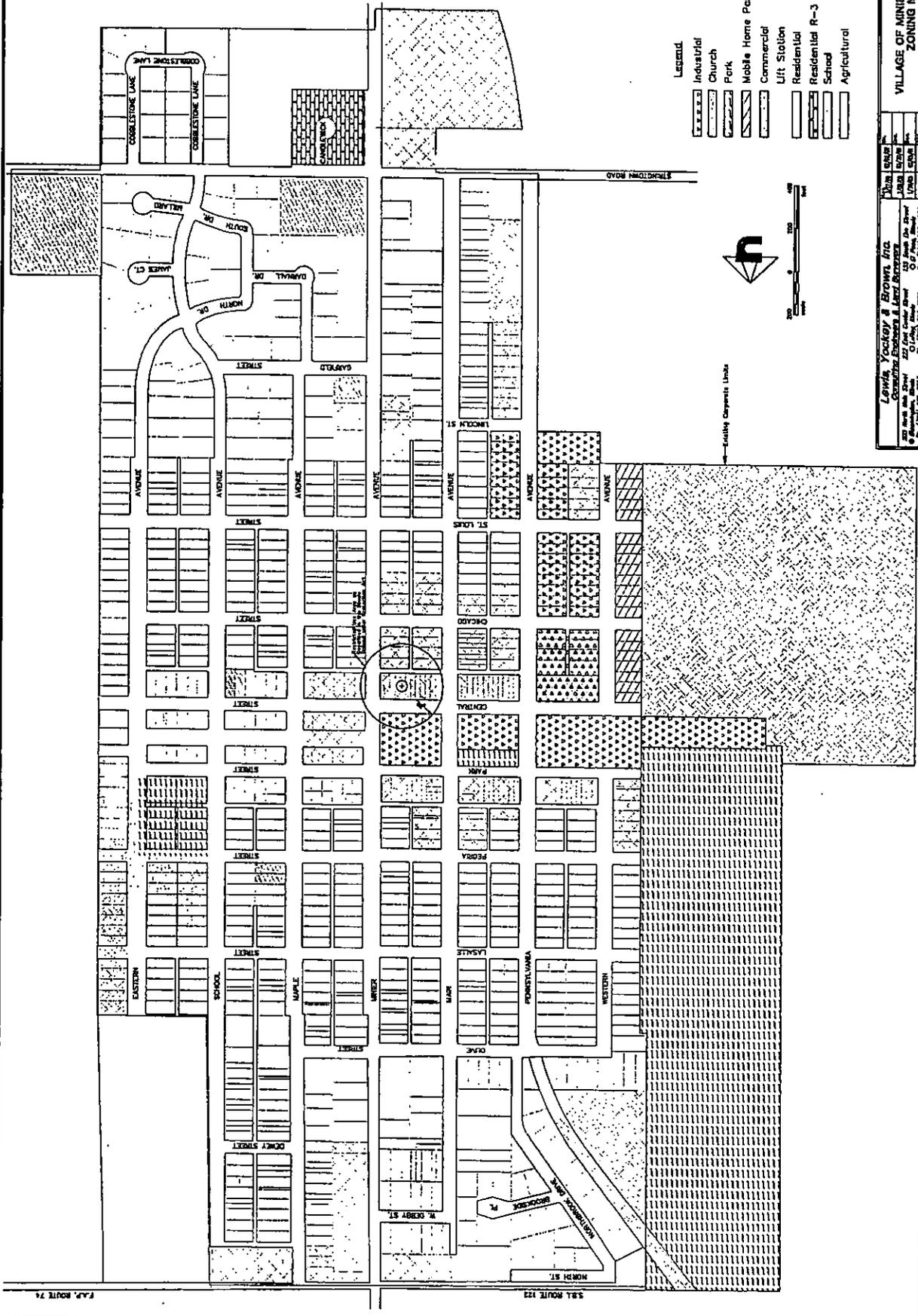
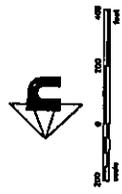
ATTEST:

Yandy Lancaster  
Village Clerk

VILLAGE OF MINIER, ILLINOIS  
ZONING MAP

*Lewis, Yockey & Brown, Inc.*  
Consulting Engineers & Land Planners  
220 West Adams Street, Chicago, Ill. 60606  
Phone: (312) 467-2200  
Fax: (312) 467-2201

- Legend
- Industrial
  - Church
  - Park
  - Mobile Home Park
  - Commercial
  - Lift Station
  - Residential R-3
  - School
  - Agricultural



F.A.R. ROUTE 74

S.E. ROUTE 123

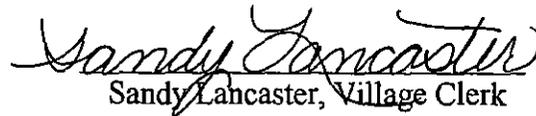
**CERTIFICATION**

I SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that the attached map is a true and correct legal boundary of the Village of Minier and that the Groundwater ordinance is applicable everywhere within the Village limits.

Dated at Minier, Illinois, this 15<sup>th</sup> day of March, 2011.

(SEAL)

  
Sandy Lancaster, Village Clerk

**VILLAGE OF MINIER**

---

**ORDINANCE NO. 785**

**AN ORDINANCE OF THE VILLAGE OF MINIER,  
ENTERING INTO A MEMORANDUM OF  
UNDERSTANDING WITH THE ILLINOIS  
ENVIRONMENTAL PROTECTION AGENCY**

---

**ADOPTED BY THE**

**VILLAGE BOARD**

**OF THE**

**VILLAGE OF MINIER, ILLINOIS**

**THIS 15TH DAY OF MARCH, 2011**

---

**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 15th day of March, 2011.**

ORDINANCE NO. 785

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS  
ENTERING INTO A MEMORANDUM OF UNDERSTANDING WITH  
THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

---

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

SECTION 1. Certain properties in the Village have been used over a period of time for commercial/industrial purposes; and

SECTION 2. Because of said use, concentrations of certain chemical constituents in the groundwater beneath the Village may exceed Class I groundwater quality standards for potable resource groundwater as forth in 35 Illinois Administrative Code 620, or Tier 1 residential remediation objectives as set forth in 35 Illinois Administrative Code 742; and

SECTION 3. The Village desires to limit potential threats to human health from groundwater contamination while facilitating the redevelopment and productive use of properties that are the source of said chemical constituents; and

SECTION 4. Section 9-1-16 of Chapter 9 of the Code of the Village provides a listing of all properties where the use of private water systems is prohibited; and

SECTION 5. It is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois ("Village"), to enter into a Memorandum of Understanding with the Illinois Environmental Protection Agency to memorialize the institutional controls established to insure that the public water system is safe from contaminates; and

SECTION 7. All ordinances or parts of ordinances in conflict herewith are hereby repealed; and

SECTION 8. This ordinance is hereby published in pamphlet form by authority of the Village Board of the Village of Minier; and

**NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER, ILLINOIS,** that the Village President may enter into and execute the Memorandum of Understanding with the Illinois Environmental Protection Agency attached hereto as Exhibit A.

PASSED at a regular meeting of the Village Board of the Village of Minier held the  
15th day of March, 2011.

AYES: Devine, Burt, Crawford & Needles

NAYS: None

ABSENT: J. Beccue & M. Beccue

APPROVED this 15th day of March, 2011.

Neill Kenegg  
Village President

ATTEST:

Kandy Tomcaster  
Village Clerk

**CERTIFICATION OF ORDINANCE**

I SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that on March 15, 2011 the Corporate Authorities of the above municipality passed and approved Ordinance No. 785.

Ordinance No. 785, including the cover sheet thereof, was prepared and published in pamphlet form on the 15<sup>th</sup> day of March, 2011. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

Dated at Minier, Illinois, this 15<sup>th</sup> day of March, 2011.

(SEAL)

  
Sandy Lancaster, Village Clerk

MEMORANDUM OF UNDERSTANDING BETWEEN  
VILLAGE OF MINIER AND THE ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY REGARDING THE USE OF A LOCAL GROUNDWATER OR  
WATER WELL ORDINANCE AS AN ENVIRONMENTAL INSTITUTIONAL CONTROL

I. PURPOSE AND INTENT

- A. This Memorandum of Understanding ("MOU") between Village of Minier and the Illinois Environmental Protection Agency ("Illinois EPA") is entered into for the purpose of satisfying the requirements of 35 Ill. Adm. Code 742.1015 for the use of groundwater or water well ordinances as environmental institutional controls. The Illinois EPA has reviewed the groundwater or water well ordinance of Village of Minier (Attachment A) and determined that the ordinance prohibits the use of groundwater for potable purposes and/or the installation and use of new potable water supply wells by private entities but does not expressly prohibit those activities by the unit of local government itself. In such cases, 35 Ill. Adm. Code 742.1015(a) provides that the unit of local government may enter into an MOU with the Illinois EPA to allow the use of the ordinance as an institutional control.
- B. The intent of this Memorandum of Understanding is to specify the responsibilities that must be assumed by the unit of local government to satisfy the requirements for MOUs as set forth at 35 Ill. Adm. Code 742.1015(i).

II. DECLARATIONS AND ASSUMPTION OF RESPONSIBILITY

In order to ensure the long-term integrity of the groundwater or water well ordinance as an environmental institutional control and that risk to human health and the environment from contamination left in place in reliance on the groundwater or water well ordinance is effectively managed, Village of Minier hereby assumes the following responsibilities pursuant to 35 Ill. Adm. Code 742.1015(d)(2) and (i):

- A. Village of Minier will notify the Illinois EPA Bureau of Land of any proposed ordinance changes or requests for variance at least 30 days prior to the date the local government is scheduled to take action on the proposed change or request (35 Ill. Adm. Code 742.1015(i)(4));
- B. Village of Minier will maintain a registry of all sites within its corporate limits that have received "No Further Remediation" determinations in reliance on the ordinance from the Illinois EPA (35 Ill. Adm. Code 742.1015(i)(5));
- C. Village of Minier will review the registry of sites established under paragraph II. B. prior to siting public potable water supply wells within the area covered by the ordinance (35 Ill. Adm. Code 742.1015(i)(6)(A));



- D. Village of Minier will determine whether the potential source of potable water has been or may be affected by contamination left in place at the sites tracked and reviewed under paragraphs II. B. and C. (35 Ill. Adm. Code 742.1015(i)(6)(B)); and
- E. Village of Minier will take action as necessary to ensure that the potential source of potable water is protected from contamination or treated before it is used as a potable water supply (35 Ill. Adm. Code 742.1015(i)(6)(C)).

NOTE: Notification under paragraph II. A. above or other communications concerning this MOU should be directed to:

Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, IL 62794-9276

### III. SUPPORTING DOCUMENTATION

The following documentation is required by 35 Ill. Adm. Code 742.1015(i) and is attached to this MOU:

- A. Attachment A: A copy of the groundwater or water well ordinance certified by the city clerk or other official as the current, controlling law (35 Ill. Adm. Code 742.1015(i)(3));
- B. Attachment B: Identification of the legal boundaries within which the ordinance is applicable (certification by city clerk or other official that the ordinance is applicable everywhere within the corporate limits; if ordinance is not applicable throughout the entire city or village, legal description and map of area showing sufficient detail to determine where ordinance is applicable) (35 Ill. Adm. Code 742.1015(i)(2));
- C. Attachment C: A statement of the authority of the unit of local government to enter into the MOU (council resolution, code of ordinances, inherent powers of mayor or other official signing MOU -- attach copies) (35 Ill. Adm. Code 742.1015(i)(1)).

IN WITNESS WHEREOF, the lawful representatives of the parties have caused this MOU to be signed as follows:

FOR: Village of Minier  
(Name of city or village)

BY: Neill Keneipp  
(Name and title of signatory)  
Neill Keneipp, Village President

DATE: 3/15/11

FOR: Illinois Environmental Protection Agency

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
Manager, Division of Remediation Management  
Bureau of Land

**VILLAGE OF MINIER**

---

**ORDINANCE NO. 808**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS PROHIBITING THE  
USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE  
INSTALLATION OR THE USE OF POTABLE WATER SUPPLY WELLS OR BY ANY  
OTHER METHOD**

---

**ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS**

**THIS 19th DAY OF MARCH 2013**

---

**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 19th day of March, 2013.**

**ORDINANCE NO. 808**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS PROHIBITING THE  
USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE  
INSTALLATION OR THE USE OF POTABLE WATER SUPPLY WELLS OR BY ANY  
OTHER METHOD**

---

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE  
VILLAGE OF MINIER, ILLINOIS:

WHEREAS, certain properties in the Village of Minier ("Village"), Illinois have been used  
over a period of time for commercial/industrial purposes; and

WHEREAS, because of said use, concentrations of certain chemical constituents in the  
groundwater beneath the Village may exceed Class I groundwater quality standards for potable  
resource groundwater as set forth in 35 Illinois Administrative Code 620 or Tier 1 remediation  
objectives as set forth in 35 Illinois Administrative Code 742; and

WHEREAS, the Village to limit potential threats to human health from groundwater  
contamination while facilitating the redevelopment and productive use of properties that are  
the source of said chemical constituents;

**NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER,  
ILLINOIS:**

**Section One.** Use of groundwater as a potable water supply prohibited.

Except for such uses or methods in existence before the effective date of  
this ordinance, the use or attempt to use as a potable water supply  
groundwater from within the corporate limits of the Village of Minier, as a  
potable water supply, by the installation or drilling of wells or by any other  
method is hereby prohibited. This prohibition does not include the Village  
of Minier.

**Section Two.** Penalties.

Any person violating the provisions of this ordinance shall be subject to a fine of  
up to \$250.00 for each violation.

**Section Three.** Definitions.

"Person" is any individual, partnership, co-partnership, firm, company, limited

liability company, corporation, association, joint stock company, trust, estate, political subdivision, or any other legal entity, or their legal representatives, agents or assigns.

"Potable water" is any water used for human or domestic consumption, including, but not limited to, water used for drinking, bathing, swimming, washing dishes, or preparing foods.

**Section Four. Memorandum of Understanding.**

The President of the Village of Minier was previously authorized and directed to enter into a Memorandum of Understanding on or about January 4, 2011 with the Illinois Environmental Protection Agency ("Illinois EPA") in which the Village of Minier assumes responsibility for tracking all sites that have received no further remediation determinations from the Illinois EPA, notifying the Illinois EPA of changes to this ordinance, and taking certain precautions when siting public potable water supply wells.

**Section Five. Repealer.**

All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed insofar as they are in conflict with this ordinance.

**Section Six. Severability.**

If any provision of this ordinance or its application to any person or under any circumstances is adjudged invalid, such adjudication shall not affect the validity of the ordinance as a whole or of any portion not adjudged invalid.

**Section Seven. Effective date.**

This ordinance shall be in full force and effect from and after its passage, approval and publication as required by law.

PASSED at a regular meeting of the Village Board of the Village of Minier held the 19th day of March, 2013.

AYES: Devine, Burt, LaDew, Crawford, Beccue & Needles

NAYS: None

ABSENT: None

APPROVED this 19th day of March, 2013.

*Neil Kenney*  
\_\_\_\_\_  
Village President

ATTEST:

*Sandy Lancaster*  
\_\_\_\_\_  
Village Clerk



# Illinois Department of Transportation

Office of Chief Counsel  
2300 South Dirksen Parkway / Springfield, Illinois / 62764

October 4, 2013

Midwest Environmental Consulting & Remediation Services, Inc.  
Attn: Penny Silzer  
PO Box 614  
Tremont, IL 61568-0614

Re: TACO Agreement: HAA 1342 in Minier, IL

Dear Ms. Silzer:

I have enclosed a fully executed original Highway Authority Agreement for the above site.

Please submit the agreement to the Illinois Environmental Protection Agency for their approval.

Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Prater".

Michael Prater  
Assistant Chief Counsel

Enclosure

R0830

### HIGHWAY AUTHORITY AGREEMENT

This Agreement is entered into this 6<sup>th</sup> day of September, 2013 pursuant to 35 Ill. Adm. Code 742.1020 by and between the Warsaw ITCO "Owner/Operator" and Illinois Department of Transportation "Highway Authority," collectively known as the "Parties."

**WHEREAS**, Warsaw ITCO is the owner or operator of one or more leaking underground storage tanks presently or formerly located at *IL Route 122, Minier, Illinois* ("the Site");

**WHEREAS**, as a result of one or more releases of contaminants from the above referenced underground storage tanks "the Release(s)", soil and/or groundwater contamination at the Site exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742;

**WHEREAS**, the soil and/or groundwater contamination exceeding Tier 1 residential remediation objectives extends or may extend into the Highway Authority's right-of-way;

**WHEREAS**, the Owner/Operator is conducting corrective action in response to the Release(s);

**WHEREAS**, the Parties desire to prevent groundwater beneath the Highway Authority's right-of-way that exceeds Tier 1 remediation objectives from use as a supply of potable or domestic water and to limit access to soil within the right-of-way that exceeds Tier 1 residential remediation objectives so that human health and the environment are protected during and after any access;

**NOW, THEREFORE**, the Parties agree as follows:

1. The recitals set forth above are incorporated by reference as if fully set forth herein.
2. The Illinois Emergency Management Agency has assigned incident number **981987** to the Release(s).
3. Attached as Exhibit A is a scaled map(s) prepared by the Owner/Operator that shows the Site and surrounding area and delineates the current and estimated future extent of soil and groundwater contamination above the applicable Tier 1 residential remediation objectives as a result of the Release(s).
4. Attached as Exhibit B is a table(s) prepared by the Owner/Operator that lists each contaminant of concern that exceeds its Tier 1 residential remediation objective, its Tier 1 residential remediation objective and its concentrations within the zone where Tier 1 residential remediation objectives are exceeded. The locations of the concentrations listed in Exhibit B are identified on the map(s) in Exhibit A.
5. Attached as Exhibit C is a scaled map prepared by the Owner/Operator showing the area of the Highway Authority's right-of-way that is governed by this agreement ("Right-of-Way"). Because Exhibit C is not a surveyed plat, the Right-of-Way boundary may be an approximation of the actual Right-of-Way lines.
6. The Highway Authority stipulates it has jurisdiction over the Right-of-Way that gives it sole control over the use of the groundwater and access to the soil located within or beneath the Right-of-Way.
7. The Highway Authority agrees to prohibit within the Right-of-Way all potable and domestic uses of groundwater exceeding Tier 1 residential remediation objectives.

8. The Highway Authority further agrees to limit access by itself and others to soil within the Right-of-Way exceeding Tier 1 residential remediation objectives. Access shall be allowed only if human health (including worker safety) and the environment are protected during and after any access. The Highway Authority may construct, reconstruct, improve, repair, maintain and operate a highway upon the Right-of-Way, or allow others to do the same by permit. In addition, the Highway Authority and others using or working in the Right-of-Way under permit have the right to remove soil or groundwater from the Right-of-Way and dispose of the same in accordance with applicable environmental laws and regulations. The Highway Authority agrees to issue all permits for work in the Right-of-Way, and make all existing permits for work in the Right-of-Way, subject to the following or a substantially similar condition:

As a condition of this permit the permittee shall request the office issuing this permit to identify sites in the Right-of-Way where a Highway Authority Agreement governs access to soil that exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742. The permittee shall take all measures necessary to protect human health (including worker safety) and the environment during and after any access to such soil.

9. This agreement shall be referenced in the Agency's no further remediation determination issued for the Release(s).
10. The Agency shall be notified of any transfer of jurisdiction over the Right-of-Way at least 30 days prior to the date the transfer takes effect. This agreement shall be null and void upon the transfer unless the transferee agrees to be bound by this agreement as if the transferee were an original party to this agreement. The transferee's agreement to be bound by the terms of this agreement shall be memorialized at the time of transfer in a writing ("Rider") that references this Highway Authority Agreement and is signed by the Highway Authority, or subsequent transferor, and the transferee.
11. This agreement shall become effective as a Highway Authority Agreement on the date the Agency issues a no further remediation determination for the Release(s). It shall remain effective as a Highway Authority Agreement until the Right-of-Way is demonstrated to be suitable for unrestricted use and the Agency issues a new no further remediation determination to reflect there is no longer a need for this agreement, or until the agreement is otherwise terminated or voided.
12. In addition to any other remedies that may be available, the Agency may bring suit to enforce the terms of this agreement or may, in its sole discretion, declare this agreement null and void if any of the Parties or any transferee violates any term of this agreement. The Parties or transferee shall be notified in writing of any such declaration.
13. This agreement shall be null and void as a Highway Authority Agreement if a court of competent jurisdiction strikes down any part or provision of the agreement.
14. This agreement supersedes any prior written or oral agreements or understandings between the Parties on the subject matter addressed herein. It may be altered, modified or amended only upon the written consent and agreement of the Parties.
15. Any notices or other correspondence regarding this agreement shall be sent to the Parties at following addresses:

Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, IL 62974-9276

If to Owner/Operator:

John Warsaw  
P. O. Box 886  
Minier, Illinois 61759

If to Department:

Illinois Department of Transportation  
Region Three Engineer  
Attn: District Four Environmental Studies Unit  
401 Main Street  
Peoria, Illinois 61602

And to:

Midwest Environmental Consulting  
Attn: Penny Silzer  
PO Box 614  
Tremont, Illinois 61568

And to:

Illinois Department of Transportation  
Attn: Assistant Chief Counsel  
2300 S. Dirksen Parkway, Room 313  
Springfield, Illinois 62764

16. This Agreement is not binding upon the Department until it is executed by the undersigned representative of the Department. Prior to execution by the undersigned representative of the Department this Agreement constitutes an offer by Owner/Operator. The duly authorized representatives of Owner/Operator have signed this Agreement and this Agreement is binding upon them, their successors and assigns.
17. The IEPA and Illinois Attorney General "AG" must review and approve this Agreement, and this Agreement shall be referenced in the IEPA's "No Further Remediation" determination in the chain of title for the Site in the county where the Site is located. This Agreement shall be null and void as a Highway Authority Agreement should the IEPA or AG not approve it or should it not be referenced in the "No Further Remediation" determination, provided, however, that this Agreement shall be effective between the Owner/Operator and the Department immediately upon signature by their representatives.
18. The Owner/Operator agrees to defend, indemnify and hold harmless the Department, and other highway authorities, if any, maintaining the highway Right-of-Way by an agreement with the Department, and the Department's agents, contractors or employees for all obligations asserted against or costs incurred by them, including reasonable attorney's fees and court costs, associated with the release of Contaminants from the Site, regardless whether said obligations or costs were caused by the negligence, but not the gross negligence, of them.
19. As an additional consideration, Owner/Operator agrees to reimburse the Department for reasonable costs to protect human health and the environment, including, but not limited to, identifying, investigating, handling, storing and disposing of contaminated soil and/or groundwater in the Right-of-Way as a result of the release of contaminants at this Site. It has been determined that the Department has not incurred any reimbursable costs at the time this Agreement is executed by the undersigned representative of the Department. If future costs are incurred, a cashier's check made payable to "Treasurer, State of Illinois" shall be tendered to the Department of Transportation upon demand by the Department.
20. Violation of the terms of this Agreement by Owner/Operator, or their successors in interest, may be grounds for voidance of this Agreement as a Highway Authority Agreement. Violation of the terms of this Agreement by the Department will not void this Agreement, unless the IEPA has determined that the violation is grounds for voiding this Agreement as a Highway Authority Agreement and the Department has not cured the violation within such time as IEPA has granted to cure the violation.

21. This Agreement is in settlement of claims the Department may have arising from the release of Contaminants into the Right-of-Way associated with IEMA incident number 981987.
22. Prior to accessing or granting access to the soil as provided in Paragraph 8 herein, the Department will first give Owner/Operator written notice, unless there is an immediate threat to the health or safety to any individual or to the public, that it intends to perform a site investigation in the Right-of-Way and remove or dispose of contaminated soil or groundwater to the extent necessary for its work. Failure to give notice is not a violation of this Agreement. The removal or disposal shall be based upon the site investigation (which may be modified by field conditions during excavation). A copy of the site investigation report will be provided to Owner/Operator. If practicable, as reasonably determined by the Department, the Department may provide Owner/Operator with an opportunity to perform the Site investigation and to remove and dispose of the contaminated soil and/or groundwater necessary for the Department's work in advance of that work.

The Owner/Operator shall reimburse the reasonable costs incurred by the Department to perform the site investigation and to dispose of any contaminated soil or groundwater, provided, however, that if notice to Owner/Operator has not been given and there was no immediate threat to health or safety, reimbursement for those costs shall be limited to \$10,000.00. There is a rebuttable presumption that the Contaminants found in the highway Right-of-Way arose from the release of Contaminants from the Site. Should Owner/Operator not reimburse the reasonable costs under the conditions set forth herein, this Agreement shall be null and void, at the Department's option, upon written notice to Owner/Operator by the Department that those costs have not been reimbursed. Owner/Operator may cure that problem within twenty working days by making payment, or may seek to enjoin that result.

23. The Department's sole responsibility under this Agreement with respect to others using the highway Right-of-Way under permit from the Department is to include the following, or similar language, in the future standard permit provisions and to make an effort to notify its current permit holders of the following:

As a condition of this permit the permittee shall request the office issuing this permit to identify sites in the Right-of-Way where a Highway Authority Agreement governs access to soil that exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742. The permittee shall take all measures necessary to protect human health (including worker safety) and the environment during and after any access to such soil.

Owner/Operator hereby releases the Department from liability for breach of this Agreement by others under permit and agrees to defend and indemnify the Department against claims that may arise from others under permit causing a breach of this Agreement. Owner/ Operator agrees that its personnel, if any, at the Site who are aware of this Agreement will notify anyone they know is excavating in the Right-of-Way about this Agreement.

24. Should the Department breach this Agreement, Owner/Operator's sole remedy is for an action for damages in the Illinois Court of Claims. Any and all claims for damages against the Department, its agents, contractors, employees or its successors in interest arising at any time for a breach of paragraphs 7 and 8 of this Agreement are limited to an aggregate maximum of \$20,000.00. No other breach by the Department, its agents, contractors, employees and its successors in interest of a provision of this Agreement is actionable in either law or equity by Owner/Operator against the Department or them and Owner/Operator hereby releases the Department, its agents, contractors, employees and its successors in interest for any cause of action it may have against them, other than as allowed in this paragraph, arising under this Agreement or environmental laws, regulations or common law governing the contaminated soil or groundwater in the highway Right-of-Way. Should the Department convey, vacate or transfer jurisdiction of that highway Right-of-Way, Owner/Operator

may pursue an action under this Agreement against the successors in interest, other than a State agency, in a court of law.

25. This Agreement is entered into by the Department in recognition of laws passed by the General Assembly and regulations adopted by the Pollution Control Board which encourage a tiered-approach to remediating environmental contamination. This Agreement is entered into by the Department in the spirit of those laws and under its right and obligations as a highway authority.

Should any provisions of this Agreement be struck down as beyond the authority of the Department, however, this Agreement shall be null and void.

**IN WITNESS WHEREOF**, Owner/Operator, Warsaw ITCO, has caused this Agreement to be signed by its duly authorized representative.

BY: *John Warsaw*  
John Warsaw  
President

DATE: 15 August 2013

IN WITNESS WHEREOF, the Department has caused this Agreement to be signed by its Secretary.

Illinois Department of Transportation

BY: *Ann L. Schneider*  
Ann L. Schneider  
Secretary

DATE: 9/6/13

This Agreement is approved on behalf of the Office of the Illinois Attorney General.

BY: *Matthew J. Dunn*  
Matthew J. Dunn  
Assistant Attorney General  
Chief, Division of Environmental/Asbestos Litigation

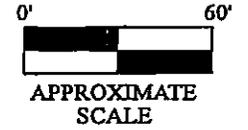
DATE: 9/30/13

**Exhibit: A**

Agricultural

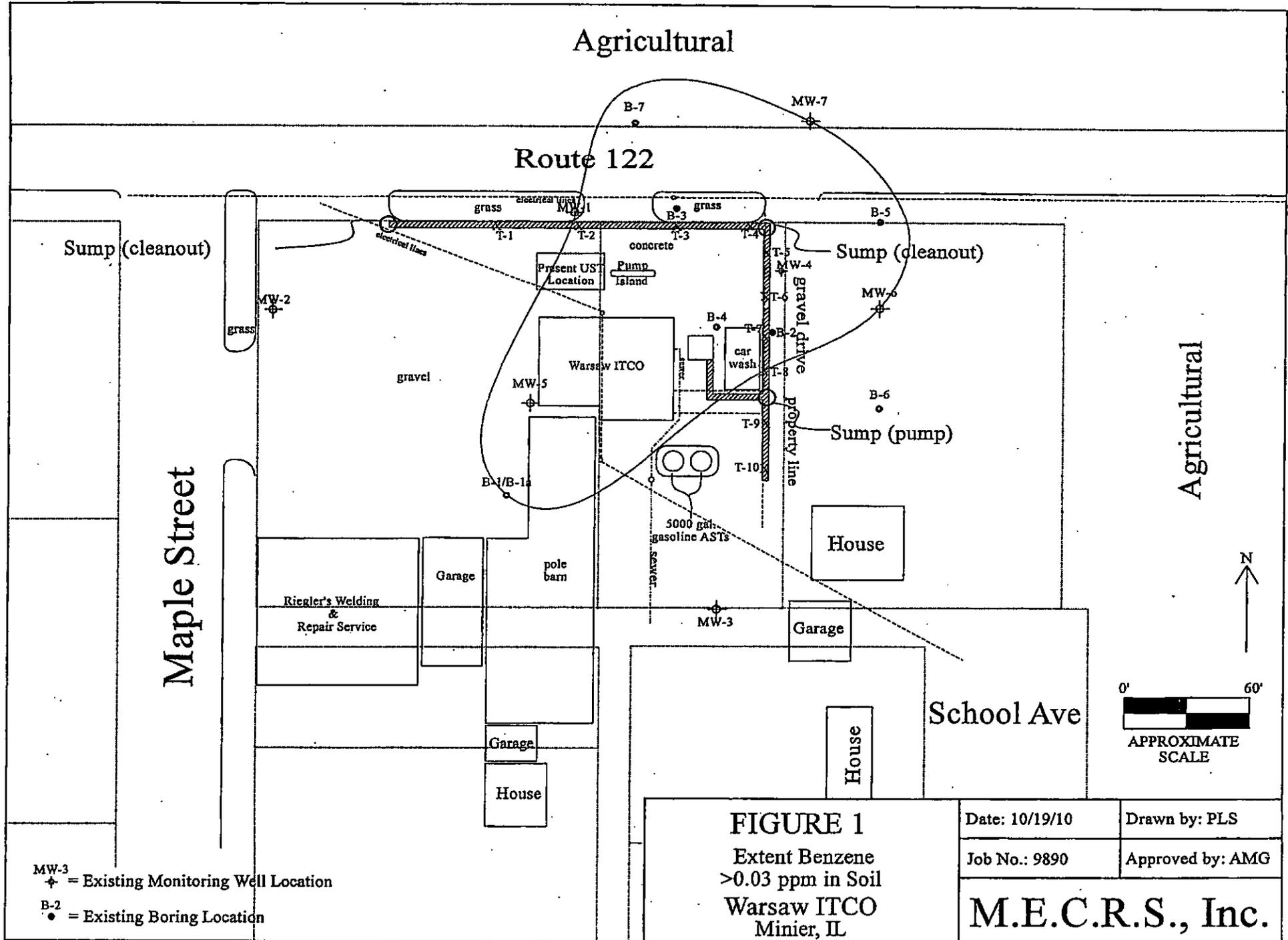
Route 122

Agricultural



HAA 1342

Page 7 of 13



MW-3  
 + = Existing Monitoring Well Location  
 B-2  
 • = Existing Boring Location

**FIGURE 1**  
 Extent Benzene  
 >0.03 ppm in Soil  
 Warsaw ITCO  
 Minier, IL

Date: 10/19/10	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**

R0837

Agricultural

Route 122

Extent Benzene in GW > 0.005 ppm

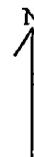
Sump (cleanout)

Sump (cleanout)

Sump (pump)

Maple Street

Agricultural



Page 8 of 13

- MW-3  
+ = Existing Monitoring Well Location
- B-2  
• = Existing Boring Location

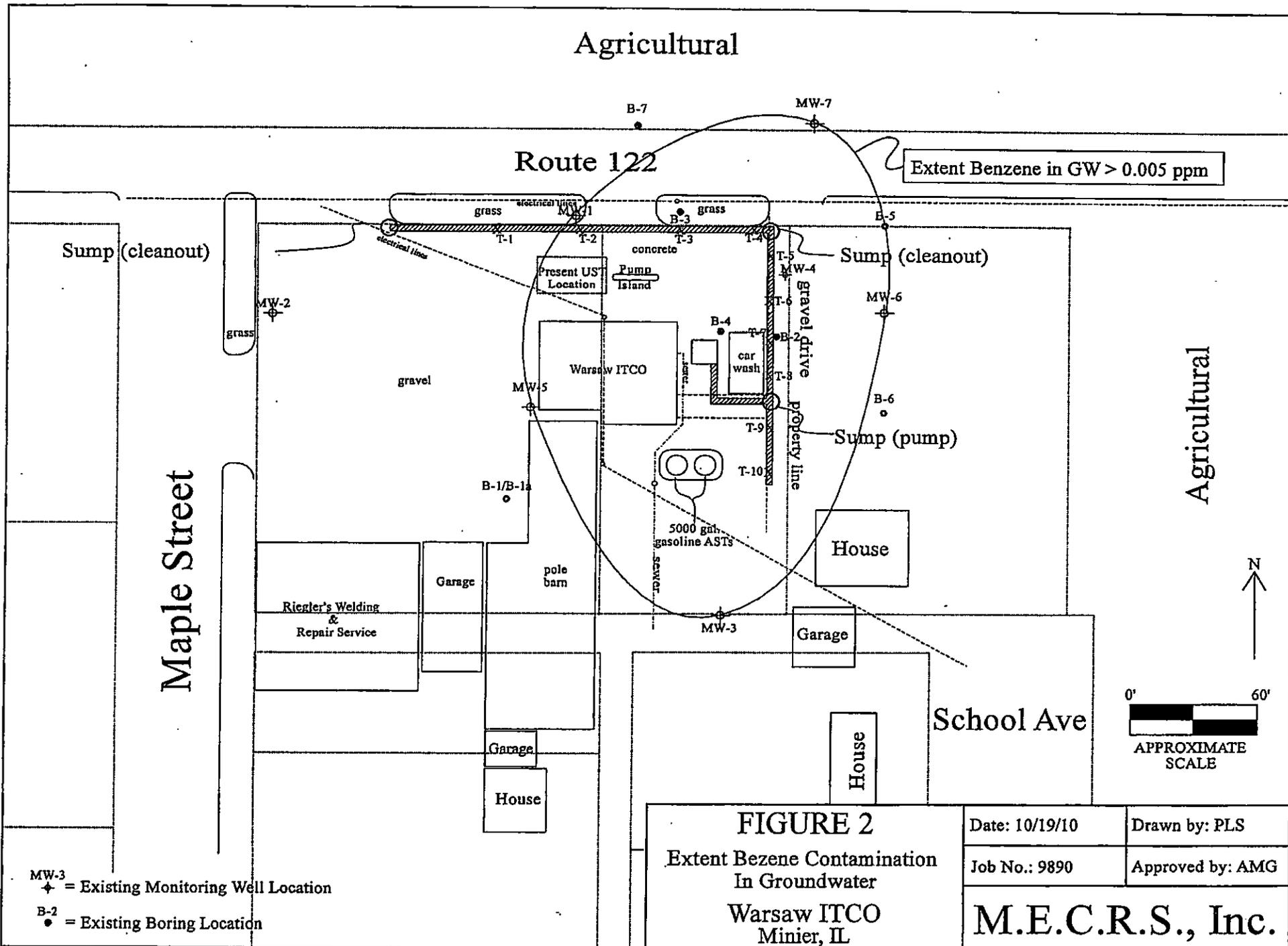
**FIGURE 2**  
Extent Benzene Contamination  
In Groundwater  
Warsaw ITCO  
Minier, IL

Date: 10/19/10	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**

R0838

HAA 1342



**Exhibit: B**

**TABLE 1.**  
**Soil Analytical Results**  
**Warsaw-ITCO**  
**Minier, IL**

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/2000	<0.002	<0.002	<0.002	<0.005	<0.011
B-2, 4-6'	5/3/2000	0.810	1.300	1.700	6.500	10.310
B-2, 6-8'	5/3/2000	0.600	0.220	0.420	1.900	3.140
B-2, 8-10'	5/3/2000	21.0	41.0	47.0	190.0	299.0
B-3, 6-8'	5/3/2000	0.400	0.120	0.210	0.460	1.190
B-3, 8-10'	5/3/2000	2.300	2.100	21	110	135.400
MW-1, 6-8'	5/4/2000	<0.002	<0.002	<0.002	<0.005	<0.011
MW-2, 8-10'	5/3/2000	<0.002	<0.002	<0.002	<0.005	<0.011
MW-3, 8-10'	5/3/2000	<0.002	<0.002	0.006	<0.005	<0.0147
MW-4, 4-6'	5/4/2000	0.230	0.220	0.870	2.500	3.820
MW-4, 6-8'	5/4/2000	0.300	1.200	5.400	20.000	26.900
B-4, 0.5-2.5'	8/23/2001	0.0081 M	0.019 M	0.0447 M	0.0772 M	0.149 M
B-4, 4-6'	8/23/2001	11.6 ME	42.7 ME	9.72 ME	38.0 ME	102.02 ME
B-5, 6-8'	8/23/2001	0.049	0.186 E	0.038	0.130	0.403
B-6, 4-6'	8/23/2001	0.020	0.053	0.031	0.090	0.194
B-6, 8-10'	8/23/2001	0.007	0.012	<0.0024	0.011	<0.0323
B-7, 8-10'	8/23/2001	0.0167 M	0.0615 M	0.0139 M	0.0395 M	0.1316 M
B-7, 12-14'	8/23/2001	0.754	<0.0613	<0.0613	<0.153	<1.0296
MW-5, 8-10'	8/23/2001	0.494 M	4.75 M	5.89 M	7.57 M	18.704 M
MW-6, 6-8'	8/23/2001	0.007	0.012	0.006	0.011	0.037
MW-7, 4-6'	8/23/2001	0.012	0.025	0.011	0.020	0.068
MW-7, 8-10	8/23/2001	0.0155 M	0.0202 M	0.007	0.012	0.054
T-1	10/20/2003	<0.0026	0.0032	<0.0026	<0.0065	<0.0149
T-2	10/20/2003	<0.0026	<0.0026	<0.0026	<0.0065	<0.0143
T-3	10/20/2003	<0.0024	0.0051	0.0051	0.0142	<0.0268
T-4	10/20/2003	<0.0024	<0.0024	<0.0024	<0.0059	<0.0131
T-5	10/20/2003	0.0034	0.0408	0.3600	0.9470	1.3512
T-6	10/20/2003	0.0853	0.6350	1.8400	7.1400	9.7003
T-7	10/20/2003	0.0855	0.0438	1.1200	2.4600	3.7093
T-8	10/20/2003	<0.0025	0.0066	0.0189	0.0568	<0.0848
T-9	10/20/2003	<0.0024	<0.0024	<0.0024	<0.0061	<0.0133
T-10	10/20/2003	<0.0025	<0.0025	<0.0025	<0.0062	<0.0137

## Notes:

1. All results in mg/kg (parts per million, ppm).
2. IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
0.03	12	13	150

3. All bolded values are above Tier 1 Residential Cleanup Objectives
4. M = Matrix interferences identified.
5. E = Estimated - Value outside linear calibration curve.

Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois

HAA 1342

Sample #	Date	DTW	GWE	Benzene	Toluene	E-Benzene	Xylenes	Total BTEX
<b>MW-1</b> Elevation Top of Casing = 99.62								
SC	5/9/2000	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3
1	10/24/2000	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4
2	8/23/2001	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E
3	11/13/2001	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.41	94.21	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.65	94.97	NS	NS	NS	NS	NS
<b>MW-2</b> Elevation Top of Casing = 99.28								
SC	5/9/2000	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7
3	11/13/2001	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.12	94.16	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.38	94.90	NS	NS	NS	NS	NS
<b>MW-3</b> Elevation Top of Casing = 100								
SC	5/9/2000	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
3	11/13/2001	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.37	94.63	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.34	95.66	NS	NS	NS	NS	NS
<b>MW-4</b> Elevation Top of Casing = 99.84								
SC	5/9/2000	5.90	93.94	2,600	12,000	4,500	18,000	37,100
1	10/24/2000	7.80	92.04	2,300	5,200	4,000	13,000	24,500
2	8/23/2001	6.67	93.17	2,290 M	2,380 M	8,150	23,600 E	36,420 E
3	11/13/2001	6.11	93.73	1,910	3,960	3,360	10,000	19,230
4	2/14/2002	5.00	94.84	1,100	1,200	2,900	5,500	10,700
5	1/24/2005	4.47	95.37	NS	NS	NS	NS	NS
<b>MW-5</b> Elevation Top of Casing = 99.57								
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9
3	11/13/2001	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.86	1.4	2.2	1.5	4.5	9.6
5	1/24/2005	3.89	95.68	NS	NS	NS	NS	NS
<b>MW-6</b> Elevation Top of Casing = 99.57								
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5
3	11/13/2001	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.66	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	WELL ICED OVER		NS	NS	NS	NS	NS
<b>MW-7</b> Elevation Top of Casing = 100.07 WELL DESTROYED AT TIME OF 1/25/05 DTW MEASUREMENT								
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	7.28	92.79	<2.0	<2.0	<2.0	5.9	<11.9
3	11/13/2001	6.23	93.84	117 E	<2.0	<2.0	<5.0	<126 E
4	2/14/2002	5.52	94.55	7	<1.0	<1.0	<3.0	<12.0
5	1/24/2005	--	--	NS	NS	NS	NS	NS

- All results reported in ug/kg (i.e. parts per billion, ppb)
- IEPA Tier 1 Cleanup Objectives (ug/kg):
- = No data available
- MDL = Method Detection Limit
- DTW = Depth to Water
- GWE = Groundwater Elevation referenced to datum point
- NA/NS = Not analyzed/not sampled this event
- E = Estimated - value outside linear range
- M = Matrix interferences identified.

Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

Date	Average DTW
5/9/2000	5.85
10/24/2000	7.78
8/23/2001	6.09
11/13/2001	6.01
2/14/2002	5.12
1/24/2005	4.35
Cumulative DTW Average:	5.87

**Exhibit: C**



Appendix F  
Budget Amendment

# General Information for the Budget and Billing Forms

LPC#: 1790455007 County: Tazewell  
City: Minier Site Name: Warsaw, Howard (Warsaw ITCO)  
Site Address: Ill. Rte. 122  
IEMA Incident No: 981987  
IEMA Notification Date: August 11, 1998  
Date this form was prepared: January 27, 2015

This form is being submitted as a (check one if applicable):

- Budget Proposal
- Budget Amendment (Budget Amendments must include only the costs over the previous budget.)
- Billing Package

Please provide the name(s) and date(s) of report(s) documenting the costs as requested:

Name(s): \_\_\_\_\_

Date (s): \_\_\_\_\_

This package is being submitted for the site activities indicated below:

### 35 Ill. Adm. Code 734:

- Early Action
- Free Produce Removal After Early Action
- Site Investigation.....Stage 1:  Stage 2:  Stage 3:   
Actual Costs
- Corrective Action

### 35 Ill. Adm. Code 732:

- Early Action
- Free Produce Removal After Early Action
- Site Classification
- Low Priority Corrective Action
- High Priority Corrective Action

### 35 Ill. Adm. Code 731

- Site Investigation
- Corrective Action

**RECEIVED**

MAR 1-0 2015

**IEPA/BOL**

# General Information for the Budget and Billing Forms

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund.

Pay to the order of: John Warsaw

Send in care of: Midwest Environmental Consulting & Remediation Services, Inc

Address: PO Box 614

City: Tremont

State: IL

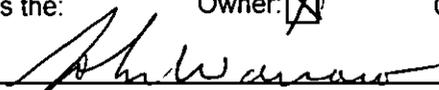
Zip: 61568

The payee is the:

Owner:

Operator:

(Check one or both)



W-9 must be submitted.

**Signature of the owner or operator of the UST(s) (required)**

Click [here](#) to print off a W-9 Form.

Number of petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101  101 or more:

Number of USTs at the site: 10 (Number of USTs includes USTs presently at the site and USTs that have been removed).

Number of incidents reported to the IEMA for this site: 1

Incidents Numbers assigned to the site due to releases from USTs: 981987

Please list all tanks that have ever been located at the site and tanks that are presently located at the site.

Product Stored in UST	Size (gallons)	Did UST have a release?	Incident No.	Type of Release Tank Leak / Overfill / Piping Leak
gasoline	500	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
gasoline	500	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
gasoline	2,000	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
diesel	2,500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		

# Budget Summary

Chose the applicable regulation:  734  732

<b>734</b>	Free Product	Stage 1 Site Investigation	Stage 2 Site Investigation	Stage 3 Site Investigation	Corrective Action
Drilling and Monitoring Well Costs Form					\$1,968.30
Analytical Costs Form					\$1,420.10
Remediation and Disposal Costs Form					\$0.00
UST Removal and Abandonment Costs Form					\$0.00
Paving, Demolition, and Well Abandonment Costs Form					\$0.00
Consulting Personnel Costs Form					\$9,670.43
Consultant's Materials Costs Form					\$185.90
Handling Charges Form	Handling charges will be determined at the time a billing package is submitted to the Illinois EPA. The amount of allowable charges will be determined in accordance with the				
<b>Total</b>					<b>\$13,244.73</b>

# Drilling and Monitoring Well Costs Form

## 1. Drilling

Number of Borings to Be Drilled	Type HSA / PUSH / Injection	Depth (feet) of Each Boring	Total Feet Drilled	Reason for Drilling
2	PUSH	15.00	30.00	collect groundwater sample with temporary well
4	PUSH	15.00	60.00	define extent of Xylenes above C <sub>sat</sub>
			0.00	
			0.00	
			0.00	
			0.00	

Subpart H minimum payment amounts applies.

	Total Feet	Rate per Foot (\$)	Total Cost (\$)
Total Feet via HSA:	90.00	\$21.87	\$1,968.30
Total Feet via PUSH:			\$0.00
Total Feet for Injection via PUSH:			\$0.00
Total Drilling Costs:			\$1,968.30

## 2. Monitoring / Recovery Wells

Number of Wells	Type of Well HSA / PUSH / 4" - 6" Recovery / 8" Recovery	Diameter of Well (inches)	Depth of Well (feet)	Total Feet of Wells to Be Installed (\$)
				0.00
				0.00
				0.00
				0.00
				0.00

Well Installation	Total Feet	Rate per Foot (\$)	Total Cost (\$)
Total Feet via HSA:			\$0.00
Total Feet via PUSH:			\$0.00
Total Feet of 4" or 6" Recovery:			\$0.00
Total Feet of 8' or Greater Recovery:			\$0.00
Total Well Costs:			\$0.00

<b>Total Drilling and Monitoring Well Costs:</b>	<b>\$1,968.30</b>
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## Analytical Costs Form

Laboratory Analysis	Number of Samples		Cost (\$) per Analysis		Total per Parameter
<b>Chemical Analysis</b>					
BTEX Soil with MTBE EPA 8260	8	x	\$103.26	=	\$826.08
BTEX Water with MTBE EPA 8260	2	x	\$98.41	=	\$196.82
COD (Chemical Oxygen Demand)		x	\$32.71	=	\$0.00
Corrosivity		x	\$16.36	=	\$0.00
Flash Point or Ignitability Analysis EPA 1010		x	\$35.99	=	\$0.00
Fraction Organic Carbon Content ( $f_{oc}$ ) ASTM-D 2974-00		x	\$41.44	=	\$0.00
Fat, Oil, & Grease (FOG)		x	\$65.43	=	\$0.00
LUST Pollutants Soil - analysis must include volatile, base/neutral, polynuclear aromatics and metals list in Section 732. Appendix B and 734. Appendix B.		x	\$755.72	=	\$0.00
Dissolved Oxygen (DO)		x	\$26.17	=	\$0.00
Paint Filter (Free Liquids)		x	\$15.27	=	\$0.00
PCB / Pesticides (combination)		x	\$37.08	=	\$0.00
PCBs		x	\$165.76	=	\$0.00
Pesticides		x	\$165.76	=	\$0.00
pH		x	\$15.27	=	\$0.00
Phenol		x	\$37.08	=	\$0.00
Polynuclear Aromatics PNAs or PAH SOIL EPA 8270		x	\$176.80	=	\$0.00
Polynuclear Aromatics PNA, PAH WATER EPA 8270		x	\$176.80	=	\$0.00
Reactivity		x	\$74.15	=	\$0.00
SVOC - Soil (Semi-Volatile Organic Compounds)		x	\$341.33	=	\$0.00
SVOC - Water (Semi-Volatile Organic Compounds)		x	\$341.33	=	\$0.00
TKN (Total Kjeldahl) "nitrogen"		x	\$47.98	=	\$0.00
TPH (Total Petroleum Hydrocarbons)		x	\$133.04	=	\$0.00
VOC (Volatile Organic Compound) - Soil (Non-Aqueous)		x	\$190.84	=	\$0.00
VOC (Volatile Organic Compound) - Water		x	\$184.29	=	\$0.00
Soil gas, BTEX	1	x	\$300.00	=	\$300.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
<b>Geo-Technical</b>					
Bulk Density ( $\rho_b$ ) ASTM D4292 / D2937		x	\$23.99	=	\$0.00
Ex-Situ Hydraulic Conductivity / Permeability		x	\$278.08	=	\$0.00
Moisture Content (w) ASTM D2216-90 / D4643-87		x	\$13.09	=	\$0.00
Porosity		x	\$32.71	=	\$0.00
Rock Hydraulic Conductivity Ex-Situ		x	\$381.67	=	\$0.00
Sieve / Particle Size Analysis ASTM D422-63 / D1140-54		x	\$158.12	=	\$0.00
Soil Classification ASTM D2488-90 / D2487-90		x	\$74.15	=	\$0.00
Soil Particle Density ( $\rho_s$ ) ASTM D854-92		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00

## Analytical Costs Form

Metals Analysis					
Soil preparation fee for Metals Soil TCLP (one fee per soil sample)		x	\$86.15	=	\$0.00
Soil preparation fee for Metals Total Soil (one fee per soil sample)		x	\$17.45	=	\$0.00
Water Preparation fee for Metals in Water (one fee per water sample)		x	\$12.00	=	\$0.00
Arsenic TCLP Soil		x	\$17.45	=	\$0.00
Arsenic Total Soil		x	\$17.45	=	\$0.00
Arsenic Water		x	\$19.63	=	\$0.00
Barium TCLP Soil		x	\$10.90	=	\$0.00
Barium Total Soil		x	\$10.90	=	\$0.00
Barium Water		x	\$13.09	=	\$0.00
Cadmium TCLP Soil		x	\$17.45	=	\$0.00
Cadmium Total Soil		x	\$17.45	=	\$0.00
Cadmium Water		x	\$19.63	=	\$0.00
Chromium TCLP Soil		x	\$10.90	=	\$0.00
Chromium Total Soil		x	\$10.90	=	\$0.00
Chromium Water		x	\$13.09	=	\$0.00
Cyanide TCLP Soil		x	\$30.53	=	\$0.00
Cyanide Total Soil		x	\$37.08	=	\$0.00
Cyanide Water		x	\$37.08	=	\$0.00
Iron TCLP Soil		x	\$10.90	=	\$0.00
Iron Total Soil		x	\$10.90	=	\$0.00
Iron Water		x	\$13.09	=	\$0.00
Lead TCLP Soil		x	\$17.45	=	\$0.00
Lead Total Soil		x	\$17.45	=	\$0.00
Lead Water		x	\$19.63	=	\$0.00
Mercury TCLP Soil		x	\$20.72	=	\$0.00
Mercury Total Soil		x	\$10.90	=	\$0.00
Mercury Water		x	\$28.35	=	\$0.00
Selenium TCLP Soil		x	\$17.45	=	\$0.00
Selenium Total Soil		x	\$17.45	=	\$0.00
Selenium Water		x	\$16.36	=	\$0.00
Silver TCLP Soil		x	\$10.90	=	\$0.00
Silver Total Soil		x	\$10.90	=	\$0.00
Silver Water		x	\$13.09	=	\$0.00
Metals TCLP Soil (a combination of all RCRA metals)		x	\$112.32	=	\$0.00
Metals Total Soil (a combination of all RCRA metals)		x	\$102.51	=	\$0.00
Metals Water (a combination of all RCRA metals)		x	\$129.77	=	\$0.00
Other					
EnCore Sampler, purge-and-trap sampler or equivalent sampling device	8	x	\$12.15	=	\$97.20
Sample Shipping per sampling event <sup>1</sup>		x	\$54.52	=	\$0.00

<sup>1</sup>A sampling event, at a minimum, is all samples (soil and groundwater) collected in a calendar day.

Total Analytical Costs: \$1,420.10

**Consulting Personnel Costs Form**

Employee Name	Personnel Title*	Hours	Rate *	Total \$
Remediation Category	Task			
Allan Green	Senior Project Manager	25	\$121.49	<b>\$3,037.25</b>
CA	project oversight, planning, permits, subcontractors			
Penny Silzer	Project Manager	45	\$109.34	<b>\$4,920.30</b>
CA	oversight of field activities, sample collection and preparation, report prep. Reim			
Andrew Fetterolf	Technician IV	6.00	\$72.88	<b>\$437.28</b>
CA	purge and sample groundwater monitoring wells, collect depth to water in all wells			
Penny Silzer	Sr. Geologist, PG	5	\$133.64	<b>\$668.20</b>
CA	review and certify reports and reimbursements			
Gaye Lynn Green	Sr. Acct Technician	5	\$66.81	<b>\$334.05</b>
CA	reimbursement forms			
Gaye Lynn Green	Sr. Admin. Assistant	5	\$54.67	<b>\$273.35</b>
CA	format, finalize, copy and submit reports and reimbursements			
				\$0.00
				\$0.00

\*Refer to the applicable Maximum Payment Amounts document.

<b>Total of Consulting Personnel Costs</b>	<b>\$9,670.43</b>
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**Consultant's Materials Costs Form**

Consulting Materials Costs:

Materials, Equipment, or Field Purchases	Time or Amount Use	Rate (\$)	Units	Total Cost
Remediation Category	Description/Justification			
Company Vehicle Mileage	105.00	\$0.58	/mile	\$60.90
CA - field	site visits and mobilization to and from site			
Well Sampling Equipment	1.00	\$25.00	/day	\$25.00
CA - field	for sampling groundwater monitoring wells			
PID	1	\$100.00	/day	\$100.00
CA- Field	soil sample screening			
				\$0.00
				\$0.00
				\$0.00
				\$0.00

**Total Consultant's Material's Costs: \$185.90**

# Owner/Operator and Licensed Professional Engineer/Geologist Budget Certification Form

I hereby certify that I intend to seek payment from the UST Fund for costs incurred while performing corrective action activities for Leaking UST incident 981987. I further certify that the costs set forth in this budget are necessary activities and are reasonable and accurate to the best of my knowledge and belief. I also certify that the costs included in this budget are not for corrective action in excess of the minimum requirements of 415 ILCS 5/57 and no costs are included in this budget which are not described in the corrective action plan, and no costs exceed Subpart H: Maximum Payment Amounts, Appendix D Sample Handling and Analysis amounts, and Appendix E Personnel Titles and Rates of 35 Ill. Adm. Code 732 or 734. I further certify that costs ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code Section 732.606 or 734.630 are not included in the budget proposal or amendment. Such ineligible costs include but are not limited to:

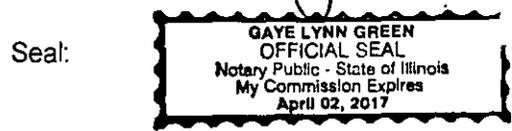
- Costs associated with ineligible tanks.
- Costs associated with site restoration (e.g., pump islands, canopies).
- Costs associated with utility replacement (e.g., sewers, electrical, telephone, etc).
- Costs incurred prior to IEMA notification.
- Costs associated with planned tank pulls.
- Legal fees or costs.
- Costs incurred prior to July 28, 1989.
- Costs associated with installation of new USTs or the repair of existing USTs.

Owner/Operator: John Warsaw  
 Authorized Representative: John Warsaw Title: Owner

Signature: [Signature] Date: 14 Feb 2015

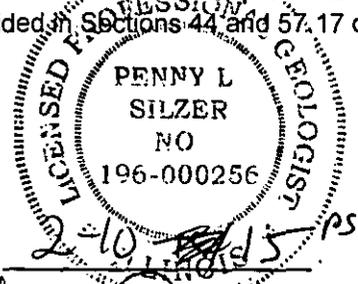
Subscribed and sworn to before me the 14th day of February 2015.  
*(Budget Proposals and Budget Amendments must be notarized when the certification is signed.)*

[Signature]  
 (Notary Public)



In addition, I certify under penalty of law that all activities that are the subject of this plan, budget or report were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan, budget, or report and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in the plan, budget, or report has been completed in accordance with the Environmental Protection Act [415 ILCS5], 35 Ill. Adm. Code 732-734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

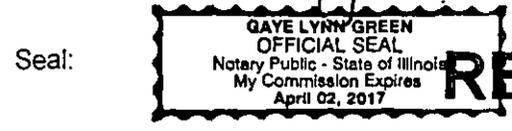
L.P.E./L.P.G.: Penny Silzer L.P.E./L.P.G. Seal:



L.P.E./L.P.G. Signature: [Signature] Date: 2-10-15

Subscribed and sworn to before me the 10th day of February 2015.

[Signature]  
 (Notary Public)



**RECEIVED**

The Illinois EPA is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder.

**IEPA/BOL**  
R0853



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276  
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601

ROD R. BLAGOJEVICH, GOVERNOR

RENEE CIPRIANO, DIRECTOR

217/782-6762

CERTIFIED MAIL

MAR 12 2003

7001 2510 0002 5277 9192

Howard Warsaw  
Route 122  
Minier, IL 61759

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
Warsaw Itco/Route 122  
LUST Incident No. 981987 and 991610  
LUST Technical File

RECEIVED

MAR 21 2003

REVIEWER MD

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Amended High Priority Corrective Action Plan Budget (budget) submitted for the above-referenced incident. This budget, dated February 18, 2003, was received by the Illinois EPA on February 26, 2003. Citations in this letter are from the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code).

In addition, the budget for the High Priority Corrective Action Plan is modified pursuant to Section 57.7(c)(4) of the Act and 35 Ill. Adm. Code 732.405(c). Based on the modifications listed in Section 2 of Attachment A, the amounts listed in Section 1 of Attachment A are approved. Please note that the costs must be incurred in accordance with the approved plan. Be aware that the amount of reimbursement may be limited by Sections 57.8(e), 57.8(g) and 57.8(d) of the Act, as well as 35 Ill. Adm. Code 732.604, 732.606(s), and 732.611.

All future correspondence must be submitted to:

Illinois Environmental Protection Agency  
Bureau of Land - #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

Page 2

An underground storage tank system owner or operator may appeal this decision to the Illinois Pollution Control Board. Appeal rights are attached.

If you have any questions or need further assistance, please contact Jim Ransdell at 217/557-6938.

Sincerely,



Thomas A. Henninger  
Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

TAH:JSR:jk\033006.doc

Attachment: Attachment A  
Appeal Rights

c: Midwest Environmental Consulting & Remediation Services, Inc.  
Division File

R0855

Attachment A

Re: LPC #1790455007 -- Tazewell County  
Minier/Warsaw, Howard  
Warsaw Itco/Route 122  
LUST Incident No. 981987 and 991610  
LUST Technical File

Citations in this attachment are from the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code).

**SECTION 1**

The budget was previously approved for:

\$0.00	Investigation Costs
\$9,380.00	Analysis Costs
\$69,161.00	Personnel Costs
\$1,728.00	Equipment Costs
\$111,514.00	Field Purchases and Other Costs
\$7,364.88	Handling Charges

As a result of the Illinois EPA's modification(s) in Section 2 of this Attachment A, the following amounts are approved:

\$0.00	Investigation Costs
\$0.00	Analysis Costs
\$0.00	Personnel Costs
\$0.00	Equipment Costs
\$32,676.00	Field Purchases and Other Costs
\$3,014.08	Handling Charges

Therefore, the total cumulative budget is approved for:

\$0.00	Investigation Costs
\$9,380.00	Analysis Costs
\$69,161.00	Personnel Costs
\$1,728.00	Equipment Costs
\$144,190.00	Field Purchases and Other Costs
\$10,378.96	Handling Charges

**SECTION 2**

1. \$8,062.00 for an adjustment in Personnel Costs. The Illinois EPA has determined that these costs are not reasonable as submitted (Section 57.7(c)(4)(C) of the Act and 35 Ill. Adm. Code 732.606(hh)). One of the overall goals of the financial review is to assure that costs associated with materials, activities, and services are reasonable (35 Ill. Adm. Code 732.505(c)). Please note that additional information and/or supporting documentation may be provided to demonstrate the costs are reasonable.

## Appeal Rights

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board pursuant to Sections 40 and 57.7(c)(4)(D) of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the filing of an appeal, please contact:

Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
State of Illinois Center  
100 West Randolph, Suite 11-500  
Chicago, IL 60601  
312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency  
Division of Legal Counsel  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276  
217/782-5544

**U.S. Postal Service**  
**CERTIFIED MAIL RECEIPT**  
*(Domestic Mail Only; No Insurance Coverage Provided)*

7001 2510 0002 5277 9192

981987+991610 TAH/JR	
Postage \$	
#24 Certified Fee	2.30
Return Receipt Fee (Endorsement Required)	1.75
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees \$	
Sent To	
Street, Apt or PO Box	Howard Warsaw
City, State	Route 122
	Minier, IL 61759

Postmark Here  
 JUN 10 1999

PS Form 3800, January 2001

See Reverse for Instructions

<b>SENDER: COMPLETE THIS SECTION</b>		<b>COMPLETE THIS SECTION ON DELIVERY</b>	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>		A. Received by (Please Print Clearly)	B. Date of Delivery
1. Article Addressed to:		Donald Riegler	3-73-03
Howard Warsaw Route 122 Minier, IL 61759		C. Signature	<input type="checkbox"/> Agent
		<input checked="" type="checkbox"/> Addressee	
		D. Is delivery address different from item 1? <input checked="" type="checkbox"/> Yes	
		If YES, enter delivery address below: <input type="checkbox"/> No	
		P.O. Box 557	
2. Article Number (Copy from service label)		3. Service Type	
7001 2510 0002 5277 9192		<input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
981987+991610 TAH/JR		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
PS Form 3811, July 1999		Domestic Return Receipt	
		102595-99-M-1789	

UNITED STATES POSTAL SERVICE



First-Class Mail  
Postage & Fees Paid  
USPS  
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

Illinois Environmental Protection Agency

P.O. Box 19276 Mail Code # *24*

Springfield, IL 62794-9276



**LEAKING UST TECHNICAL REVIEW NOTES**

Reviewed by: Brad Dilbaitis  
Date Reviewed: 4/10/2015

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 22  
Leaking UST Incident No. 981987 & 991610  
Leaking UST Technical File

**Document(s) Reviewed:**

2/9/2015 Corrective Action Plan and Budget—received 3/10/15

**General Site Information:**

Site subject to: 734

IEMA date(s): 8/11/1998 & 7/6/1999	Payment from the Fund: yes—yes
UST system removed: yes—7/6/1999	OSFM Fac. ID #: 3005023
Encountered groundwater: yes	SWAP mapping and evaluation completion date: 4/7/2015
Free product: no	Site placement correct in SWAP: yes
Current/past land use: gasoline service station	MTBE > 40 ppb in groundwater: N/A
Size & product of USTs: (1) 2,000g and (2) 500g gasoline USTs	
Is site located in EJ area? no	Is investigation of indoor inhalation exposure route required? no

EPA DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

**BOL File Information:**

08/11/1998	IEMA Incident Report for Incident #891987	<b>APR 29 2015</b>
08/11/1998	LUST Incident Tracking Database Title XVI Printout	
09/01/1998	20-Day Certification	<b>REVIEWER: JKS</b>
10/01/1998	45-Day Report	
11/02/1998	PM Review Notes for the 45-Day Report/ Early Action Extension Request	
11/04/1998	IEPA Early Action Extension Request Denial Letter	
03/22/1999	Letter from consultant concerning the early action request denial	
04/22/1999	IEPA Early Action Extension Request Approval Letter	
05/11/1999	Early Action Extension Request	
05/27/1999	IEPA Early Action Extension Request Approval Letter	
07/06/1999	IEMA Incident Report for Incident #991610 (reported during tank removal)	
08/26/1999	Free Product Removal Report for incident #891987	
08/31/1999	45-Day Report Addendum/Early Action Report for incident #891987	
09/30/1999	PM Review Notes for the 45-Day Report Addendum/Early Action Report	
10/04/1999	IEPA Free Product Removal Report Approval Letter	
10/07/1999	Site Classification Work Plan and Budget	
11/03/1999	IEPA Site Classification Work Plan and Budget Approval (without review) Letter	
07/10/2000	Site Classification Completion Report	
10/20/2000	Site Classification Completion Report Approval Letter (High Priority)	
11/30/2000	Corrective Action Plan and Budget	

03/30/2001	IEPA Corrective Action Plan and Budget Approval Letter
01/28/2002	Corrective Action Plan and Budget #2
05/07/2002	PM Review Notes for Corrective Action Plan and Budget
05/24/2002	IEPA Corrective Action Plan and Budget Approval Letter
11/06/2002	Corrective Action Budget #3
01/03/2003	PM Review Notes for the Corrective Action Plan and Budget
01/07/2003	Consultant invoice fax
01/30/2003	IEPA Corrective Action Budget Approval Letter
02/18/2003	Corrective Action Budget #4
03/03/2003	PM Notes for Corrective Action Budget
03/12/2003	IEPA Corrective Action Budget Approval (with modifications) Letter
11/10/2003	Corrective Action Budget #5
03/16/2004	PM Review Notes
03/18/2004	IEPA Corrective Action Budget Approval (with modifications) Letter
01/02/2005	PM Review Notes
08/23/2005	Corrective Action Plan and Budget
12/14/2005	IEPA Corrective Action Plan and Budget Denial Letter
06/18/2010	Corrective Action Plan and Budget
10/18/2010	PM Review Notes for Corrective Action Plan and Budget
10/18/2010	IEPA Corrective Action Plan and Budget Denial Letter
11/19/2010	Corrective Action Plan and Budget #6
03/15/2011	PM Notes for Corrective Action Plan and Budget
03/18/2011	IEPA Corrective Action Plan and Budget Approval Letter
03/31/2011	Copy of Village of Minier groundwater ordinance
03/14/2014	Corrective Action Plan and Budget #7
07/03/2014	IEPA Corrective Action Plan and Budget Approval Letter
03/16/2000	21B Invoice Voucher
07/14/2000	21B Invoice Voucher
12/19/2000	21B Invoice Voucher
08/24/2001	21B Invoice Voucher
01/07/2002	21B Invoice Voucher
04/18/2003	21B Invoice Voucher
07/28/2003	21B Invoice Voucher
05/21/2004	21B Invoice Voucher
07/27/2004	21B Invoice Voucher
12/08/2005	21B Invoice Voucher

**Corrective Action Plan/Budget Review Notes:**

- Previously proposed closure based on institutional controls—Highway Authority Agreement, ELUC, groundwater ordinance with MOU
- Collected (8) additional soil samples November 2014 to gauge current contaminant levels

- Soil borings GP-1 through GP-7 were approved to determine current concentrations of COCs in the soil in areas where soil contamination was previously found—B-2 (GP-6); B-3 (GP-3); MW-4 (GP-5); B-4 (GP-7); B-5 (GP-4); B-1 (GP-2); MW-5 (GP-1)
- Detected significant concentrations of xylenes (above  $C_{sat}$  limit) in one soil boring (GP-7) at 1,200 mg/kg
  - Benzene 37.4 mg/kg (exceeds Tier 1 SCGIER, inhalations, residential ingestion)
  - Ethylbenzene 272 mg/kg (exceeds Tier 1 SCGIER, construction worker inhalation)
  - Toluene 629 mg/kg (exceeds Tier 1 SCGIER, construction worker inhalation)
  - Xylenes 1,200 mg/kg (exceeds Tier 1 SCGIER, inhalations,  $C_{sat}$  limit)
- Had been approved to collect groundwater samples in MW-4 and MW-7 but neither could be located
- Proposing to advance (4) soil borings, one boring approximately 20 feet in each direction from GP-7, to better define the proposed excavation area (this could make for a much larger excavation than is needed)
- Soil data collected will be used to determine the volume of shallow soil where concentrations of xylenes exceeds the  $C_{sat}$  limit—excavation is anticipated
- Proposing to re-install temporary monitoring wells to obtain current groundwater contamination information for modeling
- Proposing the installation of (2) monitoring wells to replace MW-4 and MW-7, the two affected monitoring wells at the last groundwater sampling event (2/14/2002)
- Also proposing sampling only the replacement wells and none of the other (5) wells
- Proposing the collection of (1) soil gas sample from soil adjacent to the proposed soil boring PB-4—area was chosen because it is adjacent to both the building and the former tank pit—not proposed around GP-7 because that soil is to be excavated

**Site-specific parameters per 734.410:**

Hydraulic conductivity (K)	$3.14 \times 10^{-4}$ cm/sec
Soil bulk density ( $\rho_b$ )	1.77 g/cm <sup>3</sup> (B-4—4-6' bgs)
Soil particle density ( $\rho_s$ )	2.66 g/cm <sup>3</sup> (subsurface sample)
Moisture content (w)	0.171 g <sub>soil</sub> /g <sub>water</sub> (B-4—4-6' bgs)
Organic carbon content ( $f_{oc}$ )	0.0255 g/g (B-4—4-6' bgs)

- The  $f_{oc}$  analysis was completed on B-4 (sample received by the lab on 8/24/01), which is located right in the middle of the contamination—the soil sample from which the  $f_{oc}$  is being used was one of the most contaminated soil samples on site—the  $f_{oc}$  from B-4 can't be used in the TACO calculations
- The consultant stated in the 11/19/2010 Corrective Action Plan that a slug test would be done on MW-1 to determine the hydraulic conductivity—the next Corrective Action Plan presents the hydraulic conductivity as  $3.14 \times 10^{-4}$  with no supporting documentation for the slug test—this is needed—they also previously mentioned an ex situ hydraulic conductivity analysis—not sure where this K value comes from
- The consultant determined a site-specific  $C_{sat}$  limit for xylenes of 1,092 mg/kg—the xylenes concentration found in GP-7 was 1,200 mg/kg—this is very close, especially considering that the consultant determined the  $f_{oc}$  from a very contaminated soil sample in 2001

- The  $f_{oc}$  that the consultant used in the calculations was also from the 0.5' to 2.5' bgs range, which is more shallow than the contamination—should have used the  $f_{oc}$  from 4'-6' bgs, which is still not appropriate for use because it was contaminated but at least it was from a depth representative of the contamination

**Corrective Action Budget:**

Drilling & Monitoring Well Costs	\$1,968.30
Analytical Costs	\$1,420.10
Remediation & Disposal Costs	\$0.00
UST Removal & Abandonment Costs	\$0.00
Paving, Demo & Well Aband. Costs	\$0.00
Consulting Personnel Costs	\$9,670.43
Consultant's Materials Costs	\$185.90

**Illinois EPA Decision:**

- Corrective Action Plan appears to be relying on a groundwater ordinance that has previously been rejected for use and is not for the affected property/area—Highway Authority Agreement is acceptable for use for soil and groundwater
- Will not approve the payment for the re-installation of the two wells—re-work
- Also wouldn't approve the re-sampling of only two wells—would entertain the notion of re-sampling all of the wells
- Can't approve the TACO calculations for the total xylenes  $C_{sat}$  and therefore can't approve the four  $C_{sat}$  delineation borings around GP-7
- The consultant needs to re-analyze for  $f_{oc}$  in an uncontaminated area and at the representative depth of contamination—also need all slug test documentation
- Soil gas sample isn't needed—doesn't meet the criteria for a PVI investigation
- According to the OSFM, this site is owned by a land trust—need Election To Proceed As Owner form and a Land Trust form—will need new E&D before another budget is approved
- Will deny the Corrective Action Plan and Budget



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

BRUCE RAUNER, GOVERNOR

LISA BONNETT, DIRECTOR

217/524-3300  
APR 17 2015

CERTIFIED MAIL

7011 1150 0001 0862 9314

Warsaw ITCO  
John Warsaw  
P.O Box 886  
Minier, IL 61759

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 122  
Leaking UST Incident No. 981987 and 991610  
Leaking UST Technical File

EPA - DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

APR 29 2015

REVIEWER JRM

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Corrective Action Plan (plan) submitted for the above-referenced incident. This plan, dated February 9, 2015, was received by the Illinois EPA on March 10, 2015. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

The plan and the associated budget are rejected for the reason(s) listed below (Sections 57.7(b) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b), 734.510(a) and 734.510(b)).

The plan is rejected for the reason(s) listed in Attachment A:

The plan budget is rejected for the following reason(s):

In accordance with 35 Ill. Adm. Code 734.510(b), a financial review shall consist of a detailed review of the costs associated with each element necessary to accomplish the goals of the plan as required pursuant to the Act and regulations. Items to be reviewed shall include, but are not be limited to, costs associated with any materials, activities, or services that are included in the budget. The overall goal of the financial review shall be to assure that costs associated with materials, activities, and services must be reasonable, shall be consistent with the associated technical plan, shall be incurred in the performance of corrective action activities, must not be used for corrective action activities in excess of those necessary to meet the minimum requirements of the Act and regulations, and must not exceed the maximum payments set forth in Subpart H of this Part. Without an approvable plan, the proposed budget cannot be fully reviewed.

Please note that costs associated with the re-installation of any previously installed monitoring wells will not be approved in a budget. The costs associated with the installation of these monitoring wells have already been budgeted and cannot be budgeted again. This is considered re-work and exceeds the minimum requirements necessary to comply with the Act. If the monitoring wells cannot be located or have been destroyed, groundwater concentrations from the most recent groundwater monitoring event exceeding Tier 1 groundwater remediation objectives will need to be modeled to Tier 1 groundwater remediation objectives.

Pursuant to Sections 57.7(b) and 57.12(c) and (d) of the Act and 35 Ill. Adm. Code 734.100 and 734.125, a plan and/or budget must be submitted within 60 days of the date of this letter to:

Illinois Environmental Protection Agency  
Bureau of Land - #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

An underground storage tank system owner or operator may appeal this decision to the Illinois Pollution Control Board. Appeal rights are attached.

If you have any questions or need further assistance, please contact Brad Dilbaitis at (217) 785-8378 or [Bradley.Dilbaitis@illinois.gov](mailto:Bradley.Dilbaitis@illinois.gov).

Sincerely,



Thomas A. Henninger  
Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

TAH:BD\CAPdenBUdden.docx

Attachment: Attachment A  
Appeal Rights

c: Midwest Environmental Consulting & Remediation Services, Inc.  
BOL File

## Attachment A

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 122  
Leaking UST Incident No. 981987 and 991610  
Leaking UST Technical File

Citations in this attachment are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

Pursuant to 35 Ill. Adm. Code 734.335(a)(2), if any of the applicable indicator contaminants exceed the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants, within 30 days after the Illinois EPA approves the site investigation completion report, the owner or operator shall submit to the Illinois EPA for approval a corrective action plan designed to mitigate any threat to human health, human safety, or the environment resulting from the underground storage tank release. The corrective action plan must address all media impacted by the UST release and must include a statement of the remediation objectives proposed for the site. The following issues must be addressed:

1. The Corrective Action Plan appears to be relying on a groundwater ordinance that has previously been rejected for use by the Agency and does not cover the property or the surrounding area to address the groundwater ingestion exposure route.
2. The site-specific Tier 2 soil saturation limit calculations were completed using an organic carbon content of soil ( $f_{oc}$ ) value of 0.0245 g/g. This value is incorrect for two reasons.
  - a. This analysis was completed on a soil sample collected from 0.5' to 2.5' below ground surface. This is too shallow. The sample for the Tier 2 parameters should be collected from the representative depth of contamination. The  $f_{oc}$  value from 4' to 6' below ground surface is representative of the depth of contamination.
  - b. The  $f_{oc}$  analysis was completed on soil sample B-4, which was one of the most contaminated soil samples on site. The soil sampling location for analysis of the organic carbon content of soil must be in a non-impacted area. If elevated readings of petroleum hydrocarbon vapors are present (elevated PID's) or chemical sample analysis demonstrates the presence of impact, the location is not acceptable for  $f_{oc}$  analysis.
3. According to the Office of the State Fire Marshal this site is currently owned by a land trust. Please submit an Election To Proceed As Owner form for the land trust and a Land Trust Beneficial Interest Disclosure/ Designation of Signature Authority form. A new eligibility determination must be made by the Office of the State Fire Marshal in the name of the land trust before any future budgets can be approved.
4. The Corrective Action Plan proposes the collection of one soil gas sample from soil adjacent to the proposed soil boring PB-4. The site does not currently meet the criteria for a petroleum vapor intrusion investigation.

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**R0866**

## Appeal Rights

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board pursuant to Sections 40 and 57.7(c)(4) of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the filing of an appeal, please contact:

John Therriault, Assistant Clerk  
Illinois Pollution Control Board  
James R. Thompson Center  
100 West Randolph, Suite 11-500  
Chicago, IL 60601  
312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency  
Division of Legal Counsel  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276  
217/782-5544

**Midwest Environmental Consulting & Remediation Services Inc.**  
22200 Illinois Route 9 • P.O. Box 614  
Tremont, IL 61568-0614  
Phone : (309) 925-5551 • Fax : (309) 925-5606

May 5, 2015

Mr. Brad Dilbaitis  
Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Re: LPC #1790455007 – Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 981987  
LUST Technical File

IEPA - DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

JUN 11 2015

REVIEWER EAV

Dear Brad:

We are in receipt of your letter dated April 17, 2015 concerning the Corrective Action Plan dated February 9, 2015 for the subject site. The following clarifications are requested and revisions proposed to address your concerns:

1. Groundwater Ordinance – Village of Minier Ordinance 808 and Resolution 278 (memorandum of understanding (MOU)) has been submitted to the IEPA for approval.
2. Organic Carbon Content – Midwest proposes to complete one boring near MW-4 to collect a soil sample from a boring near GP-5 at a depth of 4 to 6' for analysis of  $f_{oc}$ . If groundwater is observed in the boring, a groundwater sample will also be collected from this boring to represent a resample of MW-4.
3. The Election to Proceed letter is included at the beginning of this report.
4. A soil gas sample will not be collected.
5. The investigation proposed to define the extent of COCs above the  $C_{sat}$  will remain as proposed.

**RECEIVED**

MAY 15 2015

**IEPA/BOL**

If you have any questions or comments, please contact our office at the number above.

Sincerely,

Midwest Environmental Consulting and Remediation Services, Inc.

Allan M. Green  
President

PLS/glg  
cc: Mr. Howard Warsaw  
Attachments  
Job No. 9890

**RECEIVED**  
MAY 15 2015  
**IEPA/BOL**

Leaking Underground Storage Tank Program  
**High Priority Corrective Action Plan Amendment**

**Incident Location:** Warsaw - ITCO  
Route 122  
Minier, Illinois – Tazewell Co.

**Prepared for:** John Warsaw  
PO Box 886  
Minier, Illinois 61759

**Prepared by:** Midwest Environmental Consulting  
and Remediation Services, Inc.  
22200 Illinois Route 9  
Post Office Box 614  
Tremont, Illinois 61568-0614  
Contact: Allan Green – President

**RECEIVED**  
MAY 15 2015  
**IEPA/BOL**

**For Review by:** Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
Contact: Mr. Jim Ransdell

# High Priority Site Investigation Corrective Action Plan

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IEPA Corrective Action Plan Form

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Appendix B Soil Boring Logs  
Appendix C Soil and Groundwater Sampling Protocol  
Appendix D  $C_{sat}$  Calculations  
Appendix E Institutional Controls – HAA and Groundwater Ordinance with MOU  
Appendix F Budget Amendment

**ELECTION TO PROCEED AS OWNER FORM**



# Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation, orally or in writing, in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/44 and 57.17). This form has been approved by the Forms Management Center.

## Leaking Underground Storage Tank Program Election to Proceed as "Owner"

For additional information,  
see the new fact sheet.

### A. Site Identification

IEMA Incident # (6- or 8-digit): 981987 + 991610 IEPA LPC # (10-digit): 1790455207  
Site Name: MIDICK / WARSAW HOWARD  
Site Address (Not a P.O. Box): ITCO / Rt. 124  
City: MIDICK County: Tazewell Zip Code: 61759

Leaking UST Technical File

### B. Election

Pursuant to Section 57.2 of the Environmental Protection Act [415 ILCS 5/57.2], I hereby elect to proceed as an "owner" under Title XVI of the Environmental Protection Act. I certify that I have acquired an ownership interest in the above-named site, that one or more underground storage tanks registered with the Office of the State Fire Marshal have been removed from the site, and that corrective action on the site has not yet resulted in the issuance of a "no further remediation letter" by the Illinois EPA pursuant to Title XVI of the Environmental Protection Act.

I understand that by making this election I become subject to all of the responsibilities and liabilities of an "owner" under Title XVI of the Environmental Protection Act and the Illinois Pollution Control Board's rules at 35 Ill. Adm. Code 734. I further understand that, once made, this election cannot be withdrawn.

### C. Signature

Person electing to proceed as "owner":

Name: Warsaw Family Card Trust  
John D. WARSAW, Trustee  
Contact: \_\_\_\_\_  
Address: 102 Butternut Dr  
City: MORTON  
State: IL  
Zip Code: 61550 - 1810  
Phone: 309 648-3329  
Signature: [Signature]  
Date: 5-1-15



# Illinois Environmental Protection Agency

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## Leaking Underground Storage Tank Program Land Trust Beneficial Interest Disclosure/Designation of Signature Authority

### A. Site Identification

IEMA Incident # (6- or 8-digit): 981987 + 991610 IEPA LPC# (10-digit): 1790456007  
Site Name: Misner / Warsaw Howard  
Site Address (not a P.O. Box): TICO / Ft. Le  
City: Misner County: La. Jewel Zip Code: 61759  
Leaking UST Technical File

### B. Land Trust Disclosure

This form must be completed if the owner or operator performing corrective action is a land trust. The disclosure of beneficial interests in the land trust is required under the Land Trust Beneficial Interest Disclosure Act [765 ILCS 405]. A new disclosure form must be submitted if there is a change in any of the information provided.

Name of Land Trust: Warsaw Family Land Trust  
Trustee Name and Address: John D. Warsaw Trustee  
102 Ruticourt Dr., Morton, IL 61550-1210

#### Beneficiaries' Names, Addresses, and Interests in the Land Trust:

Each beneficiary must be disclosed, regardless of the beneficiary's interest in the land trust. Identified beneficiaries cannot be nominees for other individuals or entities. 765 ILCS 405/2.

1. John D. Warsaw 2. \_\_\_\_\_  
102 Ruticourt Dr \_\_\_\_\_  
Morton, IL 61550-1210 \_\_\_\_\_  
100% beneficial interest \_\_\_\_\_
3. \_\_\_\_\_ 4. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Attach additional sheets as necessary.

**C. Designation of Signature Authority**

If there is more than one beneficiary, the following one is hereby appointed as the representative to act on behalf of all beneficiaries with respect to the Leaking Underground Storage Tank Program, including, but not limited to, signature authority for all documents requiring owner or operator signature. The appointed representative is a beneficiary of the land trust with sufficient beneficial interest to meet the definition of "owner" or "operator" as defined by 35 Illinois Administrative Code 734, 732, or 731.

Representative Beneficiary Name and Address: John D. Warsaw  
102 Rutledge Dr  
Worston, IL 61550-1210

**D. Certification**

I certify under penalty of law that the information provided in this disclosure form and in any addendum attached hereto is a complete disclosure of all holders of a beneficial interest in the land trust identified above, and that, to the best of my knowledge and belief, the information presented is accurate and complete. I also certify the appointment of the above-named beneficiary as my representative with respect to the Leaking Underground Storage Tank Program. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA including, but not limited to, fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17] and in Section 3 of the Land Trust Beneficial Interest Disclosure Act [765 ILCS 405/3].

Beneficiary Name: John D. Warsaw

Beneficiary Signature: John D. Warsaw Date: 5-1-2015

Beneficiary Name: \_\_\_\_\_

Beneficiary Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Attach additional sheets as necessary.

# **IEPA Corrective Action Plan Form**



# Illinois Environmental Protection Agency

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The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 – 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation, orally or in writing, in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/44 and 57.17). This form has been approved by the Forms Management Center.

## Leaking Underground Storage Tank Program Corrective Action Plan

### A. Site Identification

IEMA Incident # (6- or 8-digit): 981987 IEPA LPC# (10-digit): 1790455007  
Site Name: Warsaw, Howard (Warsaw ITCO)  
Site Address (Not a P.O. Box): Route 122  
City: Minier County: Tazewell ZIP Code: 61759

### B. Site Information

- Will the owner or operator seek reimbursement from the Underground Storage Tank Fund?  Yes  No
- If yes, is the budget attached?  Yes  No
- Is this an amended plan?  Yes  No
- Identify the material(s) released: gasoline

5. This Corrective Action Plan is submitted pursuant to:

- 35 Ill. Adm. Code 731.166   
The material released was:  
-petroleum   
-hazardous substance (see Environmental Protection Act Section 3.215)
- 35 Ill. Adm. Code 732.404
- 35 Ill. Adm. Code 734.335

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MAY 15 2015  
**IEPA/BOL**

### C. Proposed Methods of Remediation

- Soil excavation, TACO
- Groundwater excavation, TACO

### D. Soil and Groundwater Investigation Results

(for incidents subject to 35 Ill. Adm. Code 731 only or 732 that were classified using Method One or Two, if not previously provided)

Provide the following:

- Description of investigation activities performed to define the extents of soil and/or groundwater contamination;
- Analytical results, chain-of-custody forms, and laboratory certifications;
- Tables comparing analytical results to applicable remediation objectives;

4. Boring logs;
5. Monitoring well logs; and
6. Site maps meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440 and showing:
  - a. Soil sample locations;
  - b. Monitoring well locations; and
  - c. Plumes of soil and groundwater contamination.

## **E. Technical Information - Corrective Action Plan**

Provide the following:

1. Executive summary identifying the objectives of the corrective action plan and the technical approach to be utilized to meet such objectives;
  - a. The major components (e.g., treatment, containment, removal) of the corrective action plan;
  - b. The scope of the problems to be addressed by the proposed corrective action; and
  - c. A schedule for implementation and completion of the plan;
2. Identification of the remediation objectives proposed for the site;
3. A description of the remedial technologies selected:
  - a. The feasibility of implementing the remedial technologies;
  - b. Whether the remedial technologies will perform satisfactorily and reliably until the remediation objectives are achieved; and
  - c. A schedule of when the technologies are expected to achieve the applicable remediation objectives;
4. A confirmation sampling plan that describes how the effectiveness of the corrective action activities will be monitored during their implementation and after their completion;
5. A description of the current and projected future uses of the site;
6. A description of engineered barriers or institutional controls that will be relied upon to achieve remediation objectives:
  - a. an assessment of their long-term reliability;
  - b. operating and maintenance plans; and
  - c. maps showing area covered by barriers and institutional controls;
7. The water supply well survey:
  - a. Map(s) showing locations of community water supply wells and other potable wells and the setback zone for each well;
  - b. Map(s) showing regulated recharge areas and wellhead protection areas;
  - c. Map(s) showing the current extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
  - d. Map(s) showing the modeled extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
  - e. Tables listing the setback zone for each community water supply well and other potable water supply wells;
  - f. A narrative identifying each entity contacted to identify potable water supply wells, the name and title of each person contacted, and any field observations associated with any wells identified; and
  - g. A certification from a Licensed Professional Engineer or Licensed Professional Geologist that the survey was conducted in accordance with the requirements and that documentation submitted includes information obtained as a result of the survey (certification of this plan satisfies this requirement);

8. Appendices:
  - a. References and data sources report that are organized; and
  - b. Field logs, well logs, and reports of laboratory analyses;
9. Site map(s) meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440;
10. Engineering design specifications, diagrams, schematics, calculations, manufacturer's specifications, etc.;
11. A description of bench/pilot studies;
12. Cost comparison between proposed method of remediation and other methods of remediation;
13. For the proposed Tier 2 or 3 remediation objectives, provide the following:
  - a. The equations used;
  - b. A discussion of how input variables were determined;
  - c. Map(s) depicting distances used in equations; and
  - d. Calculations; and
14. Provide documentation to demonstrate the following for alternative technologies:
  - a. The proposed alternative technology has a substantial likelihood of successfully achieving compliance with all applicable regulations and remediation objectives;
  - b. The proposed alternative technology will not adversely affect human health and safety or the environment;
  - c. The owner or operator will obtain all Illinois EPA permits necessary to legally authorize use of the alternative technology;
  - d. The owner or operator will implement a program to monitor whether the requirements of subsection (14)(a) have been met;
  - e. Within one year from the date of Illinois EPA approval, the owner or operator will provide to the Illinois EPA monitoring program results establishing whether the proposed alternative technology will successfully achieve compliance with the requirements of subsection (14)(a); and
  - f. Demonstration that the cost of alternative technology will not exceed the cost of conventional technology and is not substantially higher than at least two other alternative technologies, if available and technically feasible.

## **F. Exposure Pathway Exclusion**

Provide the following:

1. A description of the tests to be performed in determining whether the following requirements will be met:
  - a. Attenuation capacity of the soil will not be exceeded for any of the organic contaminants;
  - b. Soil saturation limit will not be exceeded for any of the organic contaminants;
  - c. Contaminated soils do not exhibit any of the reactivity characteristics of hazardous waste per 35 Ill. Adm. Code 721.123;
  - d. Contaminated soils do not exhibit a pH  $\leq 2.0$  or  $\geq 12.5$ ; and
  - e. Contaminated soils which contain arsenic, barium, cadmium, chromium, lead, mercury, or selenium (or their associated salts) do not exhibit any of the toxicity characteristics of hazardous waste per 35 Ill. Adm. Code 721.124.
2. A discussion of how any exposure pathways are to be excluded.

## G. Signatures

All plans, budgets, and reports must be signed by the owner or operator and list the owner's or operator's full name, address, and telephone number.

### UST Owner or Operator

Name Warsaw ITCO  
Contact John Warsaw  
Address PO Box 886  
City Minier  
State IL  
Zip Code 61759  
Phone 309-392-2626  
Signature *John Warsaw*  
Date 5-7-15

### Consultant

Company Midwest Environmental Consulting  
Contact Allan Green  
Address Po Box 614  
City Tremont  
State IL  
Zip Code 61568  
Phone 309-925-5551  
Signature *Allan Green*  
Date 5-5-15

I certify under penalty of law that all activities that are the subject of this plan were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in this plan has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 Ill. Adm. Code 731, 732 or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

### Licensed Professional Engineer or Geologist

Name Penny Silzer  
Company Midwest Environmental  
Address PO Box 614  
City Tremont  
State IL  
Zip Code 61568  
Phone 309-925-5551  
Ill. Registration No. 196-000256  
License Expiration Date 03/31/2015  
Signature *Penny Silzer*  
Date 5-5-15

L.P.E. or L.P.S. **RECEIVED**

MAY 15 2015

**IEPA/BOL**



# **Corrective Action Plan**

## Section 1. Introduction

The subject site is currently a gasoline service station located on Route 122 in Minier, Illinois. The area is developed for commercial, residential and agricultural use. An area map is provided in Figure 1.

Three underground storage tanks (USTs) were removed from the site on July 6, 1999. The three tanks (1-2,000 gallon, 2-500 gallon) were used for gasoline. Details of the UST removal/free product removal activities can be found in the Report of Early Action/ Amended 45-Day Report dated August 31, 1999 and the Free Product Removal Report dated August 26, 1999, previously submitted to IEPA. During tank removal activities, an exploratory excavation was dug in order to investigate the extent of contamination. Free product was noted entering the excavation from the native silty clay sidewalls. Upon this discovery, free product recovery activities were initiated. A significant amount of free product was recovered during free product recovery activities. Approximately 690 yds<sup>3</sup> of gasoline saturated/contaminated soil were removed, and approximately 58,570 gallons of free product/gasoline contaminated groundwater were recovered. Approximately 500 gallons of free product gasoline were separated from the recovered water. Analytical data collected from the excavation indicated significant concentrations of contaminants of concern remained on site.

Between May 2000 and August 2001, Midwest Environmental Consulting and Remediation Services, Inc. (MECRS) installed seven groundwater monitoring wells (MW-1 through MW-7) and drilled seven soil borings (B-1 through B-7). Additional soil samples were collected from a recovery trench installed in October 2003 (T-1 through T-10).

Midwest proposed to close the site based on institutional controls. A Highway Authority Agreement (HAA) was received from the Illinois Department of Transportation (IDOT) in September 2013. A groundwater use restriction ordinance with an memorandum of understanding (MOU) was obtained from the Village of Minier. Mr. Jeff Heumann, the owner of the adjacent property located on the east side of the site, refused to sign the Environmental Land Use Control (ELUC). The HAA and the groundwater ordinance with the MOU are included in Appendix E. The ordinance is provided for IEPA review and approval.

In November 2014, additional soil samples were collected at the site to determine the current concentrations of COCs in the subsurface. Significant concentrations of xylenes, above the soil saturation limit were detected in one boring. The results of this investigation are presented herein. Additional groundwater sampling from wells MW-4 and MW-7 was proposed as part of the investigation approved in the CAP dated March 3, 2014. Neither well could be located and groundwater samples were not collected. Current groundwater analytical data is essential to calculate the groundwater model. The proposal to collect groundwater samples is presented herein.

The budget for CAP investigation costs incurred and those costs anticipated for additional investigation and preparation of the CAP is attached for IEPA approval.

## **Section 2. Results of the Investigation Completed to Date**

The subsurface materials encountered during advancement of boring B-1 consisted of: silty clay (OL) from ground surface to 1.5 feet bgs; silty clay (CL-ML) from 1.5 to 7 feet bgs; silty sand (SM) from 7 to 10 feet bgs; grading to sandy gravel (GP) from 10 to 13 feet bgs; clayey silt (ML) from 13 to 16 feet bgs; and silty clay till (CL-ML) from 16 feet bgs to the end of the boring at 26 feet bgs. A significant water-bearing zone was encountered between approximately 9 feet bgs and 13 ft bgs. Groundwater was initially encountered at an approximate depth of 9 feet bgs in most of the borings. Static water level depth appears to range from 5 to 6 feet bgs.

On November 13, 2014, eight geoprobe borings were completed at the site. Soil analytical data collected indicates concentrations of BTEX in one boring, GP-7, above Tier 1 CUOs. Boring GP-7 is located on-site, southeast of the dispenser island. Soil analytical data collected at the perimeter of the site from borings GP-3, GP-5, GP-6 and GP-8 demonstrate that the contaminants have not migrated off-site in soil to the property located east of the site. Based on the current soil analytical data, an Environmental Land Use Control is not necessary for the property located east of the site.

Midwest proposed to collect water samples from wells MW-4 and MW-7. Data from these wells was to be used to assess current groundwater conditions and to calculate the groundwater models. Neither of these wells could be located. In order to calculate the groundwater model, groundwater analytical data from these areas is necessary.

The extent of soil and groundwater contamination has been defined. COCs appear to have migrated from the possible source areas towards the north and east.

Soil and groundwater analytical data collected to date are presented in Tables 1 and 2. Soil boring and monitoring well locations are shown in Figure 2. The most recent potentiometric surface map for the most recent sampling event is presented in Figure 3. Laboratory data reports are presented in Appendix A. Soil boring logs are presented in Appendix B. Sampling protocol is presented in Appendix C.

### Section 3. Anticipated Cleanup Methods

It is anticipated that elimination of exposure pathways combined with limited excavation of contaminated soil will be used to address the petroleum hydrocarbon contamination at the site. A highway authority agreement (HAA) has been obtained from IDOT. A groundwater use restriction ordinance that will the IPEA will approve will be prepared and used as a institutional control. In order to eliminate exposure pathways through the use of engineered barriers and/or institutional controls, the soil saturation limits ( $C_{sat}$ ) for the respective contaminants of concern (COCs) must not be exceeded by concentrations of the COCs in the soil samples collected. Benzene, toluene, ethylbenzene and xylenes (BTEX) constituents are the COCs. The table below shows the maximum concentrations of BTEX detected in comparison to the soil saturation limit for each COC:

COC	Maximum Concentration Detected	Soil Saturation Limit $C_{sat}$
Benzene	37.4 ppm	580 ppm
Toluene	<b>629 ppm</b>	290 ppm
Ethylbenzene	<b>272 ppm</b>	150 ppm
Xylenes	<b>1,200 ppm</b>	110 ppm

Toluene, ethylbenzene and xylenes all exceed the soil saturation limits as listed in Appendix A, Table A.

$C_{sat}$  values were calculated for toluene, ethylbenzene and xylenes using equation S29 and the  $f_{oc}$  default value for subsurface soils, 0.002. Input parameters and calculations are provided in Appendix D. The  $C_{sat}$  values calculated were all below the  $C_{sat}$  values listed in Appendix A, Table A. The table below shows the maximum concentration of BTEX detected in comparison to the calculated soil saturation limit for each COC:

COC	Maximum Concentration Detected	Calculated $C_{sat}$
Benzene	37.4 ppm	495 ppm
Toluene	<b>629 ppm</b>	261 ppm
Ethylbenzene	<b>272 ppm</b>	139 ppm
Xylenes	<b>1,200 ppm</b>	107 ppm

The concentrations of COCs remain above the  $C_{sat}$  value calculated using the default value for  $f_{oc}$ . It is possible that a site specific  $f_{oc}$  value will increase the  $C_{sat}$  values. In order to calculate  $C_{sat}$ , the site specific value for organic carbon content ( $f_{oc}$ ) for the zone between 4 to 6 feet below ground surface (bgs) must be determined. Site specific soil saturation limits will be calculated for toluene, ethylbenzene and xylenes using equation S29 and all site specific soil parameters, including  $f_{oc}$ .

Site specific soil parameters to be used include:

<b>Parameter</b>	<b>Value</b>
Soil Bulk Density	1.77 gm/cm <sup>3</sup>
Soil Particle Density	2.66 gm/gm
Organic Carbon Content (4-6')	To Be determined

## **Section 4. Additional Investigation Required**

### **1. Determination of $f_{oc}$**

Midwest proposes to complete one GeoProbe boring near GP-5 to collect a soil sample from a depth of 4 to 6' for analysis of  $f_{oc}$ . This location was selected because analysis of soil samples collected from GP-5 did not show any concentrations of COCs above method detection limits and collection of groundwater data from this boring could be completed at the same time. If present, a groundwater sample will also be collected from this boring to represent a resample of MW-4. The costs for analysis of groundwater from MW-4 were previously approved but the analysis could not be completed because well MW-4 could not be located during the last groundwater sampling event.

### **2. Calculation of $C_{sat}$**

The  $f_{oc}$  data collected as detailed above will be used to calculate the site specific  $C_{sat}$  for toluene, ethylbenzene and xylenes using equation S29. The calculations will be completed and submitted to the IEPA prior to implementing Step 3 below.

### **3. Definition of the Extent of Xylenes concentrations exceeding the $C_{sat}$**

Based on experience, it is probable that the xylenes concentrations in soil will remain above the site specific calculated  $C_{sat}$  value even with determination of the site specific  $f_{oc}$ . The xylenes concentrations in soil above  $C_{sat}$  were detected at a depth of 4 to 5 feet in boring GP-7. Midwest proposes to excavate to remove the shallow contaminated soil where concentrations of xylenes exceed the calculated site specific  $C_{sat}$  value. Prior to excavating, Midwest proposes to better define the extent of Xylenes in excess of the calculated site specific  $C_{sat}$  in the soil. A minimum of four additional geoprobe borings (PB3 through PB6) are proposed, one boring approximately 20 feet in each direction from GP-7, to better define the excavation area.

The soil borings will be sampled continuously and screened with the photoionization detection meter (PID). One soil sample will be collected from each five-foot interval of each boring. Each sample will be collected from the location within the five-foot interval that is the most contaminated based on the PID readings. If an area of contamination cannot be identified within a five-foot interval, the sample will be collected from the center of the boring. Soil samples will not be collected from beneath the first encountered groundwater as established while drilling.

Proposed soil boring locations area shown in Figure 4. The soil data collected during the proposed investigation will be used to determine the volume of shallow soil in which concentrations of xylenes exceed the soil saturation limit. It is anticipated that the shallow soil where concentrations of xylenes exceed the soil saturation limit will be excavated. Once the concentrations of xylenes have been reduced to below the soil saturation limit, a TACO evaluation of the site will be completed. The TACO evaluation will include elimination of exposure pathways where appropriate, determination of Tier 2 CUOs and groundwater modeling if needed.

#### **4. Groundwater Use Restriction Ordinance**

The Village of Minier has attempted to adopt a groundwater use restriction ordinance that will meet both the needs of the Village and the requirements of the IEPA. Village of Minier Ordinance #808 is included in Appendix E. Ordinance #808 combined with the MOU should meet the requirements to be used as an institutional control. If Ordinance 808 is not approved, Midwest will request the Village to consider an ordinance for a limited area around the site that will encompass the calculated groundwater model. The groundwater model will be calculated at a later date based on the degree of contamination remaining after removal of soil with COCs in excess of the  $C_{sat}$ .

The budget for the proposed scope of work is attached in Appendix F.

**Table 1**  
**Soil Analytical Data**

**TABLE 1.**  
**Soil Analytical Results**  
**Warsaw-ITCO**  
**Minier, IL**

Sample ID:	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
B-2, 4-6'	5/3/2000	810	1,300	1,700	6,500	10,310
B-2, 6-8'	5/3/2000	600	220	420	1,900	3,140
B-2, 8-10'	5/3/2000	21,000	41,000	47,000	190,000	299,000
B-3, 6-8'	5/3/2000	400	120	210	460	1,190
B-3, 8-10'	5/3/2000	2,300	2,100	31,000	110,000	145,400
MW-1, 6-8'	5/4/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-2, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-3, 8-10'	5/3/2000	<2.0	<2.0	6	<5.0	<14.7
MW-4, 4-6'	5/4/2000	230	220	870	2,500	3,820
MW-4, 6-8'	5/4/2000	300	1,200	5,400	20,000	26,900
B-4, 0.5-2.5'	8/23/2001	8.1 M	19.0 M	44.7 M	77.2 M	149 M
B-4, 4-6'	8/23/2001	11,600 ME	42,700 ME	9,720 ME	38,000 ME	102,020 ME
B-5, 6-8'	8/23/2001	49	186 E	38	130	403
B-6, 4-6'	8/23/2001	19.5	53.4	31.3	89.8	194.0
B-6, 8-10'	8/23/2001	7.1	12.3	<2.4	10.9	<32.3
B-7, 8-10'	8/23/2001	16.7 M	61.5 M	13.9 M	39.5 M	131.6 M
B-7, 12-14'	8/23/2001	754.0	<61.3	<61.3	<153	<1,029.6
MW-5, 8-10'	8/23/2001	494 M	4,750 M	5,890 M	7,570 M	18,704 M
MW-6, 6-8'	8/23/2001	6.5	12.4	6.3	11.3	36.5
MW-7, 4-6'	8/23/2001	11.7	25.1	10.8	20.0	67.6
MW-7, 8-10	8/23/2001	15.5 M	20.2 M	6.8	11.8	54.3
T-1	10/20/2003	<2.6	3.2	<2.6	<6.5	<14.9
T-2	10/20/2003	<2.6	<2.6	<2.6	<6.5	<14.3
T-3	10/20/2003	<2.4	5.1	5.1	14.2	<26.8
T-4	10/20/2003	<2.4	<2.4	<2.4	<5.9	<13.1
T-5	10/20/2003	3.4	40.8	360.0	947.0	1,351.2
T-6	10/20/2003	85.3	635.0	1,840.0	7,140.0	9,700.3
T-7	10/20/2003	85.5	43.8	1,120.0	2,460.0	3,709.3
T-8	10/20/2003	<2.5	6.6	18.9	56.8	<84.8
T-9	10/20/2003	<2.4	<2.4	<2.4	<6.1	<13.3
T-10	10/20/2003	<2.5	<2.5	<2.5	<6.2	<13.7
GP-1, 2-3'	11/13/2014	<4.99	<4.99	<4.99	<15.0	<30
GP-1, 6-7'	11/13/2014	<5.28	<5.28	<5.28	<15.8	<32
GP-2, 2-3'	11/13/2014	<5.28	<5.28	<5.28	<15.8	<32
GP-2, 6-7'	11/13/2014	<16.0	<16.0	<16.0	<48.0	<96
GP-3, 2-3'	11/13/2014	<5.12	<5.12	<5.12	<15.4	<31
GP-3, 7-8'	11/13/2014	<5.11	5.29	<5.11	<15.3	<31
GP-4, 2-3'	11/13/2014	<5.20	<5.20	<5.20	<15.6	<32
GP-4, 6-7'	11/13/2014	<4.35	5.00	<4.35	<13.1	<27
GP-5, 2-3'	11/13/2014	<4.83	<4.83	<4.83	<14.5	<29
GP-5, 6-7'	11/13/2014	<4.64	<4.64	<4.64	<13.9	<28
GP-6, 2-3'	11/13/2014	<4.66	<4.66	<4.66	<14.0	<28
GP-6, 7-8'	11/13/2014	<5.06	6.50	<5.06	<15.2	<32
GP-7, 4-5'	11/13/2014	37,400	629,000	272,000	1,200,000	2,138,400
GP-7, 6-7'	11/13/2014	3,180	9,720	143	6,210	19,253
GP-8, 2-3'	11/13/2014	<7.14	<7.14	<7.14	<21.4	<43
GP-8, 6-7'	11/13/2014	<4.96	5.52	<4.96	<14.9	<30

Notes:

1. All results in parts per billion (ppb).
2. IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
30	12,000	13,000	5,600

3. All bolded values are above Tier 1 Residential Cleanup Objectives
4. M = Matrix interferences identified
5. E = Estimated

Sample #	foc	pH	Moisture	Soil Bulk Density	Soil Particle Density
Subsurface	2.55%	7.3	17.1%	1.77 gm/cm <sup>3</sup>	2.66

**TABLE 1. ANALYTICAL RESULTS  
WARSAW - ITCO  
MINIER, ILLINOIS**

Analytes/ Sample ID: SAMPLE DATE	BENZENE 30 ppb	TOLUENE 12,000 ppb	ETHYL- BENZENE 13,000 ppb	TOTAL XYLENES 5,600 ppb	TOTAL BTEX
F-1 7/6/1999	9,400	46,900	11,100	62,400	129,800
F-2 7/6/1999	BELOW DL	17	20	159	<197.1
NW-1 7/23/1999	BELOW DL	7	31	246	<285.7
NW-2 7/23/1999	2	3	13	38	56
SW-1 7/23/1999	1,440	24,600	14,500	96,600	137,140
SW-2 7/23/1999	259	3,010	6,250	33,700	43,219
EW-1 7/23/1999	31	10	62	192	295
EW-2 7/23/1999	176	3,570	4,020	30,000	37,766
F-1 7/23/1999	7,240	6,540	45,400	219,000	278,280
F-2 7/23/1999	1,810	8,460	9,130	45,400	64,900
NW-3 7/28/1999	37	25	265	1,270	1,597
SW-3 7/28/1999	3,040	1,290	25,900	123,000	153,230
F-3 7/28/1999	763	<125	239	6,270	<7397
WW-1 7/28/1999	796	2,530	21,200	91,500	116,026
WW-2 7/28/1999	21	10	399	3,710	4,140
W-1 (liquid) 7/27/1999	2,730	4,260	1,190	7,660	15,840

**Table 2**  
**Groundwater Analytical Data**

**Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois**

Sample #	Date	DTW	GWE	Benzene	Toluene	E-benzene	Xylenes	Total BTEX	
<b>MW-1</b>		Elevation Top of Casing =			99.62				
SC	5/12/2000	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3	
1	10/24/2000	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4	
2	8/23/2001	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E	
3	11/13/2001	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.41	94.21	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.65	94.97	NS	NS	NS	NS	NS	
<b>MW-2</b>		Elevation Top of Casing =			99.28				
SC	5/9/2000	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/2000	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/2001	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7	
3	11/13/2001	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.12	94.16	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.38	94.90	NS	NS	NS	NS	NS	
<b>MW-3</b>		Elevation Top of Casing =			100				
SC	5/9/2000	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/2000	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/2001	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
3	11/13/2001	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.37	94.63	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.34	95.66	NS	NS	NS	NS	NS	
<b>MW-4</b>		Elevation Top of Casing =			99.84				
SC	5/9/2000	5.90	93.94	2,600	12,000	4,500	18,000	37,100	
1	10/24/2000	7.80	92.04	2,300	5,200	4,000	13,000	24,500	
2	8/23/2001	6.67	93.17	2,290 M	2,380 M	8,150	23,600 E	36,420 E	
3	11/13/2001	6.11	93.73	1,910	3,960	3,360	10,000	19,230	
4	2/14/2002	5.00	94.84	1,100	1,200	2,900	5,500	10,700	
5	1/24/2005	4.47	95.37	NS	NS	NS	NS	NS	
<b>MW-5</b>		Elevation Top of Casing =			99.57				
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9	
3	11/13/2001	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	4.71	94.86	1.4	2.2	1.5	4.5	9.6	
5	1/24/2005	3.89	95.68	NS	NS	NS	NS	NS	
<b>MW-6</b>		Elevation Top of Casing =			99.37				
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5	
3	11/13/2001	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	4.71	94.66	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	WELL ICED OVER		NS	NS	NS	NS	NS	
<b>MW-7</b>		Elevation Top of Casing =			100.07				
WELL DESTROYED AT TIME OF 1/25/05 DTW MEASUREMENT									
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	7.28	92.79	<2.0	<2.0	<2.0	5.9	<11.9	
3	11/13/2001	6.23	93.84	117 E	<2.0	<2.0	<5.0	<126 E	
4	2/14/2002	5.52	94.55	7	<1.0	<1.0	<3.0	<12.0	
5	1/24/2005	--	--	NS	NS	NS	NS	NS	

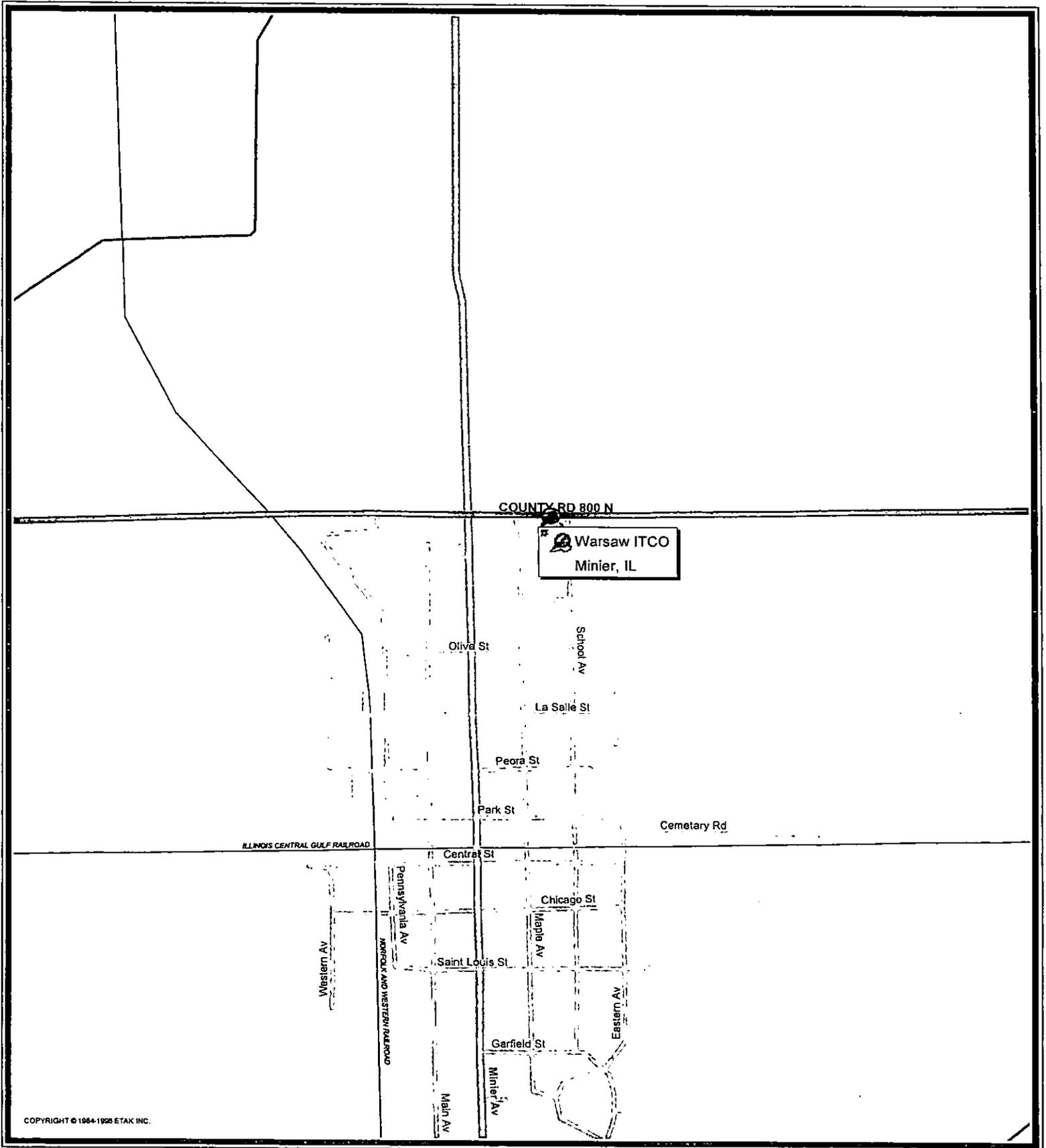
- All results reported in ug/kg (i.e. parts per billion, ppb)
- IEPA Tier 1 Cleanup Objectives (ug/kg):

Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

- = No data available
- MDL = Method Detection Limit
- DTW = Depth to Water
- GWE = Groundwater Elevation referenced to datum point
- NA/NS = Not analyzed/not sampled this event
- E = Estimated - value outside linear range
- M = Matrix interferences identified.

**Figure 1**  
**Area Map**

Figure 1. Warsaw ITCO Location Map, Minier, IL

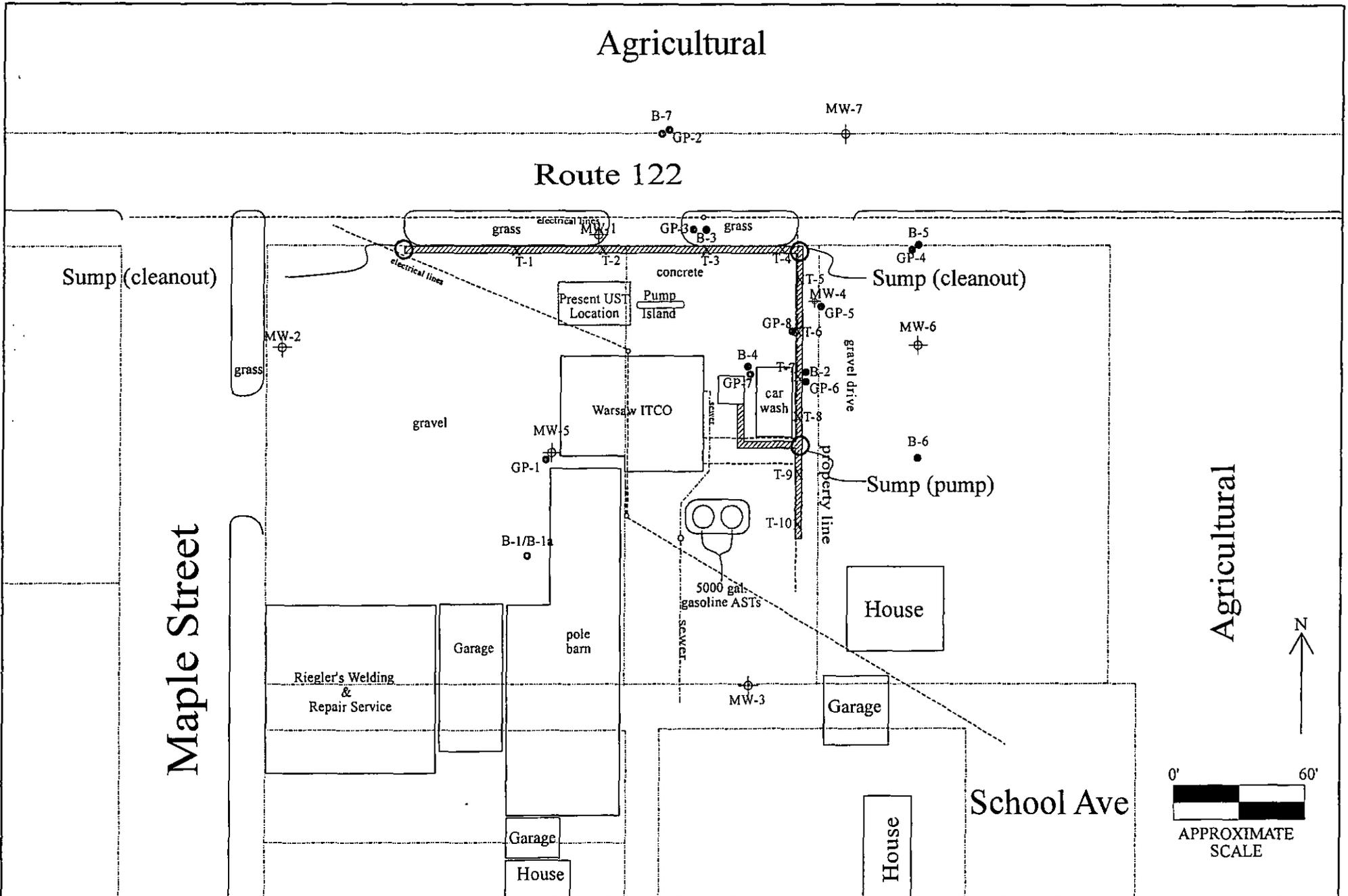


**Figure 2**

**Monitoring Well and Soil Boring Location Map**

Agricultural

Route 122



Agricultural



**Figure 2**  
**Monitoring Well & Soil Boring Locations**  
**Warsaw ITCO**  
**Minier, IL**

Date: 1/27/15	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**  
**R0896**

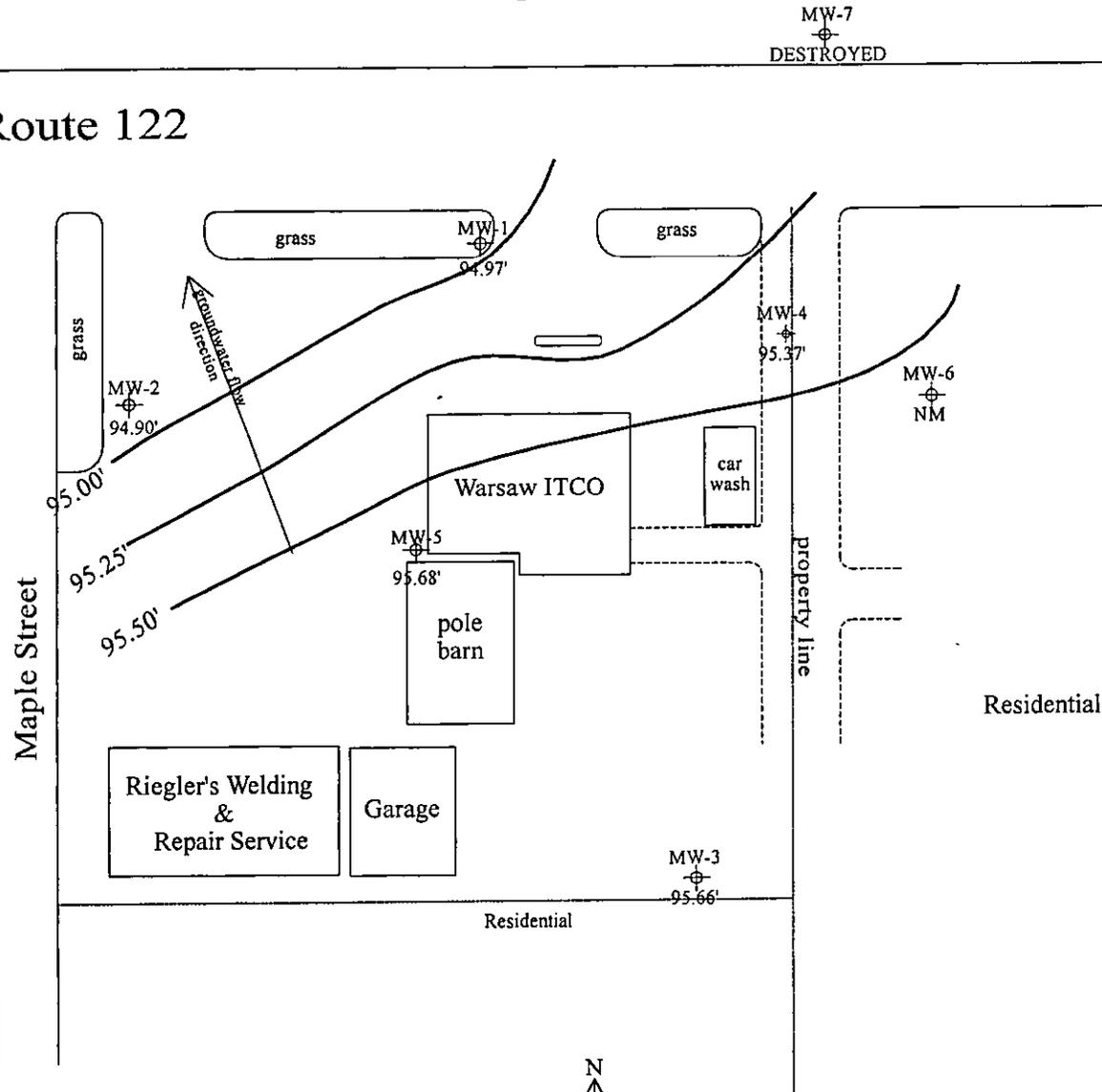
- ⊙ = Proposed Soil Boring Location
- MW-3  
⊕ = Existing Monitoring Well Location
- B-2  
● = Existing Boring Location

**Figure 3**

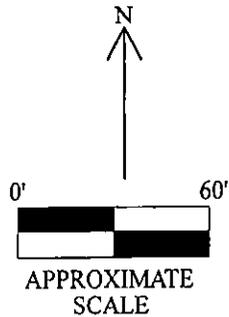
**Piezometric Surface Map 01/24/05**

# Agricultural

Route 122



Residential



- MW-3  
 = Existing Monitoring Well Location
- B-2  
 = Existing Boring Location

**FIGURE 3**  
 Piezometric Surface  
 Map - 1/24/05  
 Warsaw - ITCO  
 Minier, IL

Date: 1/24/05

Drawn by: TKB

Job No.: 9890

Approved by: AMG

**M.E.C.R.S., Inc.**

R0898



- ⊗ = Proposed Soil Boring Location
- ⊕ = Existing Monitoring Well Location
- = Existing Boring Location
- = Excavation Sample Location
- X = Trench Sample Locations

# Route 122

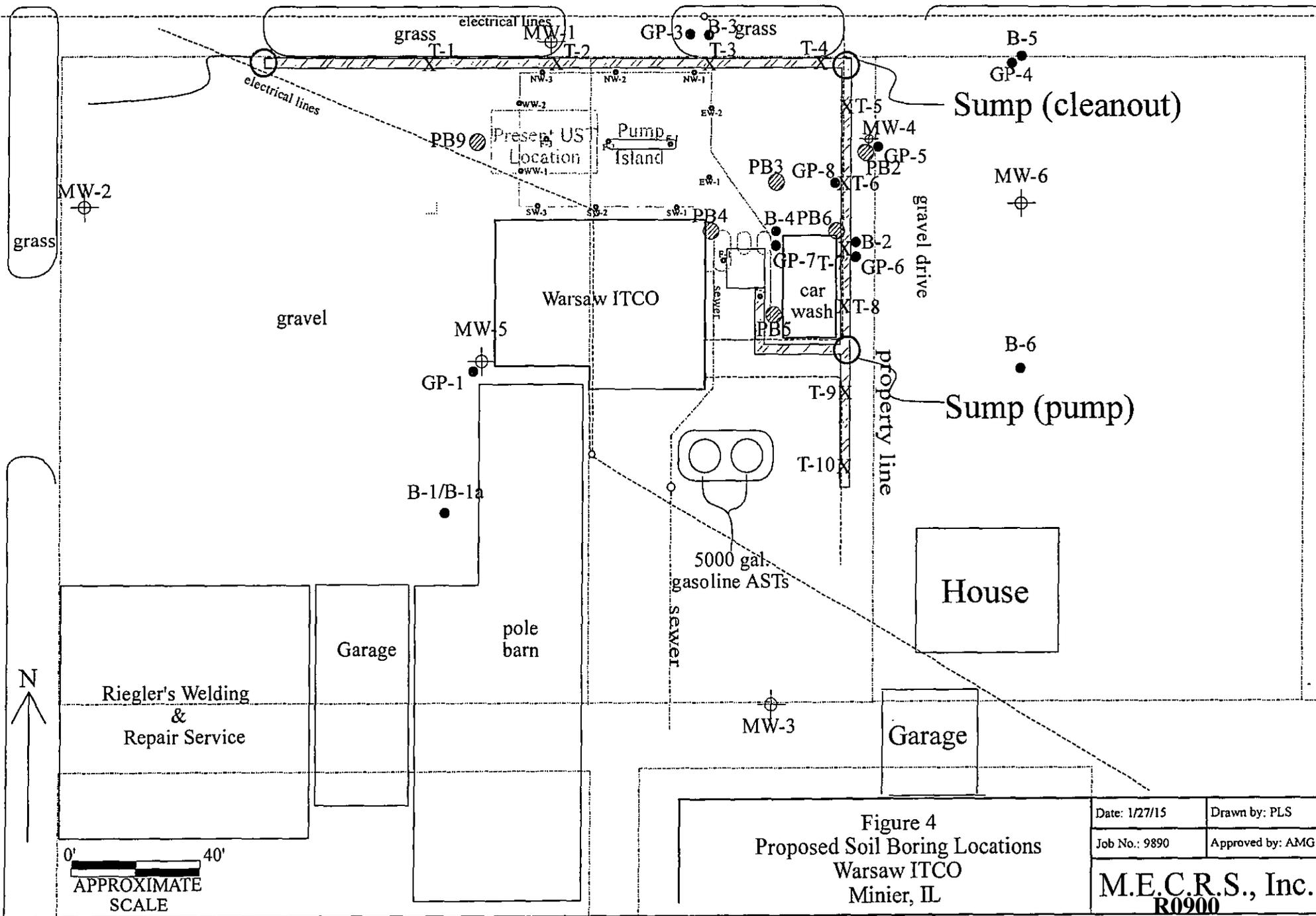


Figure 4  
Proposed Soil Boring Locations  
Warsaw ITCO  
Minier, IL

Date: 1/27/15	Drawn by: PLS
Job No.: 9890	Approved by: AMG
<b>M.E.C.R.S., Inc.</b> R0900	

**Figure 5**

**Extent of Contamination**

Agricultural

Route 122

Extent Benzene in GW > 0.005 ppm

Sump (cleanout)

Sump (cleanout)

Extent Benzene > 0.03 ppm

Sump (pump)

Maple Street

Agricultural



School Ave

Figure 5  
Extent Contamination  
Warsaw ITCO  
Minier, IL

Date: 1/27/15

Drawn by: PLS

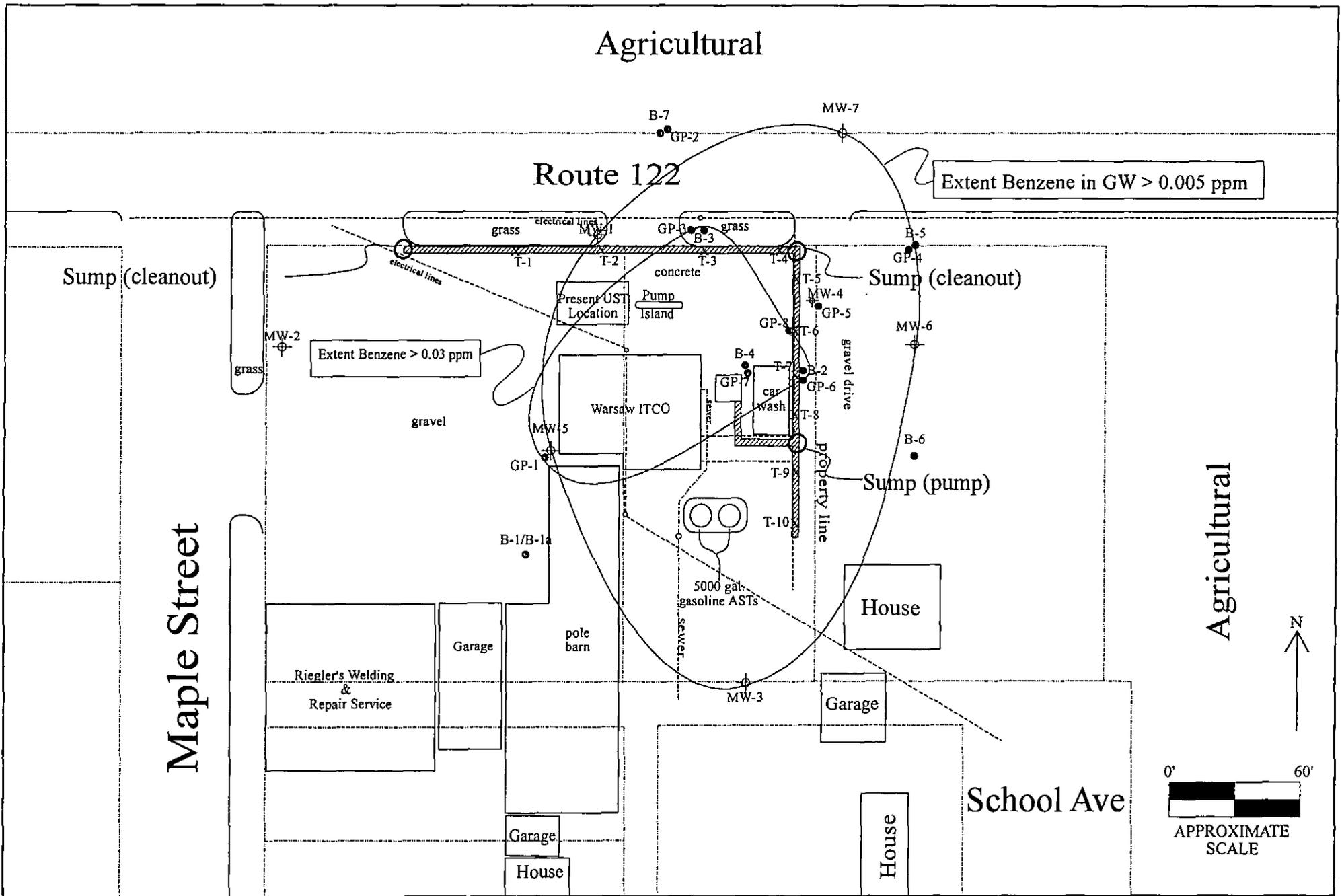
Job No.: 9890

Approved by: AMG

M.E.C.R.S., Inc.

R0902

- ⊗ = Proposed Soil Boring Location
- MW-3  
⊕ = Existing Monitoring Well Location
- B-2  
● = Existing Boring Location



**Appendix A**  
**Laboratory Data Reports**



Tuesday, December 9, 2014

Ms. Penny Silzer  
Midwest Environmental Consulting  
PO Box 614  
Tremont, IL 61568-0614  
TEL: (309) 925-5551  
FAX: (309) 925-5606

RE: Warsaw ITCO

PAS WO: 14K0287

Prairie Analytical Systems, Inc. received 16 sample(s) on 11/14/2014 for the analyses presented in the following report.

All applicable quality control procedures met method specific acceptance criteria unless otherwise noted.

This report shall not be reproduced, except in full, without the prior written consent of Prairie Analytical Systems, Inc.

If you have any questions, please feel free to contact me at (217) 753-1148.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ana L. Jensen".

Ana L. Jensen For Kristen A. Potter  
Project Manager

Certifications: NELAP/NELAC - IL #100323

---

1210 Capital Airport Drive	*	Springfield, IL 62707	*	1.217.753.1148	*	1.217.753.1152 Fax
9114 Virginia Road Suite #112	*	Lake in the Hills, IL 60156	*	1.847.651.2604	*	1.847.458.0538 Fax

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-1 2-3  
 Collection Date: 11/13/14 9:30

Lab Order: 14K0287  
 Lab ID: 14K0287-01  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.99		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:07	SW8260B Re	BDP
*Ethylbenzene	U	4.99		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:07	SW8260B Re	BDP
*Toluene	U	4.99		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:07	SW8260B Re	BDP
*Xylenes (total)	U	15.0		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:07	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	77.7	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-1 6-7  
 Collection Date: 11/13/14 9:40

Lab ID: 14K0287-02  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:36	SW8260B Re	BDP
*Ethylbenzene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:36	SW8260B Re	BDP
*Toluene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:36	SW8260B Re	BDP
*Xylenes (total)	U	15.8		µg/Kg dry	1	11/17/14 10:02	11/17/14 20:36	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	78.8	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-2 2-3  
 Collection Date: 11/13/14 9:50

Lab ID: 14K0287-03  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:05	SW8260B Re	BDP
*Ethylbenzene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:05	SW8260B Re	BDP
*Toluene	U	5.28		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:05	SW8260B Re	BDP
*Xylenes (total)	U	15.8		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:05	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	81.0	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-2 6-7  
 Collection Date: 11/13/14 10:10

Lab Order: 14K0287  
 Lab ID: 14K0287-04  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	16.0		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:35	SW8260B Re	BDP
*Ethylbenzene	U	16.0		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:35	SW8260B Re	BDP
*Toluene	U	16.0		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:35	SW8260B Re	BDP
*Xylenes (total)	U	48.0		µg/Kg dry	1	11/17/14 10:02	11/17/14 21:35	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	79.3	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-3 2-3  
 Collection Date: 11/13/14 10:20

Lab ID: 14K0287-05  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.12		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:04	SW8260B Re	BDP
*Ethylbenzene	U	5.12		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:04	SW8260B Re	BDP
*Toluene	U	5.12		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:04	SW8260B Re	BDP
*Xylenes (total)	U	15.4		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:04	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	77.5	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-3 7-8  
 Collection Date: 11/13/14 10:30

Lab ID: 14K0287-06  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.11		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:34	SW8260B Re	BDP
*Ethylbenzene	U	5.11		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:34	SW8260B Re	BDP
*Toluene	5.29	5.11		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:34	SW8260B Re	BDP
*Xylenes (total)	U	15.3		µg/Kg dry	1	11/17/14 10:02	11/17/14 22:34	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	80.3	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-4 2-3  
 Collection Date: 11/13/14 10:35

Lab Order: 14K0287  
 Lab ID: 14K0287-07  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.20		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:03	SW8260B Re	BDP
*Ethylbenzene	U	5.20		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:03	SW8260B Re	BDP
*Toluene	U	5.20		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:03	SW8260B Re	BDP
*Xylenes (total)	U	15.6		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:03	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	79.5	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-4 6-7  
 Collection Date: 11/13/14 10:40

Lab ID: 14K0287-08  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.35		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:32	SW8260B Re	BDP
*Ethylbenzene	U	4.35		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:32	SW8260B Re	BDP
*Toluene	5.00	4.35		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:32	SW8260B Re	BDP
*Xylenes (total)	U	13.1		µg/Kg dry	1	11/17/14 10:02	11/17/14 23:32	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	83.4	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-5 2-3  
 Collection Date: 11/13/14 10:45

Lab ID: 14K0287-09  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.83		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:02	SW8260B Re	BDP
*Ethylbenzene	U	4.83		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:02	SW8260B Re	BDP
*Toluene	U	4.83		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:02	SW8260B Re	BDP
*Xylenes (total)	U	14.5		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:02	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	79.7	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-5 6-7  
 Collection Date: 11/13/14 10:50

Lab Order: 14K0287  
 Lab ID: 14K0287-10  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.64		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:31	SW8260B Re	BDP
*Ethylbenzene	U	4.64		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:31	SW8260B Re	BDP
*Toluene	U	4.64		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:31	SW8260B Re	BDP
*Xylenes (total)	U	13.9		µg/Kg dry	1	11/17/14 10:02	11/18/14 0:31	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	85.5	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-6 2-3  
 Collection Date: 11/13/14 11:00

Lab ID: 14K0287-11  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.66		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:00	SW8260B Re	BDP
*Ethylbenzene	U	4.66		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:00	SW8260B Re	BDP
*Toluene	U	4.66		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:00	SW8260B Re	BDP
*Xylenes (total)	U	14.0		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:00	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	80.5	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-6 7-8  
 Collection Date: 11/13/14 11:05

Lab ID: 14K0287-12  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	5.06		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:29	SW8260B Re	BDP
*Ethylbenzene	U	5.06		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:29	SW8260B Re	BDP
*Toluene	6.50	5.06		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:29	SW8260B Re	BDP
*Xylenes (total)	U	15.2		µg/Kg dry	1	11/17/14 10:02	11/18/14 1:29	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	77.6	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-7 4-5  
 Collection Date: 11/13/14 11:10

Lab Order: 14K0287  
 Lab ID: 14K0287-13  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	37400	3400		µg/Kg dry	500	11/18/14 10:49	11/19/14 2:52	SW8260B Re	BDP
*Ethylbenzene	272000	6810		µg/Kg dry	1000	11/18/14 10:49	11/19/14 1:54	SW8260B Re	BDP
*Toluene	629000	34000		µg/Kg dry	5000	11/19/14 10:43	11/19/14 13:55	SW8260B Re	BDP
*Xylenes (total)	1200000	102000		µg/Kg dry	5000	11/19/14 10:43	11/19/14 13:55	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	73.4	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-7 6-7  
 Collection Date: 11/13/14 11:20

Lab ID: 14K0287-14  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	3180	317		µg/Kg dry	50	11/18/14 10:49	11/19/14 4:49	SW8260B Re	BDP
*Ethylbenzene	1430	317		µg/Kg dry	50	11/18/14 10:49	11/19/14 4:49	SW8260B Re	BDP
*Toluene	9720	317		µg/Kg dry	50	11/18/14 10:49	11/19/14 4:49	SW8260B Re	BDP
*Xylenes (total)	6210	950		µg/Kg dry	50	11/18/14 10:49	11/19/14 4:49	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	79.0	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

Client Sample ID: GP-8 2-3  
 Collection Date: 11/13/14 11:30

Lab ID: 14K0287-15  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	7.14		µg/Kg dry	1	11/18/14 10:49	11/18/14 23:57	SW8260B Re	BDP
*Ethylbenzene	U	7.14		µg/Kg dry	1	11/18/14 10:49	11/18/14 23:57	SW8260B Re	BDP
*Toluene	U	7.14		µg/Kg dry	1	11/18/14 10:49	11/18/14 23:57	SW8260B Re	BDP
*Xylenes (total)	U	21.4		µg/Kg dry	1	11/18/14 10:49	11/18/14 23:57	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	81.1	0.100		%	1	11/20/14 13:17	11/21/14 12:15	ASTM D2974	JLS

**LABORATORY RESULTS**

Client: Midwest Environmental Consulting  
 Project: Warsaw ITCO  
 Client Sample ID: GP-8 6-7  
 Collection Date: 11/13/14 11:35

Lab Order: 14K0287  
 Lab ID: 14K0287-16  
 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
<b>Volatile Organic Compounds by GC-MS</b>									
*Benzene	U	4.96		µg/Kg dry	1	11/17/14 10:02	11/18/14 2:56	SW8260B Re	BDP
*Ethylbenzene	U	4.96		µg/Kg dry	1	11/17/14 10:02	11/18/14 2:56	SW8260B Re	BDP
*Toluene	5.52	4.96		µg/Kg dry	1	11/17/14 10:02	11/18/14 2:56	SW8260B Re	BDP
*Xylenes (total)	U	14.9		µg/Kg dry	1	11/17/14 10:02	11/18/14 2:56	SW8260B Re	BDP
<b>Conventional Chemistry Parameters</b>									
Percent Solids	80.4	0.100		%	1	11/18/14 12:13	11/19/14 10:28	ASTM D2974	CCD

---

**LABORATORY RESULTS**

**Client:** Midwest Environmental Consulting  
**Project:** Warsaw ITCO

**Lab Order:** 14K0287

---

**Notes and Definitions**

- R RPD outside acceptance limits.
- \* NELAC certified compound.
- U Analyte not detected (i.e. less than RL or MDL).

# Chain of Custody Record

Central IL - 1210 Capital Airport Drive - Springfield, IL 62707-8490 - Phone (217) 753-1148 - Facsimile (217) 753-1152  
 Chicago IL Office - 9114 Virginia Rd., Ste 112 - Lake in the Hills, IL 60156 - Phone (847) 651-2604 - Facsimile (847) 458-9680  
 Central/Southern IL Office - Phone (217) 414-7762 - Facsimile (217) 223-7922



Client		Michaelten				Analysis and/or Method Requested						Reporting		
Address		PO Box 614				BTEX						<input type="checkbox"/> Resid <input type="checkbox"/> Ind/Comm		
City, State, Zip Code		Tremont, IL 61568										TACO		
Phone / Facsimile		309-925-5551										<input type="checkbox"/> A <input type="checkbox"/> D <input type="checkbox"/> B <input type="checkbox"/> E <input type="checkbox"/> C <input type="checkbox"/> F		
Project Name / Number		Warsaw ITCO										CALM		
Project Location		Munee										RISC		
P.C. # or Invoice To		Job # 9820										<input type="checkbox"/> Resid <input type="checkbox"/> Indust		
Contact Person		P Sitzer										Sampler Comments:		
Sample Description	Sampling		Matrix Code	Preserv Code	No. of Containers	Sample Type								
	Date	Time				Comp	Grab							
AP1, 2-3	11/13/14	9:30												
BP1, 6-7		9:40												
GP2, 2-3		9:50												
GP2, 6-7		10:10												
GP3, 2-3		10:20												
GP3, 7-8		10:30												
GP4, 2-3		10:35												
GP4, 6-7		10:40												
GP5, 2-3		10:45												
GP5, 6-7		10:50												
GP6, 2-3		11:00												
GP6, 7-8		11:05												
Matrix Code	A - Aqueous		DW - Drinking Water		GW - Ground Water		NA - Non-Aqueous Liquid		S - Solid		O - Oil		X - Other (Specify)	
Preserv Code	0 - None		1 - HCl		2 - H2SO4		3 - HNO3		4 - NaOH		5 - 5035 Kit		X - Other (Specify)	
Relinquished By		Date		Time		Received By		Date		Time		Method of Shipment		
[Signature]		11/13/14				[Signature]		11-14-14		10:05		Hand		
[Signature]		11/14/14		10:00 AM		[Signature]		11/14/14		1300		Hand		
[Signature]		11/14/14		1300		[Signature]		11/14/14		1300		Hand		
Special Instructions:						Turnaround Time: Standard <input type="checkbox"/> Rush <input type="checkbox"/>		GC Level		On wet ice? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Temperature (°C)		
						Date Required:		<input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4				2.2		

Page 9 of 10

# Chain of Custody Record

Central IL - 1210 Capital Airport Drive - Springfield, IL 62707-8490 - Phone (217) 753-1148 - Facsimile (217) 753-1152  
 Chicago IL Office - 9114 Virginia Rd., Ste 112 - Lake in the Hills, IL 60156 - Phone (847) 651-2604 - Facsimile (847) 458-9680  
 Central/Southern IL Office - Phone (217) 414-7762 - Facsimile (217) 223-7922



Client		<del>Midwest Env.</del>					Analysis and/or Method Requested						Reporting								
Address		PO Box 604					BTEX						<input type="checkbox"/> Resid <input type="checkbox"/> Ind/Comm								
City, State, Zip Code		Tremont, IL 60156											<input type="checkbox"/> A <input type="checkbox"/> D <input type="checkbox"/> B <input type="checkbox"/> E <input type="checkbox"/> C <input type="checkbox"/> F								
Phone / Facsimile		309-925-5551											<input type="checkbox"/> Resid <input type="checkbox"/> Indust								
Project Name / Number		Warsaw TCO											Sampler Comments								
Project Location		Pine Mound																			
P.O. # or Invoice To		Job # 9890																			
Contact Person		P. Sizer																			
Sample Description	Sampling		Matrix Code	Preserv Code	No of Containers	Sample Type															
	Date	Time				Comp	Grab														
GP-7, 4-5	11/13/14	11:10																			
RP-7, 6-7	↓	11:20																			
GP-8, 2-3	↓	11:30																			
GP-8, 6-7	↓	11:35																			
Matrix Code		A - Aqueous		DW - Drinking Water		GW - Ground Water								NA - Non-Aqueous Liquid		S - Solid		O - Oil		X - Other (Specify)	
Preserv Code		0 - None		1 - HCl		2 - H2SO4								3 - HNO3		4 - NaOH		5 - 5035 Kit		X - Other (Specify)	
Relinquished By		Date		Time		Received By								Date		Time		Method of Shipment			
P. Sizer		11/13/14				P. Sizer								11/14/14		10:00 AM		Hand			
D. M. O.		11/14/14		1300		P. Sizer		11/14/13		1300		Hand									
Special Instructions:						Turnaround Time: Standard <input type="checkbox"/> Rush <input type="checkbox"/>		QC Level		On-wet ice?		Temperature (°C)									
						Date Required:		1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		2.2									

Page 10 of 10

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/7 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Laboratory Certification for Chemical Analysis**

**A. Site Identification**

IEMA Incident # (6- or 8-digit): 981987      IEPA LPC# (10-digit): 1790455007  
Site Name: Warsaw ITCO  
Site Address (Not a P.O. Box): Route 122  
City: Minier      County: Tazewell      ZIP Code: 61759  
Leaking UST Technical File

**B. Sample Collector**

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
2. Chain-of-custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

PS  
(initial)

PS  
(initial)

PS  
(initial)

PS  
(initial)

**C. Laboratory Representative**

I certify that:

1. Proper chain-of-custody procedures were followed as documented on the chain-of-custody forms
2. Sample integrity was maintained by proper preservation.
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

ACT  
(initial)

ACT  
(initial)

ACT  
(initial)

ACT  
(initial)

5. Sample holding times were not exceeded.

ACT  
(initial)

6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses.

ACT  
(initial)

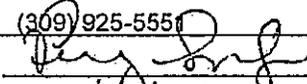
7. An accredited lab performed quantitative analysis using test methods identified in 35 IAC 186.180 (for samples collected on or after January 1, 2003).

ACT  
(initial)

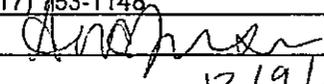
#### D. Signatures

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

##### Sample Collector :

Name: Penny Siker  
Title: Sn Geologist  
Company: M.E.C.R.S, Inc.  
Address: 22200 IL Rte. 9, P.O. Box 614  
City: Tremont  
State: Illinois  
ZIP Code: 61568  
Phone: (309) 925-5551  
Signature:   
Date: 11/19/14

##### Laboratory Representative

Name: Ana Jensen  
Title: Project Manager  
Company: Prairie Analytical  
Address: 1210 Capital Airport Drive  
City: Springfield  
State: Illinois  
ZIP Code: 62707  
Phone: (217) 753-1148  
Signature:   
Date: 12/19/14

**Appendix B**  
**Soil Boring Logs**

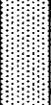
LUST Incident No.: 981987	Boring Number: <u>GP-1</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to MW-5</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	SILT LOAM (OL); Black, moist, firm			0	Sample collected at 2 to 3 feet.
2-3	BS	85%		2	SILTY CLAY (CL); Brown, w/gray mottling, moist, firm			0	
				3				0	
				4				0	Sample collected at 6 to 7 feet.
6-7	BS	100%		6				0	
				7	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			0	
				8				0	
				9				0	
				10					
				11					
				12					
				13					
				14					
				15					
				16					
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				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data		Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.  <b>R0917</b>
▼ Depth While Drilling <u>7'</u>	Rotary Depth _____ Geologist <u>PLS</u>		
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>		
	Note: Boring backfilled unless otherwise noted		

LUST Incident No.: 981987	Boring Number: <u>GP-2</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to B-7</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
2-3	BS	90%		1	SILT LOAM (OL): Black, moist, firm			0	Sample collected at 2 to 3 feet.
				2	SILTY CLAY (CL): Brown, w/gray mottling, moist, firm			0	
				3				0	
6-7	BS	100%		6				0	Sample collected at 6 to 7 feet.
				7	SILTY SAND (SM): Dark brown/gray, wet, fine to medium grained			0	
				8				0	
				9					
				10					
				11					
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				13					
				14					
				15					
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				26					
				27					
				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>7'</u>	Rotary Depth _____ Geologist <u>ALS</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

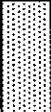
LUST Incident No.: 981987	Boring Number: <u>GP-3</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to B-3</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
2-3	BS	85%		1	SILT LOAM (OL): Black, moist, firm			0	Sample collected at 2 to 3 feet.
				2	SILTY CLAY (CL): Brown, w/gray mottling, moist, firm			0	
				3				0	
7-8	BS	90%		4				0	Sample Collected from 7 to 8 feet
				5				0	
				6				0	
				7	SILTY SAND (SM): Dark brown/gray, wet, fine to medium grained			0	
				8					
				9					
				10					
				11					
				12					
				13					
				14					
				15					
				16					
				17					
				18					
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				26					
				27					
				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data		Auger Depth _____ Rig GeoProbe	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling _____	Rotary Depth _____	Geologist <u>PLS</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>		
Note: Boring backfilled unless otherwise noted			

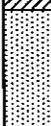
LUST Incident No.: 981987	Boring Number: <u>GP-4</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to B-5</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minter, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
2-3	BS	85%		1	SILT LOAM (OL): Black, moist, firm			0	Sample collected at 2 to 3 feet.
				2	SILTY CLAY (CL): Brown, w/gray mottling, moist, firm			0	
				3				0	
				4				0	
				5				0	
6-7	BS	95%		6				0	
				7	SILTY SAND (SM): Dark brown/gray, wet, fine to medium grained			0	
				8				0	
				9				0	
				10					
				11					
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				27					
				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data		Auger Depth _____ Rig GeoProbe	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling _____		Rotary Depth _____ Geologist <u>ALG</u>	
▽ Depth After Drilling _____		Driller/Co <u>Doug/Reynolds</u>	
Note: Boring backfilled unless otherwise noted			

LUST Incident No.: 981987	Boring Number: <u>GP-5</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to MW-4</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	Gravel Drive, gravel road base fill			0	Sample collected at 2 to 3 feet.
2-3	BS	80%		2	SILTY CLAY (CL): Brown, w/gray mottling, moist, firm			0	
				3				0	
				4				0	Sample collected at 6 to 7 feet.
6-7	BS	100%		6				0	
				7	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			0	
				8				0	
				9				0	
				10					
				11					
				12					
				13					
				14					
				15					
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				26					
				27					
				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig GeoProbe _____	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>7</u>	Rotary Depth _____ Geologist <u>PLG</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
Note: Boring backfilled unless otherwise noted		

LUST Incident No.: 981987	Boring Number: <u>GP-6</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to B-2</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	Gravel Drive, gravel road base fill			0	Sample collected at 2 to 3 feet.
2-3	BS	85%		2	SILTY CLAY (CL): Brown, w/gray mottling, moist, firm			0	
				3				0	
				4				0	
				5				0	
				6				0	
7-8	BS	90%		7				0	
				8	SILTY SAND (SM): Dark brown/gray, wet, fine to medium grained			0	
				9				0	
				10					
				11					
				12					
				13					
				14					
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Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig GeoProbe	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling 8'	Rotary Depth _____ Geologist <u>PLG</u>	
▽ Depth After Drilling	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

LUST Incident No.: 981987	Boring Number: <u>GP-7</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to B-4</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
	BS	90%		1	Gravel Drive, gravel road base over gravelly clay fill material			0	
				2	clayey sandy fill material				
	BS	100%		3				11	Sample collected at 4 to 5 feet.
4-5				4	SILTY CLAY (CL); Black w/gray mottling, moist, firm strong odor			230	
	BS	100%		5					Sample collected at 6 to 7 feet.
6-7				6	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			58	
				7				0	
				8					
				9					
				10					
				11					
				12					
				13					
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				27					
				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>7</u>	Rotary Depth _____ Geologist <u>PLS</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

LUST Incident No.: 981987	Boring Number: <u>GP-8</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to T-6</u>	Date: Start <u>11/13/14</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>11/13/14</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	Gravel Drive, gravel road base fill				
				2	Silty Clay Loam (OH); Black, moist hard			0	Sample collected at 2 to 3 feet.
2-3	BS	95%		3	SILTY CLAY (CL); Brown, w/gray mottling, moist, firm			0	
				4				0	
				5				0	Sample collected at 6 to 7 feet.
6-7	BS	100%		6				0	
				7	wet clay			180	
				8	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained				
				9				110	
				10					
				11					
				12					
				13					
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Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data

▼ Depth While Drilling 7

▽ Depth After Drilling \_\_\_\_\_

Auger Depth \_\_\_\_\_ Rig GeoProbe \_\_\_\_\_

Rotary Depth \_\_\_\_\_ Geologist PLS

Driller/Co Doug/Reynolds

Note: Boring backfilled unless otherwise noted

Midwest Environmental Consulting & Remediation Services, Inc.

## **Appendix C**

### **Soil and Groundwater Sampling Protocol**

## **SOIL SAMPLING PROTOCOL For Subsurface Investigations**

### 1. Sampling Methodology - Split Spoon Sampling

- A. All sampling equipment to be used will be cleaned and decontaminated using deionized water prior to and between samples.
- B. Verification will be made that all boring equipment to include augers, split spoon samplers and associated equipment has been properly cleaned and decontaminated prior to initiating investigation.
- C. All boring and associated samplers will be decontaminated in accordance with the following schedule.
  - 1.) Augers and center plugs will be decontaminated between borings using a high-pressure washer or steam cleaner.
  - 2.) Split Spoon Samplers will be decontaminated between samples using a warm water Alconox wash and triple rinsing.
- D. Samples representative of the interval retrieved will be removed and placed into new, glass jars with teflon lined lids\*. Proper care will be taken to minimize volatilization of possible contaminants from the sample during handling.
- E. The sample will be allowed to sit undisturbed for a period of time sufficient for vapor equilibrium to be reached. A headspace analysis of the sample will then be conducted using a portable photoionizer detector.
- F. A log of all borings will be recorded during sampling. The logs will include data regarding soil types and depths, anomalies, odor, HNU readings, and moisture contents.

### 2. Sample Storage, Handling and Transport

- A. Samples for analysis will be immediately cooled using a thermally insulated cooler and ice. The samples will be transported, on ice, as soon as possible, to the laboratory or to the engineering office cooler to await transport to the laboratory.
- B. No sample will be allowed to remain in the possession of the geologist or laboratory for more than two weeks prior to analysis.
- C. A chain of custody record will be kept for all samples taken for laboratory analysis.

\*Encore sampling system will be substituted for glass jars when required.

## **GROUNDWATER SAMPLING PROTOCOL**

To be used when sampling groundwater monitoring wells for IEPA approved investigations.

### **1. Sampling Methodology - Bailer Method**

A. Verification will be made that all sampling equipment to include bailers, buckets, chords, water level meters, have been properly decontaminated prior to sampling initiation.

B. All equipment will be decontaminated in accordance with the following protocol:

1.) Bailers will be decontaminated between samples using Alconox wash, a 30% methanol/distilled water rinse, and a final triple rinse with distilled water.

2.) Water level probes and associated equipment will be decontaminated between readings using an Alconox wash and distilled water rinse.

3.) A new section of line will be used for bailing and sampling each individual well.

C. A record of the following will be made at the time of well sampling:

- 1.) Depth to water from top of well casing.
- 2.) Total well depth from top of well casing.
- 3.) Total vertical feet of water in well.
- 4.) Number of well volumes purged.
- 5.) Number of gallons purged.
- 6.) Sampling methods.
- 7.) Sample appearance.

D. Wells will be purged and sampled using the following method:

The total vertical feet of water in the 2" ID monitor well will be multiplied by 0.163 gal./ft. in order to determine the total volume of water in the well. A total of three well volumes will be purged from the well. Groundwater samples will then be withdrawn via a stainless steel bailer and collected in 40 milliliter, properly labeled vials. The samples will be immediately placed on ice for temporary storage until the samples can be transported to an IEPA certified laboratory.

**Appendix D**  
**C<sub>sat</sub> Calculations**

S-29 For Benzene

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = \mathbf{495 \text{ ppm}}$$

$$S = 1.80\text{E}+03 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 0.1 \text{ S19}$$

$$\Theta_w = 0.30 \text{ S20}$$

$$\Theta_a = 0.03 \text{ S21}$$

$$H' = 0.23 \text{ Table E}$$

S19

$$K_d = K_{oc} * f_{oc} = \mathbf{0.1}$$

$$K_{oc} = 50 \text{ Table E}$$

$$f_{oc} = 0.002 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b / \rho_s = \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) : 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = 0.33 * (1/8)^{0.042}$$

$$\Theta_w = \mathbf{0.30}$$

$$S21 = \Theta_a = \eta - \Theta_w = \mathbf{0.03}$$

S-29 For Toluene

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = \mathbf{261 \text{ ppm}}$$

$$S = 5.30E+02 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 0.316 \text{ S19}$$

$$\Theta_w = 0.30 \text{ S20}$$

$$\Theta_a = 0.03 \text{ S21}$$

$$H' = 0.271 \text{ Table E}$$

S19

$$K_d = K_{oc} * f_{oc} = 0.316$$

$$K_{oc} = 158 \text{ Table E}$$

$$f_{oc} = 0.002 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b/\rho_s = \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) : 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = 0.33 * (1/8)^{0.042}$$

$$\Theta_w = \mathbf{0.30}$$

$$S21 = \Theta_a = \eta - \Theta_w = \mathbf{0.03}$$

S-29 For Ethylbenzene

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = \quad \mathbf{139 \text{ ppm}}$$

$$S = 1.70E+02 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 0.64 \text{ S19}$$

$$\Theta_w = 0.30 \text{ S20}$$

$$\Theta_a = 0.03 \text{ S21}$$

$$H' = 0.324 \text{ Table E}$$

S19

$$K_d = K_{oc} * f_{oc} = \quad \mathbf{0.64}$$

$$K_{oc} = 3.20E+02 \text{ Table E}$$

$$f_{oc} = 0.002 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b/\rho_s = \quad \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) : 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = 0.33 * (1/8)^{0.042}$$

$$\Theta_w = \quad \mathbf{0.30}$$

$$S21 = \Theta_a = \eta - \Theta_w = \quad \mathbf{0.03}$$

S-29 For Xylenes

$$C_{sat} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{sat} = \quad \quad \quad \mathbf{107 \text{ ppm}}$$

$$S = 1.10E+02 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 0.796 \text{ S19}$$

$$\Theta_w = 0.30 \text{ S20}$$

$$\Theta_a = 0.03 \text{ S21}$$

$$H' = 0.271 \text{ Table E}$$

S19

$$K_d = K_{oc} * f_{oc} = 0.796$$

$$K_{oc} = 3.98E+02 \text{ Table E}$$

$$f_{oc} = 0.002 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b / \rho_s = \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) : 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = 0.33 * (1/8)^{0.042}$$

$$\Theta_w = \mathbf{0.30}$$

$$S21 = \Theta_a = \eta - \Theta_w = \mathbf{0.03}$$

## Appendix E

### Institutional Controls

#### HAA and Groundwater Ordinance with MUO



# Illinois Department of Transportation

Office of Chief Counsel  
2300 South Dirksen Parkway / Springfield, Illinois / 62764

October 4, 2013

Midwest Environmental Consulting & Remediation Services, Inc.  
Attn: Penny Silzer  
PO Box 614  
Tremont, IL 61568-0614

Re: TACO Agreement: HAA 1342 in Minier, IL

Dear Ms. Silzer:

I have enclosed a fully executed original Highway Authority Agreement for the above site.

Please submit the agreement to the Illinois Environmental Protection Agency for their approval.

Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Prater".

Michael Prater  
Assistant Chief Counsel

Enclosure

R0934

### HIGHWAY AUTHORITY AGREEMENT

This Agreement is entered into this 6<sup>th</sup> day of September, 2013 pursuant to 35 Ill. Adm. Code 742.1020 by and between the **Warsaw ITCO** "Owner/Operator" and Illinois Department of Transportation "Highway Authority," collectively known as the "Parties."

**WHEREAS**, Warsaw ITCO is the owner or operator of one or more leaking underground storage tanks presently or formerly located at *IL Route 122, Minier, Illinois* ("the Site");

**WHEREAS**, as a result of one or more releases of contaminants from the above referenced underground storage tanks "the Release(s)", soil and/or groundwater contamination at the Site exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742;

**WHEREAS**, the soil and/or groundwater contamination exceeding Tier 1 residential remediation objectives extends or may extend into the Highway Authority's right-of-way;

**WHEREAS**, the Owner/Operator is conducting corrective action in response to the Release(s);

**WHEREAS**, the Parties desire to prevent groundwater beneath the Highway Authority's right-of-way that exceeds Tier 1 remediation objectives from use as a supply of potable or domestic water and to limit access to soil within the right-of-way that exceeds Tier 1 residential remediation objectives so that human health and the environment are protected during and after any access;

**NOW, THEREFORE**, the Parties agree as follows:

1. The recitals set forth above are incorporated by reference as if fully set forth herein.
2. The Illinois Emergency Management Agency has assigned incident number **981987** to the Release(s).
3. Attached as Exhibit A is a scaled map(s) prepared by the Owner/Operator that shows the Site and surrounding area and delineates the current and estimated future extent of soil and groundwater contamination above the applicable Tier 1 residential remediation objectives as a result of the Release(s).
4. Attached as Exhibit B is a table(s) prepared by the Owner/Operator that lists each contaminant of concern that exceeds its Tier 1 residential remediation objective, its Tier 1 residential remediation objective and its concentrations within the zone where Tier 1 residential remediation objectives are exceeded. The locations of the concentrations listed in Exhibit B are identified on the map(s) in Exhibit A.
5. Attached as Exhibit C is a scaled map prepared by the Owner/Operator showing the area of the Highway Authority's right-of-way that is governed by this agreement ("Right-of-Way"). Because Exhibit C is not a surveyed plat, the Right-of-Way boundary may be an approximation of the actual Right-of-Way lines.
6. The Highway Authority stipulates it has jurisdiction over the Right-of-Way that gives it sole control over the use of the groundwater and access to the soil located within or beneath the Right-of-Way.
7. The Highway Authority agrees to prohibit within the Right-of-Way all potable and domestic uses of groundwater exceeding Tier 1 residential remediation objectives.

8. The Highway Authority further agrees to limit access by itself and others to soil within the Right-of-Way exceeding Tier 1 residential remediation objectives. Access shall be allowed only if human health (including worker safety) and the environment are protected during and after any access. The Highway Authority may construct, reconstruct, improve, repair, maintain and operate a highway upon the Right-of-Way, or allow others to do the same by permit. In addition, the Highway Authority and others using or working in the Right-of-Way under permit have the right to remove soil or groundwater from the Right-of-Way and dispose of the same in accordance with applicable environmental laws and regulations. The Highway Authority agrees to issue all permits for work in the Right-of-Way, and make all existing permits for work in the Right-of-Way, subject to the following or a substantially similar condition:

As a condition of this permit the permittee shall request the office issuing this permit to identify sites in the Right-of-Way where a Highway Authority Agreement governs access to soil that exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742. The permittee shall take all measures necessary to protect human health (including worker safety) and the environment during and after any access to such soil.

9. This agreement shall be referenced in the Agency's no further remediation determination issued for the Release(s).
10. The Agency shall be notified of any transfer of jurisdiction over the Right-of-Way at least 30 days prior to the date the transfer takes effect. This agreement shall be null and void upon the transfer unless the transferee agrees to be bound by this agreement as if the transferee were an original party to this agreement. The transferee's agreement to be bound by the terms of this agreement shall be memorialized at the time of transfer in a writing ("Rider") that references this Highway Authority Agreement and is signed by the Highway Authority, or subsequent transferor, and the transferee.
11. This agreement shall become effective as a Highway Authority Agreement on the date the Agency issues a no further remediation determination for the Release(s). It shall remain effective as a Highway Authority Agreement until the Right-of-Way is demonstrated to be suitable for unrestricted use and the Agency issues a new no further remediation determination to reflect there is no longer a need for this agreement, or until the agreement is otherwise terminated or voided.
12. In addition to any other remedies that may be available, the Agency may bring suit to enforce the terms of this agreement or may, in its sole discretion, declare this agreement null and void if any of the Parties or any transferee violates any term of this agreement. The Parties or transferee shall be notified in writing of any such declaration.
13. This agreement shall be null and void as a Highway Authority Agreement if a court of competent jurisdiction strikes down any part or provision of the agreement.
14. This agreement supersedes any prior written or oral agreements or understandings between the Parties on the subject matter addressed herein. It may be altered, modified or amended only upon the written consent and agreement of the Parties.
15. Any notices or other correspondence regarding this agreement shall be sent to the Parties at following addresses:

Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, IL 62974-9276

If to Owner/Operator:

John Warsaw  
P. O. Box 886  
Minier, Illinois 61759

If to Department:

Illinois Department of Transportation  
Region Three Engineer  
Attn: District Four Environmental Studies Unit  
401 Main Street  
Peoria, Illinois 61602

And to:

Midwest Environmental Consulting  
Attn: Penny Silzer  
PO Box 614  
Tremont, Illinois 61568

And to:

Illinois Department of Transportation  
Attn: Assistant Chief Counsel  
2300 S. Dirksen Parkway, Room 313  
Springfield, Illinois 62764

16. This Agreement is not binding upon the Department until it is executed by the undersigned representative of the Department. Prior to execution by the undersigned representative of the Department this Agreement constitutes an offer by Owner/Operator. The duly authorized representatives of Owner/Operator have signed this Agreement and this Agreement is binding upon them, their successors and assigns.
17. The IEPA and Illinois Attorney General "AG" must review and approve this Agreement, and this Agreement shall be referenced in the IEPA's "No Further Remediation" determination in the chain of title for the Site in the county where the Site is located. This Agreement shall be null and void as a Highway Authority Agreement should the IEPA or AG not approve it or should it not be referenced in the "No Further Remediation" determination, provided, however, that this Agreement shall be effective between the Owner/Operator and the Department immediately upon signature by their representatives.
18. The Owner/Operator agrees to defend, indemnify and hold harmless the Department, and other highway authorities, if any, maintaining the highway Right-of-Way by an agreement with the Department, and the Department's agents, contractors or employees for all obligations asserted against or costs incurred by them, including reasonable attorney's fees and court costs, associated with the release of Contaminants from the Site, regardless whether said obligations or costs were caused by the negligence, but not the gross negligence, of them.
19. As an additional consideration, Owner/Operator agrees to reimburse the Department for reasonable costs to protect human health and the environment, including, but not limited to, identifying, investigating, handling, storing and disposing of contaminated soil and/or groundwater in the Right-of-Way as a result of the release of contaminants at this Site. It has been determined that the Department has not incurred any reimbursable costs at the time this Agreement is executed by the undersigned representative of the Department. If future costs are incurred, a cashier's check made payable to "Treasurer, State of Illinois" shall be tendered to the Department of Transportation upon demand by the Department.
20. Violation of the terms of this Agreement by Owner/Operator, or their successors in interest, may be grounds for voidance of this Agreement as a Highway Authority Agreement. Violation of the terms of this Agreement by the Department will not void this Agreement, unless the IEPA has determined that the violation is grounds for voiding this Agreement as a Highway Authority Agreement and the Department has not cured the violation within such time as IEPA has granted to cure the violation.

21. This Agreement is in settlement of claims the Department may have arising from the release of Contaminants into the Right-of-Way associated with IEMA incident number 981987.
22. Prior to accessing or granting access to the soil as provided in Paragraph 8 herein, the Department will first give Owner/Operator written notice, unless there is an immediate threat to the health or safety to any individual or to the public, that it intends to perform a site investigation in the Right-of-Way and remove or dispose of contaminated soil or groundwater to the extent necessary for its work. Failure to give notice is not a violation of this Agreement. The removal or disposal shall be based upon the site investigation (which may be modified by field conditions during excavation). A copy of the site investigation report will be provided to Owner/Operator. If practicable, as reasonably determined by the Department, the Department may provide Owner/Operator with an opportunity to perform the Site investigation and to remove and dispose of the contaminated soil and/or groundwater necessary for the Department's work in advance of that work.

The Owner/Operator shall reimburse the reasonable costs incurred by the Department to perform the site investigation and to dispose of any contaminated soil or groundwater, provided, however, that if notice to Owner/Operator has not been given and there was no immediate threat to health or safety, reimbursement for those costs shall be limited to \$10,000.00. There is a rebuttable presumption that the Contaminants found in the highway Right-of-Way arose from the release of Contaminants from the Site. Should Owner/Operator not reimburse the reasonable costs under the conditions set forth herein, this Agreement shall be null and void, at the Department's option, upon written notice to Owner/Operator by the Department that those costs have not been reimbursed. Owner/Operator may cure that problem within twenty working days by making payment, or may seek to enjoin that result.

23. The Department's sole responsibility under this Agreement with respect to others using the highway Right-of-Way under permit from the Department is to include the following, or similar language, in the future standard permit provisions and to make an effort to notify its current permit holders of the following:

As a condition of this permit the permittee shall request the office issuing this permit to identify sites in the Right-of-Way where a Highway Authority Agreement governs access to soil that exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742. The permittee shall take all measures necessary to protect human health (including worker safety) and the environment during and after any access to such soil.

Owner/Operator hereby releases the Department from liability for breach of this Agreement by others under permit and agrees to defend and indemnify the Department against claims that may arise from others under permit causing a breach of this Agreement. Owner/Operator agrees that its personnel, if any, at the Site who are aware of this Agreement will notify anyone they know is excavating in the Right-of-Way about this Agreement.

24. Should the Department breach this Agreement, Owner/Operator's sole remedy is for an action for damages in the Illinois Court of Claims. Any and all claims for damages against the Department, its agents, contractors, employees or its successors in interest arising at any time for a breach of paragraphs 7 and 8 of this Agreement are limited to an aggregate maximum of \$20,000.00. No other breach by the Department, its agents, contractors, employees and its successors in interest of a provision of this Agreement is actionable in either law or equity by Owner/Operator against the Department or them and Owner/Operator hereby releases the Department, its agents, contractors, employees and its successors in interest for any cause of action it may have against them, other than as allowed in this paragraph, arising under this Agreement or environmental laws, regulations or common law governing the contaminated soil or groundwater in the highway Right-of-Way. Should the Department convey, vacate or transfer jurisdiction of that highway Right-of-Way, Owner/Operator

may pursue an action under this Agreement against the successors in interest, other than a State agency, in a court of law.

25. This Agreement is entered into by the Department in recognition of laws passed by the General Assembly and regulations adopted by the Pollution Control Board which encourage a tiered-approach to remediating environmental contamination. This Agreement is entered into by the Department in the spirit of those laws and under its right and obligations as a highway authority.

Should any provisions of this Agreement be struck down as beyond the authority of the Department, however, this Agreement shall be null and void.

**IN WITNESS WHEREOF**, Owner/Operator, Warsaw ITCO, has caused this Agreement to be signed by its duly authorized representative.

BY: *John Warsaw*  
John Warsaw  
President

DATE: 15 August 2013

IN WITNESS WHEREOF, the Department has caused this Agreement to be signed by its Secretary.

Illinois Department of Transportation

BY: *Ann L. Schneider*  
Ann L. Schneider  
Secretary

DATE: 9/6/13

This Agreement is approved on behalf of the Office of the Illinois Attorney General.

BY: *Matthew J. Dunn*  
Matthew J. Dunn  
Assistant Attorney General  
Chief, Division of Environmental/Asbestos Litigation

DATE: 9/30/13

**Exhibit: A**

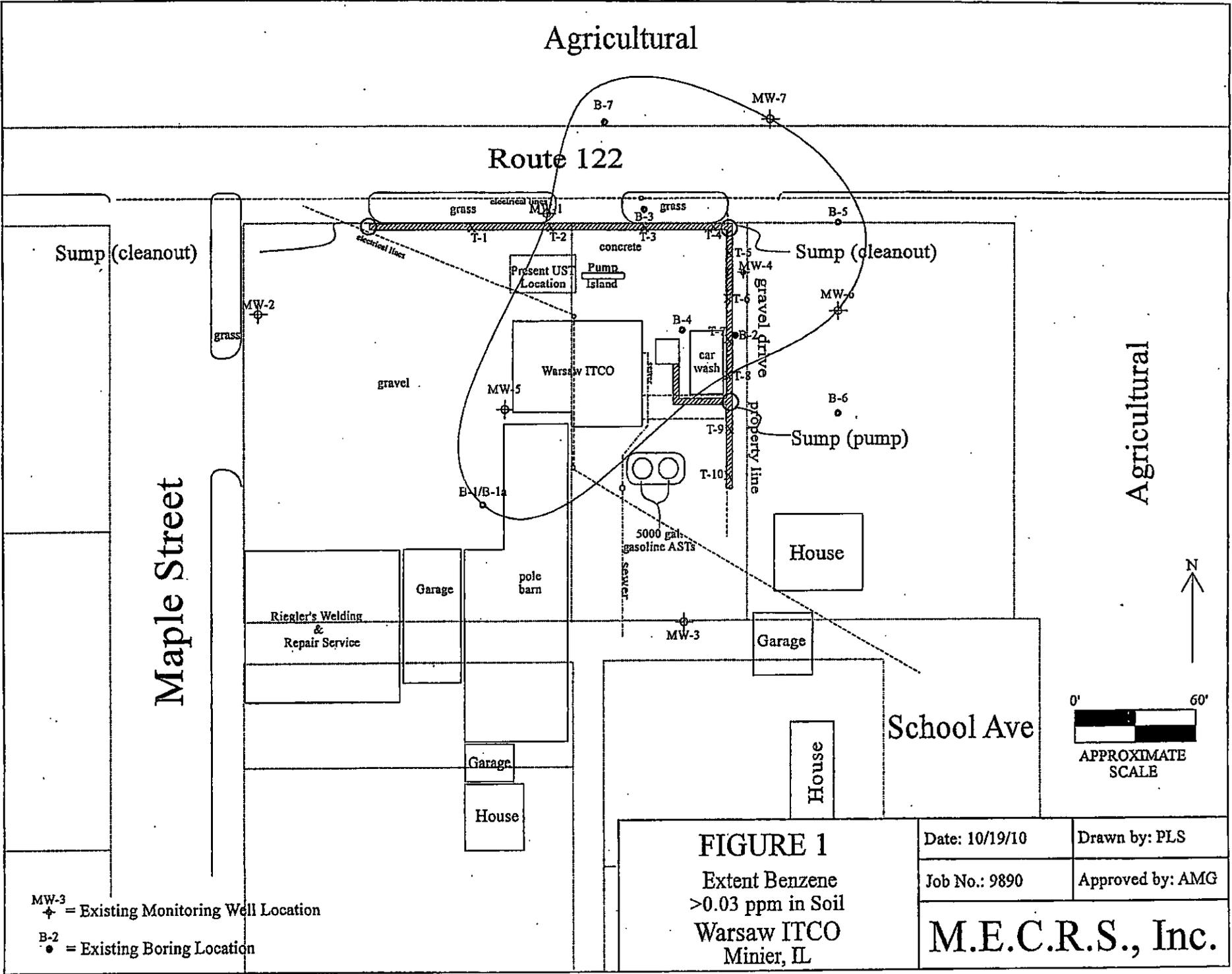
Agricultural

Route 122

Agricultural

Maple Street

School Ave



MW-3  
+ = Existing Monitoring Well Location  
B-2  
• = Existing Boring Location

**FIGURE 1**  
Extent Benzene  
>0.03 ppm in Soil  
Warsaw ITCO  
Minier, IL

Date: 10/19/10  
Job No.: 9890  
Drawn by: PLS  
Approved by: AMG

**M.E.C.R.S., Inc.**

HAA 1342

Agricultural

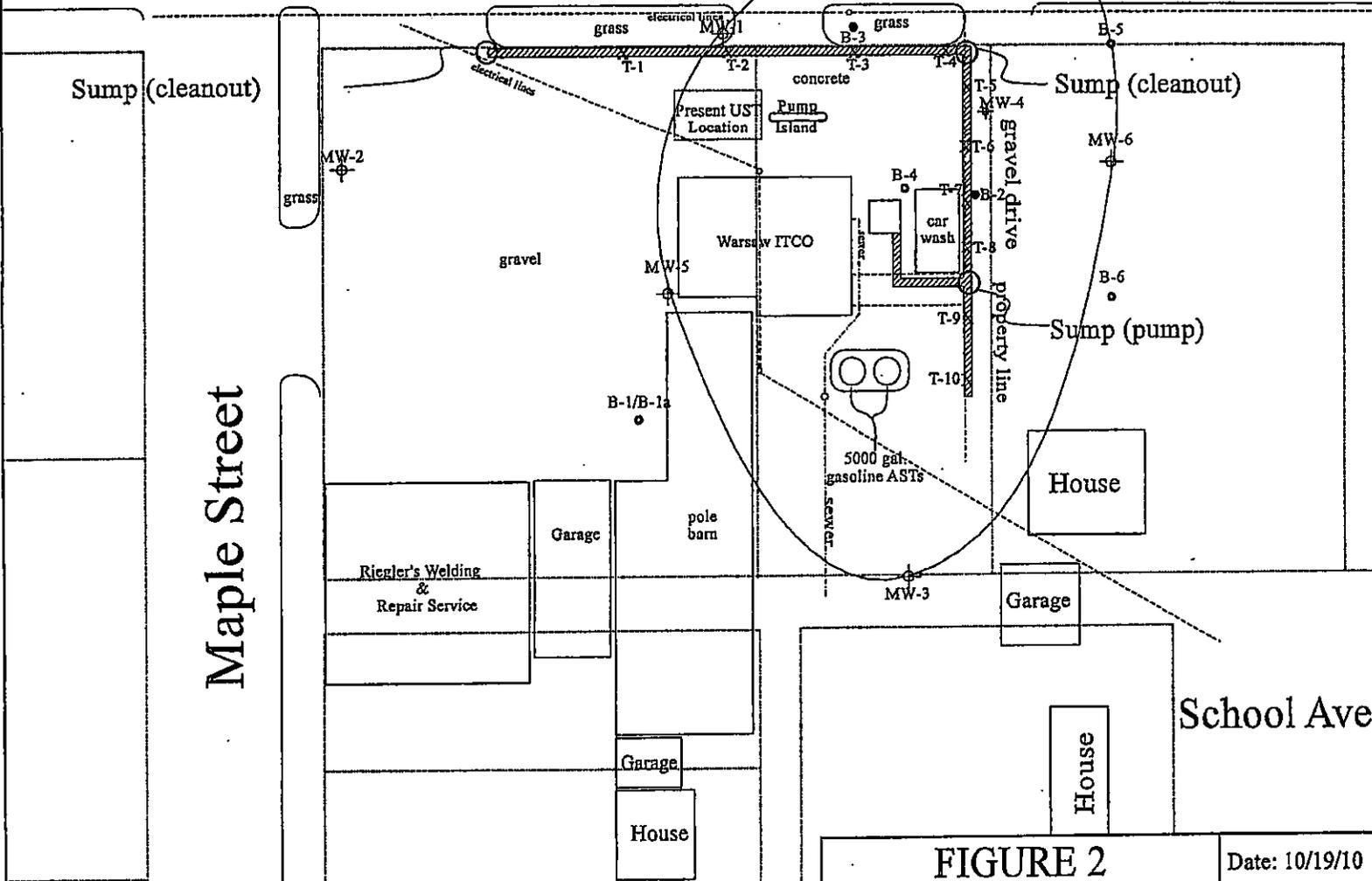
Route 122

Extent Benzene in GW > 0.005 ppm

Agricultural

Maple Street

School Ave



MW-3  
 + = Existing Monitoring Well Location  
 B-2  
 • = Existing Boring Location

**FIGURE 2**  
 Extent Benzene Contamination  
 In Groundwater  
 Warsaw ITCO  
 Miner, IL

Date: 10/19/10	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**

HAA 1342

**Exhibit: B**

**The appearance of some of the images  
following this page is due to**

**Poor Quality Original Documents**

**and not the scanning or filming processes.**

**Com Microfilm Company  
(217) 525-5860**

**TABLE 1.**  
**Soil Analytical Results**  
**Warsaw-ITCO**  
**Minier, IL**

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/2000	<0.002	<0.002	<0.002	<0.005	<0.011
B-2, 4-6'	5/3/2000	0.810	1.300	1.700	6.500	10.310
B-2, 6-8'	5/3/2000	0.600	0.220	0.420	1.900	3.140
B-2, 8-10'	5/3/2000	21.0	41.0	47.0	190.0	299.0
B-3, 6-8'	5/3/2000	0.400	0.120	0.210	0.460	1.190
B-3, 8-10'	5/3/2000	2.300	2.100	21	110	135.400
MW-1, 6-8'	5/4/2000	<0.002	<0.002	<0.002	<0.005	<0.011
MW-2, 8-10'	5/3/2000	<0.002	<0.002	<0.002	<0.005	<0.011
MW-3, 8-10'	5/3/2000	<0.002	<0.002	0.006	<0.005	<0.0147
MW-4, 4-6'	5/4/2000	0.230	0.220	0.870	2.500	3.820
MW-4, 6-8'	5/4/2000	0.300	1.200	5.400	20.000	26.900
B-4, 0.5-2.5'	8/23/2001	0.0081 M	0.019 M	0.0447 M	0.0772 M	0.149 M
B-4, 4-6'	8/23/2001	11.6 ME	42.7 ME	9.72 ME	38.0 ME	102.02 ME
B-5, 6-8'	8/23/2001	0.049	0.186 E	0.038	0.130	0.403
B-6, 4-6'	8/23/2001	0.020	0.053	0.031	0.090	0.194
B-6, 8-10'	8/23/2001	0.007	0.012	<0.0024	0.011	<0.0323
B-7, 8-10'	8/23/2001	0.0167 M	0.0615 M	0.0139 M	0.0395 M	0.1316 M
B-7, 12-14'	8/23/2001	0.754	<0.0613	<0.0613	<0.153	<1.0296
MW-5, 8-10'	8/23/2001	0.494 M	4.75 M	5.89 M	7.57 M	18.704 M
MW-6, 6-8'	8/23/2001	0.007	0.012	0.006	0.011	0.037
MW-7, 4-6'	8/23/2001	0.012	0.025	0.011	0.020	0.068
MW-7, 8-10	8/23/2001	0.0155 M	0.0202 M	0.007	0.012	0.054
T-1	10/20/2003	<0.0026	0.0032	<0.0026	<0.0065	<0.0149
T-2	10/20/2003	<0.0026	<0.0026	<0.0026	<0.0065	<0.0143
T-3	10/20/2003	<0.0024	0.0051	0.0051	0.0142	<0.0268
T-4	10/20/2003	<0.0024	<0.0024	<0.0024	<0.0059	<0.0131
T-5	10/20/2003	0.0034	0.0408	0.3600	0.9470	1.3512
T-6	10/20/2003	0.0853	0.6350	1.8400	7.1400	9.7003
T-7	10/20/2003	0.0855	0.0438	1.1200	2.4600	3.7093
T-8	10/20/2003	<0.0025	0.0066	0.0189	0.0568	<0.0848
T-9	10/20/2003	<0.0024	<0.0024	<0.0024	<0.0061	<0.0133
T-10	10/20/2003	<0.0025	<0.0025	<0.0025	<0.0062	<0.0137

## Notes:

- All results in mg/kg (parts per million, ppm).
- IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
0.03	12	13	150

- All bolded values are above Tier 1 Residential Cleanup Objectives
- M = Matrix interferences identified.
- E = Estimated - Value outside linear calibration curve.

Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois

HAA 1342

Sample #	Date	DTW	GWE	Benzene	Toluene	E-benzene	Xylenes	Total BTEX
----------	------	-----	-----	---------	---------	-----------	---------	------------

MW-1	Elevation Top of Casing	99.62						
SC	5/12/2000	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3
1	10/24/2000	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4
2	8/23/2001	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E
3	11/13/2001	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.41	94.21	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.65	94.97	NS	NS	NS	NS	NS

MW-2	Elevation Top of Casing	99.28						
SC	5/9/2000	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7
3	11/13/2001	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.12	94.16	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.38	94.90	NS	NS	NS	NS	NS

MW-3	Elevation Top of Casing	100						
SC	5/9/2000	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
3	11/13/2001	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.37	94.63	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.34	95.66	NS	NS	NS	NS	NS

MW-4	Elevation Top of Casing	99.84						
SC	5/9/2000	5.90	93.94	2,600	12,000	4,500	18,000	37,100
1	10/24/2000	7.80	92.04	2,300	5,200	4,000	13,000	24,500
2	8/23/2001	6.67	93.17	2,290 M	2,380 M	8,150	23,600 E	36,420 E
3	11/13/2001	6.11	93.73	1,910	3,960	3,360	10,000	19,230
4	2/14/2002	5.00	94.84	1,100	1,200	2,900	5,500	10,700
5	1/24/2005	4.47	95.37	NS	NS	NS	NS	NS

MW-5	Elevation Top of Casing	99.57						
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9
3	11/13/2001	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.86	1.4	2.2	1.5	4.5	9.6
5	1/24/2005	3.89	95.68	NS	NS	NS	NS	NS

MW-6	Elevation Top of Casing	99.37						
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5
3	11/13/2001	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.66	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	WELL ICED OVER		NS	NS	NS	NS	NS

MW-7	Elevation Top of Casing	100.07						
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	7.28	92.79	<2.0	<2.0	<2.0	5.9	<11.9
3	11/13/2001	6.23	93.84	117 E	<2.0	<2.0	<5.0	<126 E
4	2/14/2002	5.52	94.55	7	<1.0	<1.0	<3.0	<12.0
5	1/24/2005	--	--	NS	NS	NS	NS	NS

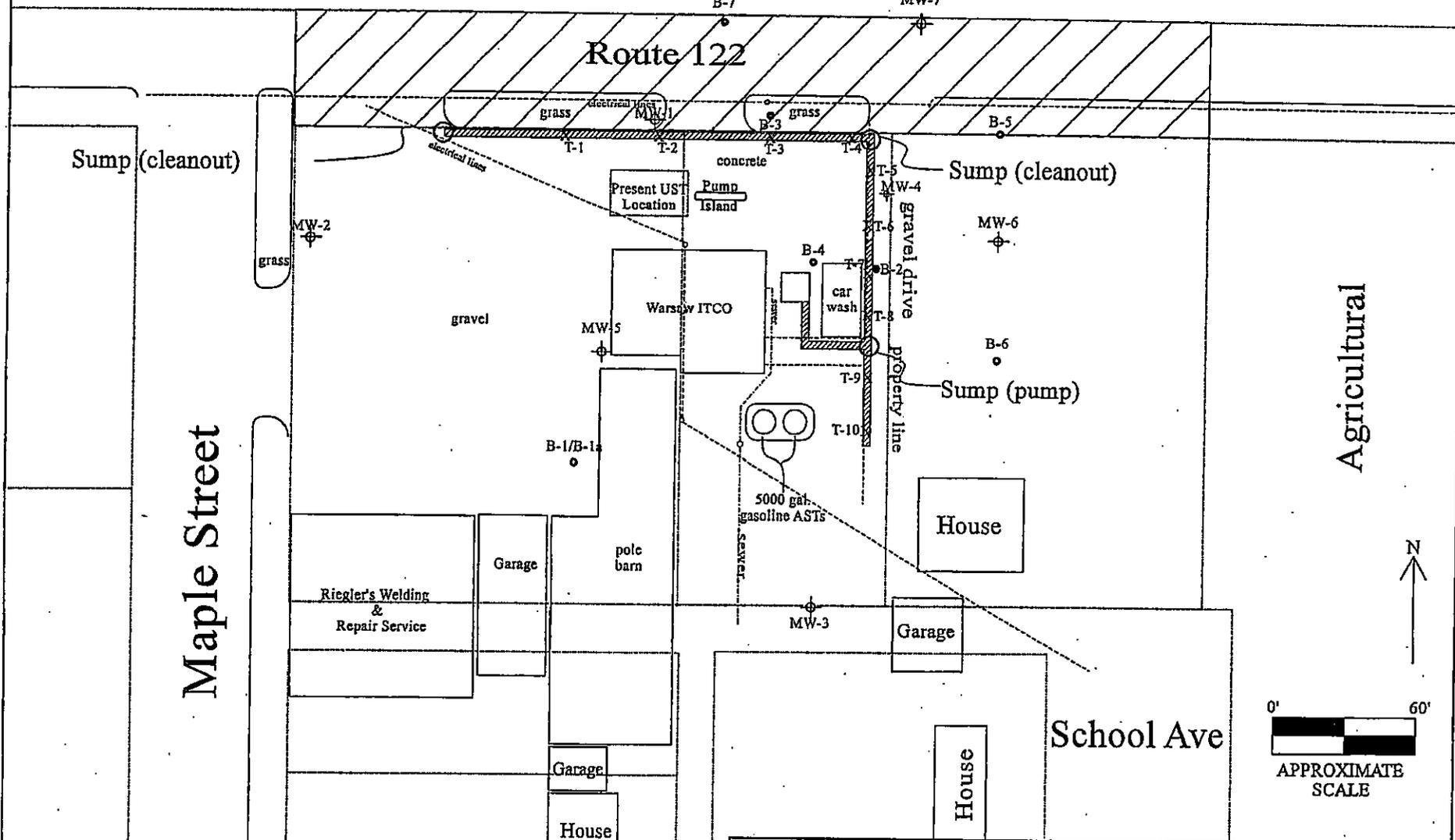
- All results reported in ug/kg (i.e. parts per billion, ppb)
- IEPA Tier 1 Cleanup Objectives (ug/kg):
- No data available
- MDL = Method Detection Limit
- DTW = Depth to Water
- GWE = Groundwater Elevation referenced to datum point
- NA/NS = Not analyzed/not sampled this event
- E = Estimated - value outside linear range
- M = Matrix interferences identified.

Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

Date	Average DTW
5/9/2000	5.85
10/24/2000	7.78
8/23/2001	6.09
11/13/2001	6.01
2/14/2002	5.12
1/24/2005	4.35
Cumulative DTW Average:	5.87

**Exhibit: C**

Agricultural



**FIGURE 3**  
 Highway Authority  
 Agreement Area  
 Warsaw ITCO  
 Minier, IL

Date: 10/19/10	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**

HAA 1342

Appendix F  
Budget Amendment

General Information for the Budget and Billing Forms

LPC#: 1790455007 County: Tazewell
City: Minier Site Name: Warsaw, Howard (Warsaw ITCO)
Site Address: Ill. Rte. 122
IEMA Incident No: 981987
IEMA Notification Date: August 11, 1998
Date this form was prepared: April 28, 2015

This form is being submitted as a (check one if applicable):

- Budget Proposal
[X] Budget Amendment (Budget Amendments must include only the costs over the previous budget.)
Billing Package

Please provide the name(s) and date(s) of report(s) documenting the costs as requested:

Name(s):

Date (s):

This package is being submitted for the site activities indicated below:

35 III. Adm. Code 734:

- Early Action
Free Produce Removal After Early Action
Site Investigation.....Stage 1: Actual Costs Stage 2: Stage 3:
[X] Corrective Action

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35 III. Adm. Code 732:

- Early Action
Free Produce Removal After Early Action
Site Classification
Low Priority Corrective Action
High Priority Corrective Action

35 III. Adm. Code 731

- Site Investigation
Corrective Action

## Budget Summary

Chose the applicable regulation:  734  732

<b>734</b>	Free Product	Stage 1 Site Investigation	Stage 2 Site Investigation	Stage 3 Site Investigation	Corrective Action
Drilling and Monitoring Well Costs Form					\$1,530.90
Analytical Costs Form					\$969.44
Remediation and Disposal Costs Form					\$0.00
UST Removal and Abandonment Costs Form					\$0.00
Paving, Demolition, and Well Abandonment Costs Form					\$0.00
Consulting Personnel Costs Form					\$10,217.13
Consultant's Materials Costs Form					\$185.90
Handling Charges Form	Handling charges will be determined at the time a billing package is submitted to the Illinois EPA. The amount of allowable charges will be determined in accordance with the				
<b>Total</b>					<b>\$12,903.37</b>

## General Information for the Budget and Billing Forms

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund.

Pay to the order of: John Warsaw

Send in care of: Midwest Environmental Consulting & Remediation Services, Inc

Address: PO Box 614

City: Tremont

State: IL

Zip: 61568

The payee is the:

Owner:

Operator

(Check one or both)

John Warsaw

5/7/15

W-9 must be submitted.

Signature of the owner or operator of the UST(s) (required)

Click [here](#) to print off a W-9 Form.

Number of petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101  101 or more:

Number of USTs at the site: 10 (Number of USTs includes USTs presently at the site and USTs that have been removed).

Number of incidents reported to the IEMA for this site: 1

Incidents Numbers assigned to the site due to releases from USTs: 981987

Please list all tanks that have ever been located at the site and tanks that are presently located at the site.

Product Stored in UST	Size (gallons)	Did UST have a release?	Incident No.	Type of Release Tank Leak / Overfill / Piping Leak
gasoline	500	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
gasoline	500	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
gasoline	2,000	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
diesel	2,500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		

# Drilling and Monitoring Well Costs Form

## 1. Drilling

Number of Borings to Be Drilled	Type HSA / PUSH / Injection	Depth (feet) of Each Boring	Total Feet Drilled	Reason for Drilling
1	PUSH	10.00	10.00	collect $f_{oc}$ sample
4	PUSH	15.00	60.00	define extent of Xylenes above $C_{sat}$
			0.00	
			0.00	
			0.00	
			0.00	

Subpart H minimum payment amounts applies.

	Total Feet	Rate per Foot (\$)	Total Cost (\$)
Total Feet via HSA:	70.00	\$21.87	\$1,530.90
Total Feet via PUSH:			\$0.00
Total Feet for Injection via PUSH:			\$0.00
Total Drilling Costs:			\$1,530.90

## 2. Monitoring / Recovery Wells

Number of Wells	Type of Well HSA / PUSH / 4" - 6" Recovery / 8" Recovery	Diameter of Well (inches)	Depth of Well (feet)	Total Feet of Wells to Be Installed (\$)
				0.00
				0.00
				0.00
				0.00
				0.00

Well Installation	Total Feet	Rate per Foot (\$)	Total Cost (\$)
Total Feet via HSA:			\$0.00
Total Feet via PUSH:			\$0.00
Total Feet of 4" or 6" Recovery:			\$0.00
Total Feet of 8' or Greater Recovery:			\$0.00
Total Well Costs:			\$0.00

<b>Total Drilling and Monitoring Well Costs:</b>	<b>\$1,530.90</b>
--	-------------------

## Analytical Costs Form

Laboratory Analysis	Number of Samples		Cost (\$) per Analysis		Total per Parameter
<b>Chemical Analysis</b>					
BTEX Soil with MTBE EPA 8260	8	x	\$103.26	=	\$826.08
BTEX Water with MTBE EPA 8260		x	\$98.41	=	\$0.00
COD (Chemical Oxygen Demand)		x	\$32.71	=	\$0.00
Corrosivity		x	\$16.36	=	\$0.00
Flash Point or Ignitability Analysis EPA 1010		x	\$35.99	=	\$0.00
Fraction Organic Carbon Content ( $f_{oc}$ ) ASTM-D 2974-00	1	x	\$46.16	=	\$46.16
Fat, Oil, & Grease (FOG)		x	\$65.43	=	\$0.00
LUST Pollutants Soil - analysis must include volatile, base/neutral, polynuclear aromatics and metals list in Section 732. Appendix B and 734. Appendix B.		x	\$755.72	=	\$0.00
Dissolved Oxygen (DO)		x	\$26.17	=	\$0.00
Paint Filter (Free Liquids)		x	\$15.27	=	\$0.00
PCB / Pesticides (combination)		x	\$37.08	=	\$0.00
PCBs		x	\$165.76	=	\$0.00
Pesticides		x	\$165.76	=	\$0.00
pH		x	\$15.27	=	\$0.00
Phenol		x	\$37.08	=	\$0.00
Polynuclear Aromatics PNAs or PAH SOIL EPA 8270		x	\$176.80	=	\$0.00
Polynuclear Aromatics PNA, PAH WATER EPA 8270		x	\$176.80	=	\$0.00
Reactivity		x	\$74.15	=	\$0.00
SVOC - Soil (Semi-Volatile Organic Compounds)		x	\$341.33	=	\$0.00
SVOC - Water (Semi-Volatile Organic Compounds)		x	\$341.33	=	\$0.00
TKN (Total Kjeldahl) "nitrogen"		x	\$47.98	=	\$0.00
TPH (Total Petroleum Hydrocarbons)		x	\$133.04	=	\$0.00
VOC (Volatile Organic Compound) - Soil (Non-Aqueous)		x	\$190.84	=	\$0.00
VOC (Volatile Organic Compound) - Water		x	\$184.29	=	\$0.00
Soil gas, BTEX		x	\$300.00	=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
<b>Geo-Technical</b>					
Bulk Density ( $\rho_b$ ) ASTM D4292 / D2937		x	\$23.99	=	\$0.00
Ex-Situ Hydraulic Conductivity / Permeability		x	\$278.08	=	\$0.00
Moisture Content (w) ASTM D2216-90 / D4643-87		x	\$13.09	=	\$0.00
Porosity		x	\$32.71	=	\$0.00
Rock Hydraulic Conductivity Ex-Situ		x	\$381.67	=	\$0.00
Sieve / Particle Size Analysis ASTM D422-63 / D1140-54		x	\$158.12	=	\$0.00
Soil Classification ASTM D2488-90 / D2487-90		x	\$74.15	=	\$0.00
Soil Particle Density ( $\rho_s$ ) ASTM D854-92		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00

## Analytical Costs Form

Metals Analysis					
Soil preparation fee for Metals Soil TCLP (one fee per soil sample)		x	\$86.15	=	\$0.00
Soil preparation fee for Metals Total Soil (one fee per soil sample)		x	\$17.45	=	\$0.00
Water Preparation fee for Metals in Water (one fee per water sample)		x	\$12.00	=	\$0.00
Arsenic TCLP Soil		x	\$17.45	=	\$0.00
Arsenic Total Soil		x	\$17.45	=	\$0.00
Arsenic Water		x	\$19.63	=	\$0.00
Barium TCLP Soil		x	\$10.90	=	\$0.00
Barium Total Soil		x	\$10.90	=	\$0.00
Barium Water		x	\$13.09	=	\$0.00
Cadmium TCLP Soil		x	\$17.45	=	\$0.00
Cadmium Total Soil		x	\$17.45	=	\$0.00
Cadmium Water		x	\$19.63	=	\$0.00
Chromium TCLP Soil		x	\$10.90	=	\$0.00
Chromium Total Soil		x	\$10.90	=	\$0.00
Chromium Water		x	\$13.09	=	\$0.00
Cyanide TCLP Soil		x	\$30.53	=	\$0.00
Cyanide Total Soil		x	\$37.08	=	\$0.00
Cyanide Water		x	\$37.08	=	\$0.00
Iron TCLP Soil		x	\$10.90	=	\$0.00
Iron Total Soil		x	\$10.90	=	\$0.00
Iron Water		x	\$13.09	=	\$0.00
Lead TCLP Soil		x	\$17.45	=	\$0.00
Lead Total Soil		x	\$17.45	=	\$0.00
Lead Water		x	\$19.63	=	\$0.00
Mercury TCLP Soil		x	\$20.72	=	\$0.00
Mercury Total Soil		x	\$10.90	=	\$0.00
Mercury Water		x	\$28.35	=	\$0.00
Selenium TCLP Soil		x	\$17.45	=	\$0.00
Selenium Total Soil		x	\$17.45	=	\$0.00
Selenium Water		x	\$16.36	=	\$0.00
Silver TCLP Soil		x	\$10.90	=	\$0.00
Silver Total Soil		x	\$10.90	=	\$0.00
Silver Water		x	\$13.09	=	\$0.00
Metals TCLP Soil (a combination of all RCRA metals)		x	\$112.32	=	\$0.00
Metals Total Soil (a combination of all RCRA metals)		x	\$102.51	=	\$0.00
Metals Water (a combination of all RCRA metals)		x	\$129.77	=	\$0.00
Other					
EnCore Sampler, purge-and-trap sampler or equivalent sampling device	8	x	\$12.15	=	\$97.20
Sample Shipping per sampling event <sup>1</sup>		x	\$54.52	=	\$0.00

<sup>1</sup>A sampling event, at a minimum, is all samples (soil and groundwater) collected in a calendar day.

Total Analytical Costs:                     \$969.44                    

R0955

### Consulting Personnel Costs Form

Employee Name	Personnel Title*	Hours	Rate *	Total \$
Remediation Category	Task			
Allan Green	Senior Project Manager	25	\$121.49	\$3,037.25
CA	project oversight, planning, permits, subcontractors			
Penny Silzer	Project Manager	50	\$109.34	\$5,467.00
CA	oversight of field activities, sample collection and preparation, report prep. Reim			
Andrew Fetterolf	Technician IV	6.00	\$72.88	\$437.28
CA	purge and sample groundwater monitoring wells, collect depth to water in all wells			
Penny Silzer	Sr. Geologist, PG	5	\$133.64	\$668.20
CA	review and certify reports and reimbursements			
Gaye Lynn Green	Sr. Acct Technician	5	\$66.81	\$334.05
CA	reimbursement forms			
Gaye Lynn Green	Sr. Admin. Assistant	5	\$54.67	\$273.35
CA	format, finalize, copy and submit reports and reimbursements			
				\$0.00
				\$0.00

\*Refer to the applicable Maximum Payment Amounts document.

<b>Total of Consulting Personnel Costs</b>	<b>\$10,217.13</b>
--	--------------------

**Consultant's Materials Costs Form**

Consulting Materials Costs:

Materials, Equipment, or Field Purchases	Time or Amount Use	Rate (\$)	Units	Total Cost
Remediation Category	Description/Justification			
Company Vehicle Mileage	105.00	\$0.58	/mile	<b>\$60.90</b>
CA - field	site visits and mobilization to and from site			
Well Sampling Equipment	1.00	\$25.00	/day	<b>\$25.00</b>
CA - field	for sampling groundwater monitoring wells			
PID	1	\$100.00	/day	<b>\$100.00</b>
CA- Field	soil sample screening			
				\$0.00
				\$0.00
				\$0.00
				\$0.00

**Total Consultant's Material's Costs: \$185.90**

**Owner/Operator and Licensed Professional Engineer/Geologist Budget Certification Form**

I hereby certify that I intend to seek payment from the UST Fund for costs incurred while performing corrective action activities for Leaking UST incident 981987. I further certify that the costs set forth in this budget are necessary activities and are reasonable and accurate to the best of my knowledge and belief. I also certify that the costs included in this budget are not for corrective action in excess of the minimum requirements of 415 ILCS 5/57 and no costs are included in this budget which are not described in the corrective action plan, and no costs exceed Subpart H: Maximum Payment Amounts, Appendix D Sample Handling and Analysis amounts, and Appendix E Personnel Titles and Rates of 35 Ill. Adm. Code 732 or 734. I further certify that costs ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code Section 732.606 or 734.630 are not included in the budget proposal or amendment. Such ineligible costs include but are not limited to:

- Costs associated with ineligible tanks.
- Costs associated with site restoration (e.g., pump islands, canopies).
- Costs associated with utility replacement (e.g., sewers, electrical, telephone, etc).
- Costs incurred prior to IEMA notification.
- Costs associated with planned tank pulls.
- Legal fees or costs.
- Costs incurred prior to July 28, 1989.
- Costs associated with installation of new USTs or the repair of existing USTs.

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MAY 15 2015  
**EPA/BOL**

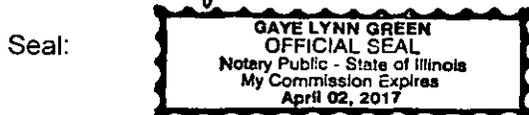
Owner/Operator: John Warsaw

Authorized Representative: John Warsaw Title: Owner

Signature: [Signature] Date: 5/2/15

Subscribed and sworn to before me the 7<sup>th</sup> day of May, 2015.  
*(Budget Proposals and Budget Amendments must be notarized when the certification is signed.)*

[Signature]  
(Notary Public)



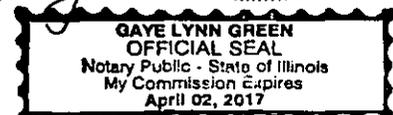
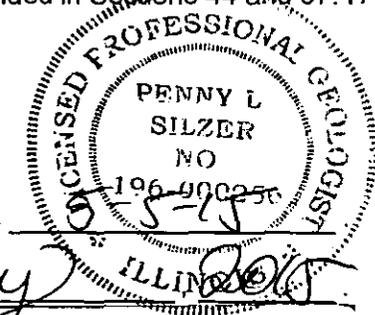
In addition, I certify under penalty of law that all activities that are the subject of this plan, budget or report were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan, budget, or report and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in the plan, budget, or report has been completed in accordance with the Environmental Protection Act [415 ILCS5], 35 Ill. Adm. Code 732-734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

L.P.E./L.P.G.: Penny Silzer L.P.E./L.P.G. Seal:

L.P.E./L.P.G. Signature: [Signature] Date: 5-5-15

Subscribed and sworn to before me the 5<sup>th</sup> day of May, 2015.

[Signature]  
(Notary Public)



The Illinois EPA is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder.

**R0958**



# Illinois Environmental Protection Agency

1790455007 - Tazewell Co.  
Warsaw, Howard  
Incident #981987  
LUST Tech

Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/7 - 5/7.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation, orally or in writing, in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/44 and 5/7.17). This form has been approved by the Forms Management Center.

## Leaking Underground Storage Tank Program Election to Proceed as "Owner"

For additional information,  
see the new fact sheet.

### A. Site Identification

IEMA Incident # (6- or 8-digit): 981987 + 991610 IEPA LPC # (10-digit): 1790455007  
Site Name: Minier / Warsaw Howard  
Site Address (Not a P.O. Box): ITCO / Rt. 122  
City: Minier County: Tazewell Zip Code: 61759

Leaking UST Technical File

### B. Election

Pursuant to Section 57.2 of the Environmental Protection Act [415 ILCS 5/57.2], I hereby elect to proceed as an "owner" under Title XVI of the Environmental Protection Act. I certify that I have acquired an ownership interest in the above-named site, that one or more underground storage tanks registered with the Office of the State Fire Marshal have been removed from the site, and that corrective action on the site has not yet resulted in the issuance of a "no further remediation letter" by the Illinois EPA pursuant to Title XVI of the Environmental Protection Act.

I understand that by making this election I become subject to all of the responsibilities and liabilities of an owner under Title XVI of the Environmental Protection Act and the Illinois Pollution Control Board's rules at 35 Ill. Admin. Code 332. I further understand that, once made, this election cannot be withdrawn.

**RECEIVED**

MAY 15 2015

### C. Signature

**IEPA/BOL**

Person electing to proceed as "owner":

Name: Warsaw Family Cad Trust  
John D. Warsaw, Trustee  
Contact: \_\_\_\_\_  
Address: 102 Butlernut Dr  
City: Morton  
State: IL  
Zip Code: 61550 - 1510  
Phone: 309 648-3389  
Signature: [Signature]  
Date: 5-1-15

IEPA - DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

JUN 11 2015

REVIEWER EAV

1790455007 - Tazewell Co.  
Warsaw, Howard  
Incident # 981987  
LUST Tech



# Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation, orally or in writing, in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/44 and 57.17). This form has been approved by the Forms Management Center.

## Leaking Underground Storage Tank Program Land Trust Beneficial Interest Disclosure/Designation of Signature Authority

### A. Site Identification

IEMA Incident # (6- or 8-digit): 981987 + 991610 IEPA LPC# (10-digit): 1790455007  
Site Name: Misier / Warsaw Howard  
Site Address (not a P.O. Box): ITCO / Rt 122  
City: Misier County: Tazewell Zip Code: 61759  
Leaking UST Technical File

### B. Land Trust Disclosure

This form must be completed if the owner or operator performing corrective action is a land trust. The disclosure of beneficial interests in the land trust is required under the Land Trust Beneficial Interest Disclosure Act [765 ILCS 405]. A new disclosure form must be submitted if there is a change in any of the information provided.

Name of Land Trust: Warsaw family Land Trust  
Trustee Name and Address: John D. Warsaw Trustee  
102 Buttnerut Dr., Morton, IL 61550-1210

#### Beneficiaries' Names, Addresses, and Interests in the Land Trust:

Each beneficiary must be disclosed, regardless of the beneficiary's interest in the land trust. Identified beneficiaries cannot be nominees for other individuals or entities. 765 ILCS 405/2.

- |                                 |          |
|---------------------------------|----------|
| 1. <u>John D. Warsaw</u>        | 2. _____ |
| <u>102 Buttnerut Dr</u>         | _____    |
| <u>Morton, IL 61550-1210</u>    | _____    |
| <u>100% beneficial interest</u> | _____    |
| 3. _____                        | 4. _____ |
| _____                           | _____    |
| _____                           | _____    |
| _____                           | _____    |

IEPA DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

JUN 03 2015

REVIEWER: JKS

Attach additional sheets as necessary.

RECEIVED

MAY 15 2015

IEPA/BOL

**C. Designation of Signature Authority**

If there is more than one beneficiary, the following one is hereby appointed as the representative to act on behalf of all beneficiaries with respect to the Leaking Underground Storage Tank Program, including, but not limited to, signature authority for all documents requiring owner or operator signature. The appointed representative is a beneficiary of the land trust with sufficient beneficial interest to meet the definition of "owner" or "operator" as defined by 35 Illinois Administrative Code 734, 732, or 731.

Representative Beneficiary Name and Address: John D. Warsaw  
102 Rutland Dr  
Worston, IL 61550-1210

**D. Certification**

I certify under penalty of law that the information provided in this disclosure form and in any addendum attached hereto is a complete disclosure of all holders of a beneficial interest in the land trust identified above, and that, to the best of my knowledge and belief, the information presented is accurate and complete. I also certify the appointment of the above-named beneficiary as my representative with respect to the Leaking Underground Storage Tank Program. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA including, but not limited to, fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17] and in Section 3 of the Land Trust Beneficial Interest Disclosure Act [765 ILCS 405/3].

Beneficiary Name: John D. Warsaw  
Beneficiary Signature: John D. Warsaw Date: 5-1-2015

Beneficiary Name: \_\_\_\_\_

Beneficiary Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Attach additional sheets as necessary.



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

BRUCE RAUNER, GOVERNOR

LISA BONNETT, DIRECTOR

217/524-3300

**CERTIFIED MAIL**

**MAY 28 2015**

**7013 2630 0001 4708 7553**

Warsaw Family Land Trust  
John D. Warsaw, Trustee  
102 Butternut Drive  
Morton, IL 61550-1210

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw ITCO/ Rt. 122  
Leaking UST Incident No. 981987 and 991610  
Leaking UST Technical File

EPA - DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

JUN 11 2015

REVIEWER EAV

Dear Mr. Warsaw:

On May 15, 2015, the Illinois Environmental Protection Agency (Illinois EPA) received the Election to Proceed as "Owner" form (electing to proceed under Title XVI of the Act as amended by Public Act 94-0274) dated May 1, 2015 for the above-referenced incident. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

By signing the form, you certified that you have acquired an ownership interest in the above-referenced site, one or more underground storage tanks registered with the Office of the State Fire Marshal have been removed from the site, and corrective action on the site has not yet resulted in the issuance of a "no further remediation letter" by the Illinois EPA pursuant to Title XVI of the Act. Based upon this certification, your Election to Proceed as "Owner" is accepted (Section 57.13 of the Act and 35 Ill. Adm. Code 734.105).

As the new owner, you may be eligible to access the Underground Storage Tank Fund for payment of costs related to remediation of the release. For information regarding eligibility and the deductible amount to be paid, please contact the Office of the State Fire Marshal at 217/785-5878.

Submit all future correspondence to:

Illinois Environmental Protection Agency  
Bureau of Land -- #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Springfield, IL 62794-9276

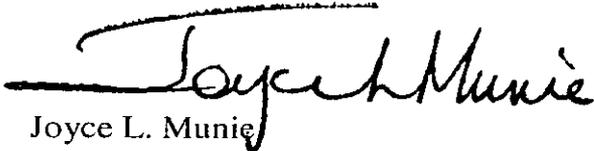
R0962

Page 2

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

If you have any questions or need further assistance, please contact Brad Dilbaitis at (217) 785-8378 or [Bradley.Dilbaitis@illinois.gov](mailto:Bradley.Dilbaitis@illinois.gov).

Sincerely,

A handwritten signature in black ink that reads "Joyce L. Munie". The signature is written in a cursive style with a long horizontal line above the first few letters.

Joyce L. Munie  
Acting Manager, Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

JLM:BD\981987-electapp.docx

c: Midwest Environmental Consulting & Remediation Services, Inc.  
BOL File

**R0963**



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

BRUCE RAUNER, GOVERNOR

LISA BONNETT, DIRECTOR

217/524-3300

**CERTIFIED MAIL**

MAY 28 2015

7013 2630 0001 4708 7553

Warsaw Family Land Trust  
John D. Warsaw, Trustee  
102 Butternut Drive  
Morton, IL 61550-1210

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw ITCO/ Rt. 122  
Leaking UST Incident No. 981987 and 991610  
Leaking UST Technical File

EPA DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

JUN 16 2015

REVIEWER: JKS

Dear Mr. Warsaw:

On May 15, 2015, the Illinois Environmental Protection Agency (Illinois EPA) received the Election to Proceed as "Owner" form (electing to proceed under Title XVI of the Act as amended by Public Act 94-0274) dated May 1, 2015 for the above-referenced incident. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the envelope, or on the front if space permits.</li> </ul>	<p>A. Signature <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p><i>x Rose Warsaw</i></p> <p>B. Received by (Printed Name) <input type="checkbox"/> C. Date of Delivery</p> <p><i>Rose Warsaw 6-1-15</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input type="checkbox"/> No If YES, enter delivery address below:</p>
<p>1. Article Addressed to:</p> <p><b>Warsaw Family Land Trust</b> <b>Attn: John D. Warsaw</b> <b>102 Butternut Drive</b> <b>Morton, IL 61550-1210</b></p>	<p><i>4/11/13 981987</i></p> <p>3. Service Type</p> <p><input checked="" type="checkbox"/> Certified Mail® <input type="checkbox"/> Priority Mail Express™</p> <p><input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Insured Mail <input type="checkbox"/> Collect on Delivery</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label)</p>	<p><i>4013 2630 0001 4708 7553</i></p>

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Restrictions (Endorsement)

**Warsaw Family Land Trust**

**Attn: John D. Warsaw**

**102 Butternut Drive**

**Morton, IL 61550-1210**

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SPRINGFIELD, IL 62794-9276



**LEAKING UST TECHNICAL REVIEW NOTES**

Reviewed by: Brad Dilbaitis  
Date Reviewed: 5/28/2015

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 22  
Leaking UST Incident No: 981987 & 991610  
Leaking UST Technical File

IEPA-DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

**Document(s) Reviewed:**  
5/5/2015 Corrective Action Plan and Budget—received 5/15/15

JUN 11 2015

**General Site Information:**

**REVIEWER EAV**

Site subject to: 734

IEMA date(s): 8/11/1998 & 7/6/1999	Payment from the Fund: yes—yes
UST system removed: yes—7/6/1999	OSFM Fac. ID #: 3005023
Encountered groundwater: yes	SWAP mapping and evaluation completion date: 4/7/2015
Free product: no	Site placement correct in SWAP: yes
Current/past land use: gasoline service station	MTBE > 40 ppb in groundwater: N/A
Size & product of USTs: (1) 2,000g and (2) 500g gasoline USTs	
Is site located in EJ area? no	Is investigation of indoor inhalation exposure route required? no

**Corrective Action Plan/Budget Review Notes:**

- Previously proposed closure based on institutional controls—Highway Authority Agreement, ELUC, groundwater ordinance with MOU
- Collected (8) additional soil samples November 2014 to gauge current contaminant levels
- Soil borings GP-1 through GP-7 were approved to determine current concentrations of COCs in the soil in areas where soil contamination was previously found—B-2 (GP-6); B-3 (GP-3); MW-4 (GP-5); B-4 (GP-7); B-5 (GP-4); B-1 (GP-2); MW-5 (GP-1)
- Detected significant concentrations of xylenes (above C<sub>sat</sub> limit) in one soil boring (GP-7) at 1,200 mg/kg
  - Benzene 37.4 mg/kg (exceeds Tier 1 SCGIER, inhalations, residential ingestion)
  - Ethylbenzene 272 mg/kg (exceeds Tier 1 SCGIER, construction worker inhalation, C<sub>sat</sub>)
  - Toluene 629 mg/kg (exceeds Tier 1 SCGIER, construction worker inhalation, C<sub>sat</sub>)
  - Xylenes 1,200 mg/kg (exceeds Tier 1 SCGIER, inhalations, C<sub>sat</sub>)
- Had been approved to collect groundwater samples in MW-4 and MW-7 but neither could be located
- Proposing to complete (1) soil boring near MW-4 to collect a soil sample from a boring near GP-5 at a depth of 4-6' for f<sub>oc</sub> analysis—the f<sub>oc</sub> analysis was previously completed on B-4 (sample received by the lab on 8/24/01), which is located right in the middle of the contamination—the soil sample from which the f<sub>oc</sub> is being used was one of the most contaminated soil samples on site—the f<sub>oc</sub> from B-4 can't be used in the TACO calculations

- Consultant will calculate a Tier 2 soil saturation limit for toluene, ethylbenzene and total xylenes using the updated  $f_{oc}$  value
- The consultant states that, based on experience, it is probable that the xylenes concentration in soil will remain above the calculated Tier 2 site-specific  $C_{sat}$  value even with determination of the site-specific  $f_{oc}$ —I assume that this means that the consultant expects that the  $f_{oc}$  analysis will be less than .027 g/g (this  $f_{oc}$  calculates a site-specific  $C_{sat}$  of 1,201 mg/kg, using the parameters provided by the consultant)
- Proposing to advance (4) soil borings, one boring approximately 20 feet in each direction from GP-7, to better define the proposed excavation area (this could make for a much larger excavation than is needed)
- Soil data collected will be used to determine the volume of shallow soil where concentrations of xylenes exceeds the  $C_{sat}$  limit—excavation is anticipated
- Assuming that the four soil borings have total xylenes concentrations less than the Tier 2  $C_{sat}$ , the excavation will measure 40' x 40' x 5'—a 296 cubic yard excavation which extends under the entire car wash to the east and a garage to the west
- If I were to agree with the consultant and assume that the  $f_{oc}$  value from the proposed analysis produces a  $C_{sat}$  for xylenes less than 1,200 ppm, requiring some sort of excavation, does the approval of the (4) soil borings, each 20' from GP-7, constitute approval for a 40' x 40' x 5' excavation to remove the soil or can the excavation limits somehow be prorated from 20' from center based on the yet-to-be-determined  $C_{sat}$  calculation(s)?

**Site-specific parameters per 734.410:**

Hydraulic conductivity (K)	3.14 x 10 <sup>-4</sup> cm/sec
Soil bulk density ( $\rho_b$ )	1.77 g/cm <sup>3</sup> (B-4—4-6' bgs)
Soil particle density ( $\rho_s$ )	2.66 g/cm <sup>3</sup> (subsurface sample)
Moisture content (w)	0.171 g <sub>soil</sub> /g <sub>water</sub> (B-4—4-6' bgs)
Organic carbon content ( $f_{oc}$ )	0.0255 g/g (B-4—4-6' bgs)—cannot use

- The consultant stated in the 11/19/2010 Corrective Action Plan that a slug test would be done on MW-1 to determine the hydraulic conductivity—the next Corrective Action Plan presents the hydraulic conductivity as 3.14 x 10<sup>-4</sup> with no supporting documentation for the slug test—this is needed—they also previously mentioned an ex situ hydraulic conductivity analysis—not sure where this K value comes from

**Corrective Action Budget:**

Drilling & Monitoring Well Costs	\$1,530.90
Analytical Costs	\$969.44
Remediation & Disposal Costs	\$0.00
UST Removal & Abandonment Costs	\$0.00
Paving, Demo & Well Aband. Costs	\$0.00
Consulting Personnel Costs	\$10,217.13
Consultant's Materials Costs	\$185.90

**Illinois EPA Decision:**

- The plan relies on a presumed excavation of  $C_{sat}$  soil based on an assumption that the  $f_{oc}$  analysis will provide a  $f_{oc}$  value less than 2.70 g/g—the excavation itself is already determined at 40' x 40' x 5' (assuming that we excavate from clean boring to clean boring) and will remove approximately 300 cubic yards of soil
- Will approve the costs associated with the (4) additional soil borings even though it hasn't technically been determined that an excavation will be necessary
- The locations of these (4) proposed borings should also be addressed—it doesn't seem likely that the soil exceeding the site-specific Tier 2  $C_{sat}$  exceedances will require an excavation this large
- Will approve the Corrective Action Plan and Budget—excavation size will be addressed in the next Corrective Action Plan

BD\CAP2notes.docx



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829  
BRUCE RAUNER, GOVERNOR LISA BONNETT, DIRECTOR

217/524-3300

JUN 03 2015

CERTIFIED MAIL

7013 2630 0001 4708 7836

Warsaw ITCO  
John Warsaw  
P.O Box 886  
Minier, IL 61759

EPA-DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 122  
Leaking UST Incident No. 981987 and 991610  
Leaking UST Technical File

JUN 16 2015

REVIEWER: JKS

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Corrective Action Plan (plan) submitted for the above-referenced incident. This plan, dated May 5, 2015, was received by the Illinois EPA on May 15, 2015. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

Pursuant to Sections 57.7(b)(2) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(a), the plan is approved. The activities proposed in the plan are appropriate to demonstrate compliance with Title XVI of the Act. Please note that all activities associated with the remediation of this release proposed in the plan must be executed in accordance with all applicable regulatory and statutory requirements, including compliance with the proper permits.

In addition, the total budget is approved for the amounts listed in Attachment A. Please note that the costs must be incurred in accordance with the approved plan. Be aware that the amount of payment from the Fund may be limited by Sections 57.7(c), 57.8(d), 57.8(e), and 57.8(g) of the Act, as well as 35 Ill. Adm. Code 734.630 and 734.655.

NOTE: Pursuant to Section 57.8(a)(5) of the Act, if payment from the Fund will be sought for any additional costs that may be incurred as a result of the Illinois EPA's modifications, an amended budget must be submitted. Amended plans and/or budgets must be submitted and approved prior to the issuance of a No Further Remediation (NFR) Letter. Costs associated with a plan or budget that have not been approved prior to the issuance of an NFR Letter will not be paid from the Fund.

Pursuant to Sections 57.7(b)(5) and 57.12(c) and (d) of the Act and 35 Ill. Adm. Code 734.100 and 734.125, the Illinois EPA requires that a Corrective Action Completion Report that achieves compliance with applicable remediation objectives be submitted within 30 days after completion of the plan to:

Illinois Environmental Protection Agency  
Bureau of Land - #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

If within four years after the approval of this plan, compliance with the applicable remediation objectives has not been achieved and a Corrective Action Completion Report has not been submitted, the Illinois EPA requires the submission of a status report pursuant to Section 57.7(b)(6) of the Act.

If you have any questions or need further assistance, please contact Brad Dilbaitis at (217) 785-8378 or [Bradley.Dilbaitis@illinois.gov](mailto:Bradley.Dilbaitis@illinois.gov).

Sincerely,



Thomas A. Henninger  
Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

TAH:BD\CAP2appBUDapp.docx

Attachment: Attachment A

c: Midwest Environmental Consulting & Remediation Services, Inc.  
BOL File

Attachment A

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 122  
Leaking UST Incident No. 981987 and 991610  
Leaking UST Technical File

The budget was previously approved for:

\$2,264.40	Drilling and Monitoring Well Costs
\$2,908.56	Analytical Costs
\$1,191.08	Remediation and Disposal Costs
\$0.00	UST Removal and Abandonment Costs
\$0.00	Paving, Demolition, and Well Abandonment Costs
\$9,481.11	Consulting Personnel Costs
\$185.90	Consultant's Materials Costs

As a result of review of the budget at-hand, the following amounts are approved:

\$1,530.90	Drilling and Monitoring Well Costs
\$969.44	Analytical Costs
\$0.00	Remediation and Disposal Costs
\$0.00	UST Removal and Abandonment Costs
\$0.00	Paving, Demolition, and Well Abandonment Costs
\$10,217.13	Consulting Personnel Costs
\$185.90	Consultant's Materials Costs

Handling charges will be determined at the time a billing package is reviewed by the Illinois EPA. The amount of allowable handling charges will be determined in accordance with Section 57.1(a) of the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code) 734.635.

Therefore, the total cumulative budget is approved for:

\$3,795.30	Drilling and Monitoring Well Costs
\$3,878.00	Analytical Costs
\$1,191.08	Remediation and Disposal Costs
\$0.00	UST Removal and Abandonment Costs
\$0.00	Paving, Demolition, and Well Abandonment Costs
\$19,698.24	Consulting Personnel Costs
\$371.80	Consultant's Materials Costs

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R0971

LPC#1790455007 Tazewell County  
Warsaw, Howard  
Incident#981987 + 991610  
LUST TECH

**Midwest Environmental Consulting & Re**

**22200 Illinois Route 9 • P.O. Box 614**

**Tremont, IL 61568-0614**

**Phone : (309) 925-5551 • Fax : (309) 925-5606**

**E-mail : mdwstenv@frontier.com**

October 18, 2016

Mr. Brad Dilbaitis  
Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Re: LPC #1790455007 – Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 981987  
LUST Technical File

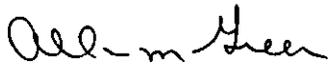
Dear Brad:

Attached please find the Corrective Action Plan for the subject site.

If you have any questions or comments, please contact our office at the number above.

Sincerely,

Midwest Environmental Consulting and Remediation Services, Inc.



Allan M. Green  
President

EPA-DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

JAN 19 2017

REVIEWER JRM

PLS/alg  
cc: Mr. Howard Warsaw  
Attachments  
Job No. 9890

**RECEIVED**

OCT 28 2016

**IEPA/BOL**  
R0972

Leaking Underground Storage Tank Program  
**High Priority Corrective Action Plan Amendment**

**Incident Location:** Warsaw - ITCO  
Route 122  
Minier, Illinois – Tazewell Co.

**Prepared for:** John Warsaw  
PO Box 886  
Minier, Illinois 61759

**Prepared by:** Midwest Environmental Consulting  
and Remediation Services, Inc.  
22200 Illinois Route 9  
Post Office Box 614  
Tremont, Illinois 61568-0614  
Contact: Allan Green – President

**For Review by:** Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
Contact: Mr. Jim Ransdell

**RECEIVED**

OCT 28 2016

**IEPA/BOL**

**R0973**

# High Priority Site Investigation Corrective Action Plan

## TABLE OF CONTENTS

### FORMS

IEPA Corrective Action Plan Form

### SECTIONS

Section 1. Introduction  
Section 2. Results of the Investigation Completed to Date  
Section 3. Anticipated Cleanup Methods  
Section 4. Additional Investigation Required

### TABLES

Table 1 Soil Analytical Data  
Table 2 Groundwater Analytical Data

### FIGURES

Figure 1 Area map  
Figure 2 Monitoring Well and Soil Boring Location Map  
Figure 3 Potentiometric Surface Map  
Figure 4 Proposed Boring Location Map  
Figure 5 Extent of Contamination

### APPENDICES

Appendix A Laboratory Data Reports  
Appendix B Soil Boring Logs  
Appendix C Soil and Groundwater Sampling Protocol  
Appendix D  $C_{sat}$  Calculations  
Appendix E Institutional Controls – HAA and Groundwater Ordinance with MOU  
Appendix F Budget Amendment

**IEPA Corrective Action Plan Form**

**RECEIVED**

OCT 28 2016

**IEPA/BOL**



# Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 – 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation, orally or in writing, in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/44 and 57.17). This form has been approved by the Forms Management Center.

## Leaking Underground Storage Tank Program Corrective Action Plan

### A. Site Identification

IEMA Incident # (6- or 8-digit): 981987 IEPA LPC# (10-digit): 1790455007  
Site Name: Warsaw, Howard  
Site Address (Not a P.O. Box): Route 122  
City: Minier County: Tazewell ZIP Code: 61759

### B. Site Information

- Will the owner or operator seek reimbursement from the Underground Storage Tank Fund?  Yes  No
- If yes, is the budget attached?  Yes  No
- Is this an amended plan?  Yes  No
- Identify the material(s) released: gasoline
- This Corrective Action Plan is submitted pursuant to:
  - 35 Ill. Adm. Code 731.166
  - 35 Ill. Adm. Code 732.404
  - 35 Ill. Adm. Code 734.335

The material released was:

  - petroleum
  - hazardous substance (see Environmental Protection Act Section 3.215)

EPA-DIVISION OF RECORDS MANAGEMENT  
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JAN 19 2017  
REVIEWER JRM

### C. Proposed Methods of Remediation

- Soil Excavation, TACO, institutional controls
- Groundwater Excavation, TACO, institutional controls

**RECEIVED**

OCT 28 2016

### D. Soil and Groundwater Investigation Results

(for incidents subject to 35 Ill. Adm. Code 731 only or 732 that were classified using Method One or Two, if not previously provided)

**IEPA/BOL**

Provide the following:

- Description of investigation activities performed to define the extents of soil and/or groundwater contamination;
- Analytical results, chain-of-custody forms, and laboratory certifications;
- Tables comparing analytical results to applicable remediation objectives;

4. Boring logs;
5. Monitoring well logs; and
6. Site maps meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440 and showing:
  - a. Soil sample locations;
  - b. Monitoring well locations; and
  - c. Plumes of soil and groundwater contamination.

## E. Technical Information - Corrective Action Plan

Provide the following:

1. Executive summary identifying the objectives of the corrective action plan and the technical approach to be utilized to meet such objectives;
  - a. The major components (e.g., treatment, containment, removal) of the corrective action plan;
  - b. The scope of the problems to be addressed by the proposed corrective action; and
  - c. A schedule for implementation and completion of the plan;
2. Identification of the remediation objectives proposed for the site;
3. A description of the remedial technologies selected:
  - a. The feasibility of implementing the remedial technologies;
  - b. Whether the remedial technologies will perform satisfactorily and reliably until the remediation objectives are achieved; and
  - c. A schedule of when the technologies are expected to achieve the applicable remediation objectives;
4. A confirmation sampling plan that describes how the effectiveness of the corrective action activities will be monitored during their implementation and after their completion;
5. A description of the current and projected future uses of the site;
6. A description of engineered barriers or institutional controls that will be relied upon to achieve remediation objectives:
  - a. an assessment of their long-term reliability;
  - b. operating and maintenance plans; and
  - c. maps showing area covered by barriers and institutional controls;
7. The water supply well survey:
  - a. Map(s) showing locations of community water supply wells and other potable wells and the setback zone for each well;
  - b. Map(s) showing regulated recharge areas and wellhead protection areas;
  - c. Map(s) showing the current extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
  - d. Map(s) showing the modeled extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
  - e. Tables listing the setback zone for each community water supply well and other potable water supply wells;
  - f. A narrative identifying each entity contacted to identify potable water supply wells, the name and title of each person contacted, and any field observations associated with any wells identified; and
  - g. A certification from a Licensed Professional Engineer or Licensed Professional Geologist that the survey was conducted in accordance with the requirements and that documentation submitted includes information obtained as a result of the survey (certification of this plan satisfies this requirement).

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8. Appendices:
  - a. References and data sources report that are organized; and
  - b. Field logs, well logs, and reports of laboratory analyses;
9. Site map(s) meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440;
10. Engineering design specifications, diagrams, schematics, calculations, manufacturer's specifications, etc.;
11. A description of bench/pilot studies;
12. Cost comparison between proposed method of remediation and other methods of remediation;
13. For the proposed Tier 2 or 3 remediation objectives, provide the following:
  - a. The equations used;
  - b. A discussion of how input variables were determined;
  - c. Map(s) depicting distances used in equations; and
  - d. Calculations; and
14. Provide documentation to demonstrate the following for alternative technologies:
  - a. The proposed alternative technology has a substantial likelihood of successfully achieving compliance with all applicable regulations and remediation objectives;
  - b. The proposed alternative technology will not adversely affect human health and safety or the environment;
  - c. The owner or operator will obtain all Illinois EPA permits necessary to legally authorize use of the alternative technology;
  - d. The owner or operator will implement a program to monitor whether the requirements of subsection (14)(a) have been met;
  - e. Within one year from the date of Illinois EPA approval, the owner or operator will provide to the Illinois EPA monitoring program results establishing whether the proposed alternative technology will successfully achieve compliance with the requirements of subsection (14)(a); and
  - f. Demonstration that the cost of alternative technology will not exceed the cost of conventional technology and is not substantially higher than at least two other alternative technologies, if available and technically feasible.

## **F. Exposure Pathway Exclusion**

Provide the following:

1. A description of the tests to be performed in determining whether the following requirements will be met:
  - a. Attenuation capacity of the soil will not be exceeded for any of the organic contaminants;
  - b. Soil saturation limit will not be exceeded for any of the organic contaminants;
  - c. Contaminated soils do not exhibit any of the reactivity characteristics of hazardous waste per 35 Ill. Adm. Code 721.123;
  - d. Contaminated soils do not exhibit a  $\text{pH} \leq 2.0$  or  $\geq 12.5$ ; and
  - e. Contaminated soils which contain arsenic, barium, cadmium, chromium, lead, mercury, or selenium (or their associated salts) do not exhibit any of the toxicity characteristics of hazardous waste per 35 Ill. Adm. Code 721.124.
2. A discussion of how any exposure pathways are to be excluded.

## G. Signatures

All plans, budgets, and reports must be signed by the owner or operator and list the owner's or operator's full name, address, and telephone number.

### UST Owner or Operator

Name Warsaw, Howard  
Contact John Warsaw  
Address PO Box 886  
City Minier  
State IL  
Zip Code 61759  
Phone 309-392-2626  
Signature *John Warsaw*  
Date 10/24/16

### Consultant

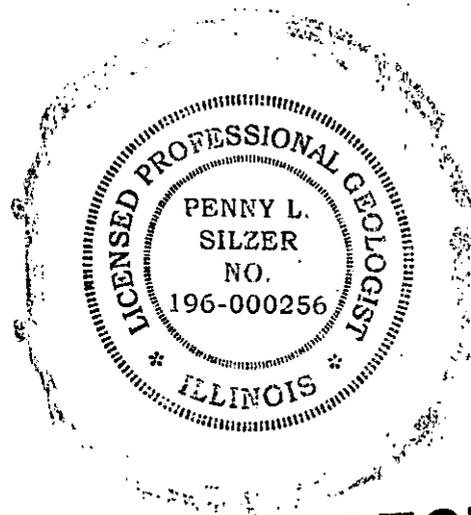
Company Midwest Environmental Consulting  
Contact Allan Green  
Address Po Box 614  
City Tremont  
State IL  
Zip Code 61568  
Phone 309-925-5551  
Signature *Allan Green*  
Date 10/20/16

I certify under penalty of law that all activities that are the subject of this plan were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in this plan has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 Ill. Adm. Code 731, 732 or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

### Licensed Professional Engineer or Geologist

Name Penny Silzer  
Company Midwest Environmental  
Address PO Box 614  
City Tremont  
State IL  
Zip Code 61568  
Phone 309-925-5551  
Ill. Registration No. 196-000256  
License Expiration Date 03/31/2017  
Signature *Penny Silzer*  
Date 10/20/16

### L.P.E. or L.P.G. Seal



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**Corrective Action Plan**

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## Section 1. Introduction

The subject site is currently a gasoline service station located on Route 122 in Minier, Illinois. The area is developed for commercial, residential and agricultural use. An area map is provided in Figure 1.

Three underground storage tanks (USTs) were removed from the site on July 6, 1999. The three tanks (1-2,000 gallon, 2-500 gallon) were used for gasoline. Details of the UST removal/free product removal activities can be found in the Report of Early Action/ Amended 45-Day Report dated August 31, 1999 and the Free Product Removal Report dated August 26, 1999, previously submitted to IEPA. During tank removal activities, an exploratory excavation was dug in order to investigate the extent of contamination. Free product was noted entering the excavation from the native silty clay sidewalls. Upon this discovery, free product recovery activities were initiated. A significant amount of free product was recovered during free product recovery activities. Approximately 690 yds<sup>3</sup> of gasoline saturated/contaminated soil were removed, and approximately 58,570 gallons of free product/gasoline contaminated groundwater were recovered. Approximately 500 gallons of free product gasoline were separated from the recovered water. Analytical data collected from the excavation indicated significant concentrations of contaminants of concern remained on site.

Between May 2000 and August 2001, Midwest Environmental Consulting and Remediation Services, Inc. (MECRS) installed seven groundwater monitoring wells (MW-1 through MW-7) and drilled seven soil borings (B-1 through B-7). Additional soil samples were collected from a recovery trench installed in October 2003 (T-1 through T-10).

Midwest proposed to close the site based on institutional controls. A Highway Authority Agreement (HAA) was received from the Illinois Department of Transportation (IDOT) in September 2013. A groundwater use restriction ordinance with an memorandum of understanding (MOU) was obtained from the Village of Minier. Mr. Jeff Heumann, the owner of the adjacent property located on the east side of the site, refused to sign the Environmental Land Use Control (ELUC). The HAA and the groundwater ordinance with the MOU are included in Appendix E. The ordinance is provided for IEPA review and approval.

In November 2014, additional soil samples were collected at the site to determine the current concentrations of COCs in the subsurface. Significant concentrations of xylenes, above the soil saturation limit were detected in one boring. The results of this investigation are presented herein. Additional groundwater sampling from wells MW-4 and MW-7 was proposed as part of the investigation approved in the CAP dated March 3, 2014. Neither well could be located and groundwater samples were not collected. Current groundwater analytical data is essential to calculate the groundwater model.

In August 2016, additional soil and groundwater samples were collected at the site to determine the organic carbon content of the soil ( $f_{oc}$ ), the concentrations of xylenes in soil at concentrations above  $C_{sat}$ , and the current concentrations of COCs in groundwater at locations where monitoring wells could not be located. Details of this investigation are reported herein.

## Section 2. Results of the Investigation Completed to Date

The subsurface materials encountered during advancement of boring B-1 consisted of: silty clay (OL) from ground surface to 1.5 feet bgs; silty clay (CL-ML) from 1.5 to 7 feet bgs; silty sand (SM) from 7 to 10 feet bgs; grading to sandy gravel (GP) from 10 to 13 feet bgs; clayey silt (ML) from 13 to 16 feet bgs; and silty clay till (CL-ML) from 16 feet bgs to the end of the boring at 26 feet bgs. A significant water-bearing zone was encountered between approximately 9 feet bgs and 13 ft bgs. Groundwater was initially encountered at an approximate depth of 9 feet bgs in most of the borings. Static water level depth appears to range from 5 to 6 feet bgs.

On November 13, 2014, eight geoprobe borings were completed at the site. Soil analytical data collected indicates concentrations of BTEX in one boring, GP-7, above Tier 1 CUOs. Boring GP-7 is located on-site, southeast of the dispenser island. Soil analytical data collected at the perimeter of the site from borings GP-3, GP-5, GP-6 and GP-8 demonstrate that the contaminants have not migrated off-site in soil to the property located east of the site. Based on the current soil analytical data, an Environmental Land Use Control is not necessary for the property located east of the site.

In August 2016, borings GP-11, GP-12, GP-13 and GP-14 were completed to define the extent of xylenes concentrations above the  $C_{sat}$  around boring GP-7. Based on the data collected, the extent of xylenes concentrations above  $C_{sat}$  has been defined.

A soil sample was collected from boring GP-10 at a depth of 4-6 ft and analyzed for  $f_{oc}$ . The results were used to calculate the  $C_{sat}$  and other TACO equations.

Midwest proposed to collect water samples from wells MW-4 and MW-7 but the wells could not be located. Data from these wells was to be used to assess current groundwater conditions and to calculate the groundwater models. In August 2016, groundwater samples were collected from temporary wells GP-9 and GP-10 in order to assess groundwater quality at MW-7 and MW-4, respectively. Concentrations of COCs above Tier 1 CUOs were not detected in the groundwater sample from GP-9. Concentrations of ethylbenzene and xylenes were detected above Tier 1 CUOs in groundwater from boring GP-10.

The extent of soil and groundwater contamination has been defined. COCs appear to have migrated from the possible source areas towards the north and east.

Soil and groundwater analytical data collected to date are presented in Tables 1 and 2. Soil boring and monitoring well locations are shown in Figure 2. The most recent potentiometric surface map for the most recent sampling event is presented in Figure 3. Laboratory data reports are presented in Appendix A. Soil boring logs are presented in Appendix B. Sampling protocol is presented in Appendix C.

### Section 3. Proposed Corrective Action

#### 1. Excavation of Soil where Xylenes exceed $C_{sat}$ .

Midwest proposes to use elimination of exposure pathways combined with limited excavation of contaminated soil to address the petroleum hydrocarbon contamination at the site. A highway authority agreement (HAA) has been obtained from IDOT. A groundwater use restriction ordinance with a MOU has been obtained from the Village of Minier. In order to eliminate exposure pathways through the use of engineered barriers and/or institutional controls, the soil saturation limits ( $C_{sat}$ ) for the respective contaminants of concern (COCs) must not be exceeded by concentrations of the COCs in the soil samples collected. Benzene, toluene, ethylbenzene and xylenes (BTEX) constituents are the COCs. The table below shows the maximum concentrations of BTEX detected in comparison to the soil saturation limit for each COC:

COC	Maximum Concentration Detected	Soil Saturation Limit $C_{sat}$
Benzene	37.4 ppm	580 ppm
Toluene	<b>629 ppm</b>	290 ppm
Ethylbenzene	<b>272 ppm</b>	150 ppm
Xylenes	<b>1,200 ppm</b>	110 ppm

Toluene, ethylbenzene and xylenes all exceed the soil saturation limits as listed in Appendix A, Table A.

$C_{sat}$  values were calculated for toluene, ethylbenzene and xylenes using equation S29 and the  $f_{oc}$  value for subsurface soils, 0.0072. Input parameters and calculations are provided in Appendix D. The  $C_{sat}$  values calculated were all below the  $C_{sat}$  values listed in Appendix A, Table A. The table below shows the maximum concentration of BTEX detected in comparison to the calculated soil saturation limit for each COC:

COC	Maximum Concentration Detected	Calculated $C_{sat}$
Benzene	37.4 ppm	996 ppm
Toluene	<b>629 ppm</b>	735 ppm
Ethylbenzene	<b>272 ppm</b>	448 ppm
Xylenes	<b>1,200 ppm</b>	<b>356 ppm</b>

The concentrations of COCs in soil above the calculated  $C_{sat}$  for xylenes have been defined. In order to reduce the xylenes concentrations in soil to below the  $C_{sat}$ , Midwest proposes to excavate approximately 200 yd<sup>3</sup> of soil from the vicinity of boring GP-7. The surface area to be excavated is approximately 20ft x 20ft and approximately 8ft deep. Soil samples will be collected for every 400 ft<sup>2</sup> of pit floor, and along the side walls at the interval of one sample for every 20 linear feet of wall from a depth of two thirds of the total depth of the excavation. Soil sampling protocol is provided in Appendix C.

#### 2. Collection of Groundwater Sample from MW-4

## **2. Collection of Groundwater Sample from MW-4**

During excavation activities, Midwest proposes to use the backhoe to locate well MW-4. If possible, necessary repairs will be made to the well to allow for sampling of groundwater. If the well cannot be repaired, it will be properly abandoned. In which case a temporary well will be installed with the geoprobe to collect a groundwater sample approximately three months after completion of the excavation. Based on experience, it is probable that the removal of highly contaminated soil in the vicinity of GP-7 will result in reduction of the concentrations of COCs in the vicinity of MW-4. The concentrations of COCs in MW-4 will have an impact on the extent of the modeled groundwater plume.

## **3. Elimination of Exposure Pathways and Calculation of Tier 2 CUOs.**

Analytical data collected, along with current analytical data from other site locations, will be used to eliminate exposure pathways, to calculate Tier 2 CUOs where needed, and to calculate the groundwater model.

## **4. Removal of Groundwater Treatment System**

During excavation activities, the groundwater treatment system will be removed. The treatment system and shed will be removed. The backhoe, present during excavation activities, will be used to remove the sumps in the trenches and filled with clean backfill material similar to that brought in to fill the excavation.

#### **Section 4. Groundwater Use Restriction Ordinance**

The Village of Minier has attempted to adopt a groundwater use restriction ordinance that will meet both the needs of the Village and the requirements of the IEPA. Village of Minier Ordinance #808 is included in Appendix E. Ordinance #808 combined with the MOU should meet the requirements to be used as an institutional control. If Ordinance 808 is not approved, Midwest will request the Village to consider an ordinance for a limited area around the site that will encompass the calculated groundwater model. The groundwater model will be calculated at a later date based on the degree of contamination remaining after removal of soil with COCs in excess of the  $C_{sat}$ .

The budget for the proposed scope of work is attached in Appendix F.

**Table 1**  
**Soil Analytical Data**

**TABLE 1.**  
**Soil Analytical Results**  
**Warsaw-ITCO**  
**Minier, IL**

Sample ID:	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
B-2, 4-6'	5/3/2000	810	1,300	1,700	6,500	10,310
B-2, 6-8'	5/3/2000	600	220	420	1,900	3,140
B-2, 8-10'	5/3/2000	21,000	41,000	47,000	190,000	299,000
B-3, 6-8'	5/3/2000	400	120	210	460	1,190
B-3, 8-10'	5/3/2000	2,300	2,100	31,000	110,000	145,400
MW-1, 6-8'	5/4/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-2, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-3, 8-10'	5/3/2000	<2.0	<2.0	6	<5.0	<14.7
MW-4, 4-6'	5/4/2000	230	220	870	2,500	3,820
MW-4, 6-8'	5/4/2000	300	1,200	5,400	20,000	26,900
B-4, 0.5-2.5'	8/23/2001	8.1 M	19.0 M	44.7 M	77.2 M	149 M
B-4, 4-6'	8/23/2001	11,600 ME	42,700 ME	9,720 ME	38,000 ME	102,020 ME
B-5, 6-8'	8/23/2001	49	186 E	38	130	403
B-6, 4-6'	8/23/2001	19.5	53.4	31.3	89.8	194.0
B-6, 8-10'	8/23/2001	7.1	12.3	<2.4	10.9	<32.3
B-7, 8-10'	8/23/2001	16.7 M	61.5 M	13.9 M	39.5 M	131.6 M
B-7, 12-14'	8/23/2001	754.0	<61.3	<61.3	<153	<1,029.6
MW-5, 8-10'	8/23/2001	494 M	4,750 M	5,890 M	7,570 M	18,704 M
MW-6, 6-8'	8/23/2001	6.5	12.4	6.3	11.3	36.5
MW-7, 4-6'	8/23/2001	11.7	25.1	10.8	20.0	67.6
MW-7, 8-10	8/23/2001	15.5 M	20.2 M	6.8	11.8	54.3
T-1	10/20/2003	<2.6	3.2	<2.6	<6.5	<14.9
T-2	10/20/2003	<2.6	<2.6	<2.6	<6.5	<14.3
T-3	10/20/2003	<2.4	5.1	5.1	14.2	<26.8
T-4	10/20/2003	<2.4	<2.4	<2.4	<5.9	<13.1
T-5	10/20/2003	3.4	40.8	360.0	947.0	1,351.2
T-6	10/20/2003	85.3	635.0	1,840.0	7,140.0	9,700.3
T-7	10/20/2003	85.5	43.8	1,120.0	2,460.0	3,709.3
T-8	10/20/2003	<2.5	6.6	18.9	56.8	<84.8
T-9	10/20/2003	<2.4	<2.4	<2.4	<6.1	<13.3
T-10	10/20/2003	<2.5	<2.5	<2.5	<6.2	<13.7
GP-1, 2-3'	11/13/2014	<4.99	<4.99	<4.99	<15.0	<30
GP-1, 6-7'	11/13/2014	<5.28	<5.28	<5.28	<15.8	<32
GP-2, 2-3'	11/13/2014	<5.28	<5.28	<5.28	<15.8	<32
GP-2, 6-7'	11/13/2014	<16.0	<16.0	<16.0	<48.0	<96
GP-3, 2-3'	11/13/2014	<5.12	<5.12	<5.12	<15.4	<31
GP-3, 7-8'	11/13/2014	<5.11	5.29	<5.11	<15.3	<31
GP-4, 2-3'	11/13/2014	<5.20	<5.20	<5.20	<15.6	<32
GP-4, 6-7'	11/13/2014	<4.35	5.00	<4.35	<13.1	<27
GP-5, 2-3'	11/13/2014	<4.83	<4.83	<4.83	<14.5	<29
GP-5, 6-7'	11/13/2014	<4.64	<4.64	<4.64	<13.9	<28
GP-6, 2-3'	11/13/2014	<4.66	<4.66	<4.66	<14.0	<28
GP-6, 7-8'	11/13/2014	<5.06	6.50	<5.06	<15.2	<32
GP-7, 4-5'	11/13/2014	37,400	629,000	272,000	1,200,000	2,138,400
GP-7, 6-7'	11/13/2014	3,180	9,720	143	6,210	19,253
GP-8, 2-3'	11/13/2014	<7.14	<7.14	<7.14	<21.4	<43
GP-8, 6-7'	11/13/2014	<4.96	5.52	<4.96	<14.9	<30
GP-11, 4-5'	8/18/2016	<220	380	6,700	56,000	<63,280
GP-12, 4-5'	8/18/2016	570	440	25,000	66,000	92,010
GP-12, 7-8'	8/18/2016	1,400	1,100	28,000	96,000	126,500
GP-13, 2-3'	8/18/2016	28	56	1,700	5,400	7,184
GP-13, 7-8'	8/18/2016	8.1	12	370	1,300	1,690
GP-14, 2-3'	8/18/2016	<5.6	<5.6	<5.6	<17	<34
GP-14, 7-8'	8/18/2016	<4.7	<4.7	8.2	64	<82

Notes:

1. All results in parts per billion (ppb).
2. IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
30	12,000	13,000	5,600

3. All bolded values are above Tier 1 Residential Cleanup Objectives
4. M = Matrix interferences identified
5. E = Estimated

Sample #	foc	pH	Moisture	Soil Bulk Density	Soil Particle Density
Subsurface	2.55%	7.3	17.1%	1.77 gm/cm <sup>3</sup>	2.66

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**Table 2**  
**Groundwater Analytical Data**

**Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois**

Sample #	Date	DTW	GWE	Benzene	Toluene	E-benzene	Xylenes	Total BTEX	
<b>MW-1</b>		Elevation Top of Casing = 99.62							
SC	5/12/2000	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3	
1	10/24/2000	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4	
2	8/23/2001	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E	
3	11/13/2001	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.41	94.21	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.65	94.97	NS	NS	NS	NS	NS	
<b>MW-2</b>		Elevation Top of Casing = 99.28							
SC	5/9/2000	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/2000	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/2001	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7	
3	11/13/2001	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.12	94.16	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.38	94.90	NS	NS	NS	NS	NS	
<b>MW-3</b>		Elevation Top of Casing = 100							
SC	5/9/2000	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/2000	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/2001	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
3	11/13/2001	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.37	94.63	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.34	95.66	NS	NS	NS	NS	NS	
<b>MW-4</b>		Elevation Top of Casing = 99.84							
SC	5/9/2000	5.90	93.94	2,600	12,000	4,500	18,000	37,100	
1	10/24/2000	7.80	92.04	2,300	5,200	4,000	13,000	24,500	
2	8/23/2001	6.67	93.17	2,290 M	2,380 M	8,150	23,600 E	36,420 E	
3	11/13/2001	6.11	93.73	1,910	3,960	3,360	10,000	19,230	
4	2/14/2002	5.00	94.84	1,100	1,200	2,900	5,500	10,700	
5	1/24/2005	4.47	95.37	NS	NS	NS	NS	NS	
<b>MW-5</b>		Elevation Top of Casing = 99.57							
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9	
3	11/13/2001	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	4.71	94.86	1.4	2.2	1.5	4.5	9.6	
5	1/24/2005	3.89	95.68	NS	NS	NS	NS	NS	
<b>MW-6</b>		Elevation Top of Casing = 99.37							
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5	
3	11/13/2001	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	4.71	94.66	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	WELL ICED OVER		NS	NS	NS	NS	NS	
<b>MW-7</b>		Elevation Top of Casing = 100.07			WELL DESTROYED AT TIME OF 1/25/05 DTW MEASUREMENT				
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	7.28	92.79	<2.0	<2.0	<2.0	5.9	<11.9	
3	11/13/2001	6.23	93.84	117 E	<2.0	<2.0	<5.0	<126 E	
4	2/14/2002	5.52	94.55	7	<1.0	<1.0	<3.0	<12.0	
5	1/24/2005	--	--	NS	NS	NS	NS	NS	
<b>GP-9</b>									
--	--	--	--	<1.0	<1.0	6.7	4.5	<14	
<b>GP-10</b>									
--	--	--	--	<1	<10	1500	1000	<2520	

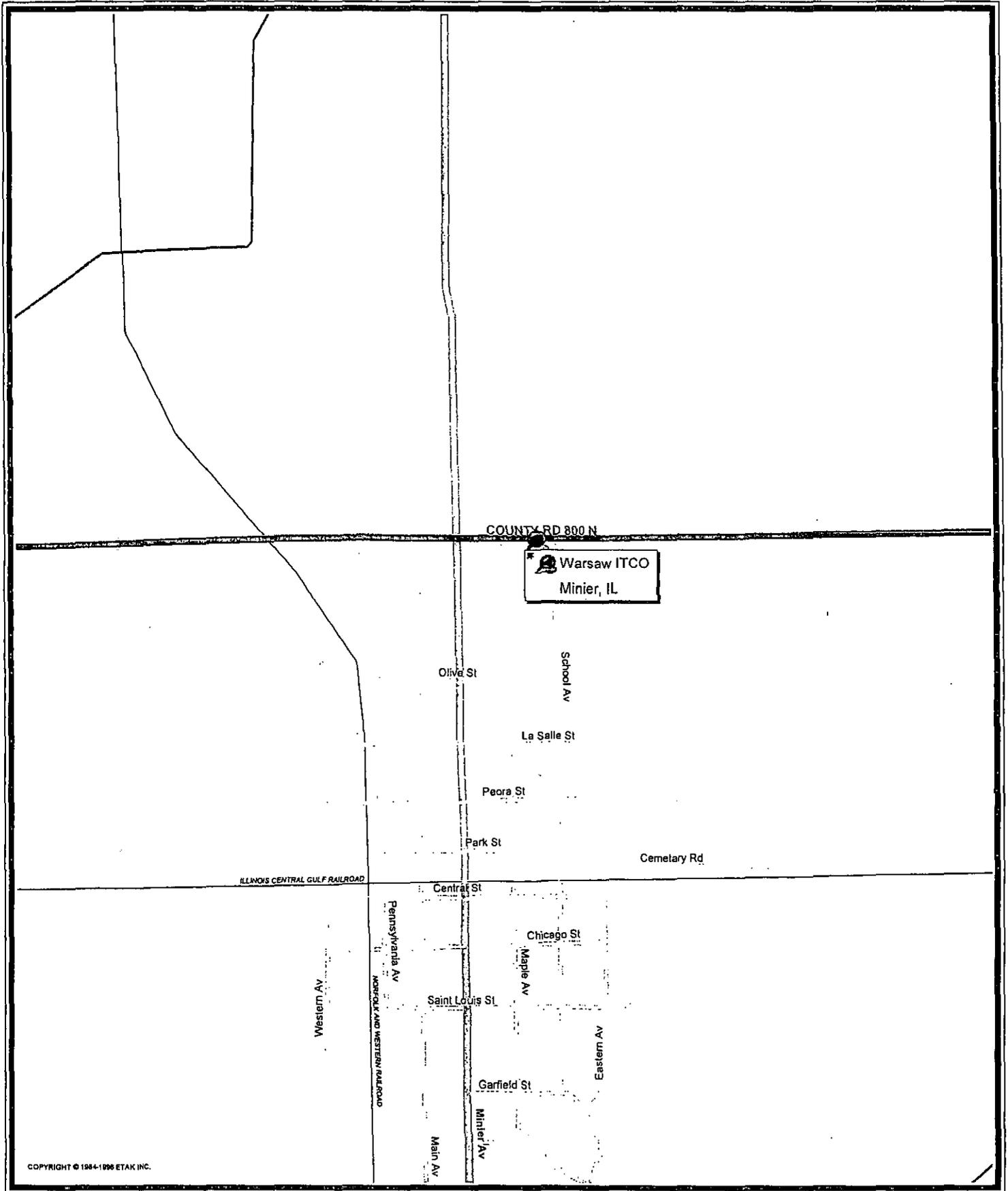
- All results reported in ug/kg (i.e. parts per billion, ppb)
- IEPA Tier 1 Cleanup Objectives (ug/kg):
- = No data available
- MDL = Method Detection Limit
- DTW = Depth to Water
- GWE = Groundwater Elevation referenced to datum point
- NA/NS = Not analyzed/not sampled this event
- E = Estimated - value outside linear range
- M = Matrix interferences identified.

Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

**R0989**



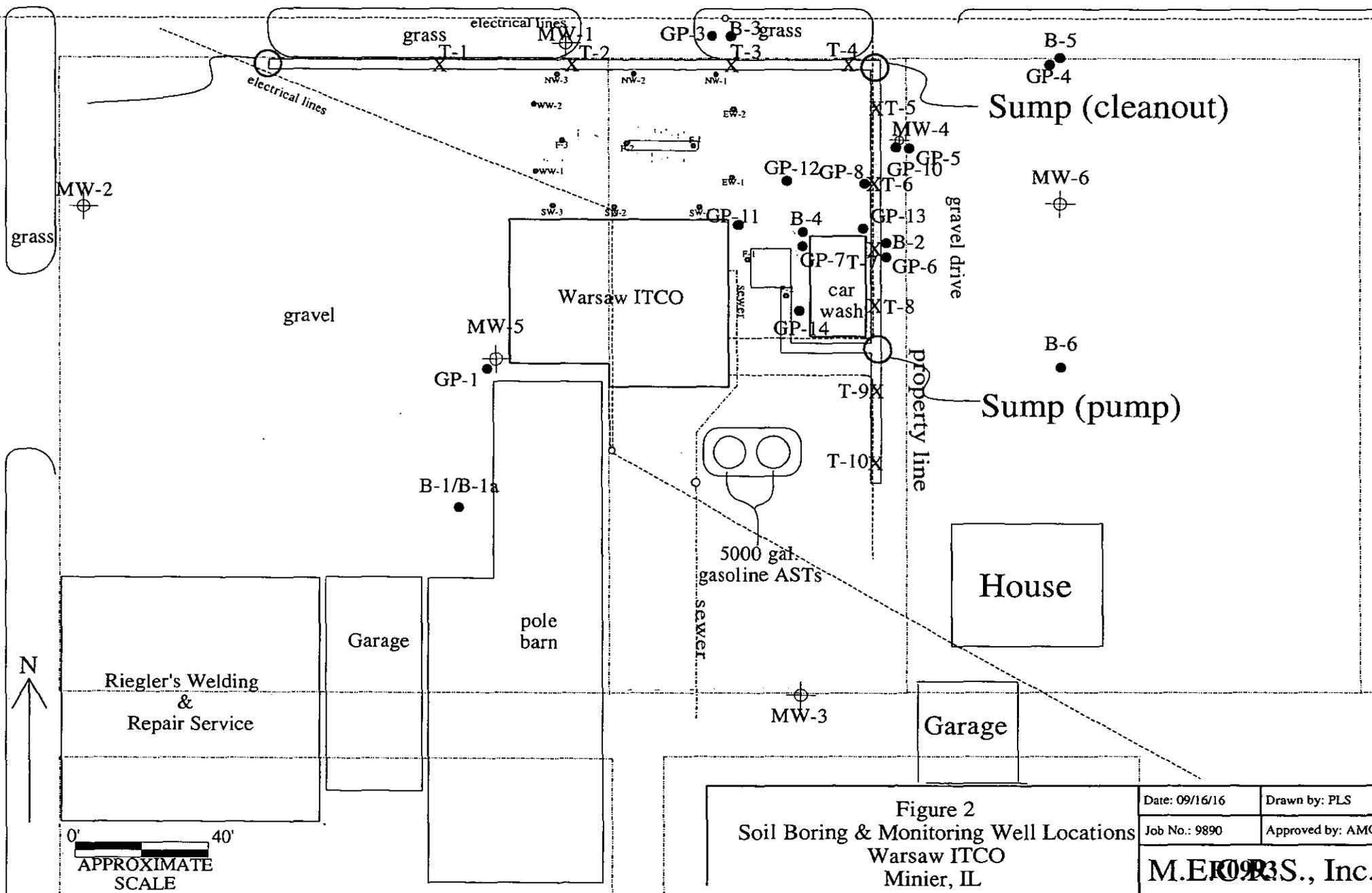
Figure 1. Warsaw ITCO Location Map, Minier, IL



**Figure 2**  
**Monitoring Well and Soil Boring Location Map**

- ⊗ = Proposed Soil Boring Location
- ⊕ = Existing Monitoring Well Location
- = Existing Boring Location
- = Excavation Sample Location
- X = Trench Sample Locations

# Route 122

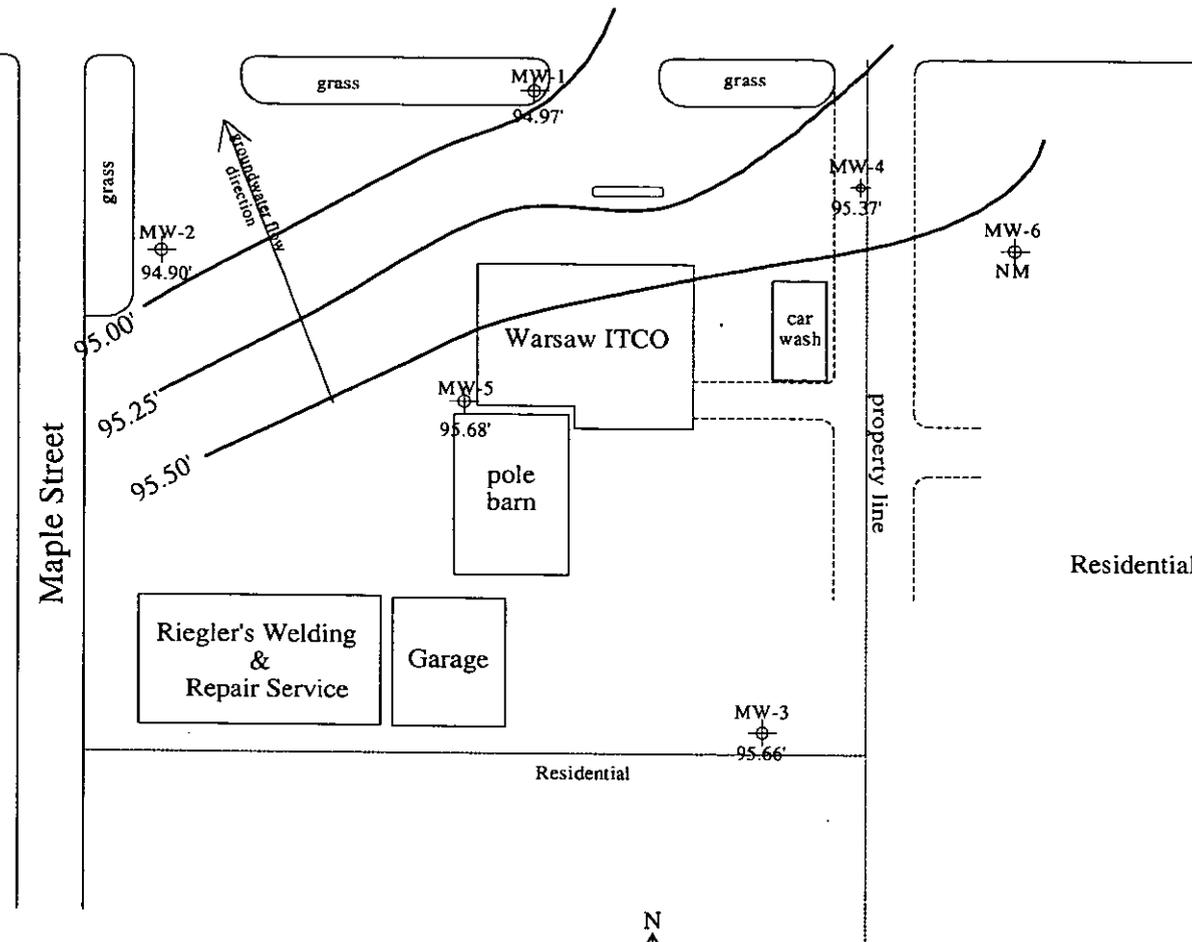


**Figure 3**  
**Piezometric Surface Map 01/24/05**

# Agricultural

Route 122

MW-7  
  
 DESTROYED



- MW-3  
 = Existing Monitoring Well Location
- B-2  
 = Existing Boring Location

**FIGURE 3**  
 Piezometric Surface  
 Map - 1/24/05  
 Warsaw - ITCO  
 Minier, IL

Date: 1/24/05

Drawn by: TKB

Job No.: 9890

Approved by: AMG

**M.E.C.R. S<sub>1995</sub> Inc.**

**Figure 4**

**Proposed Excavation**

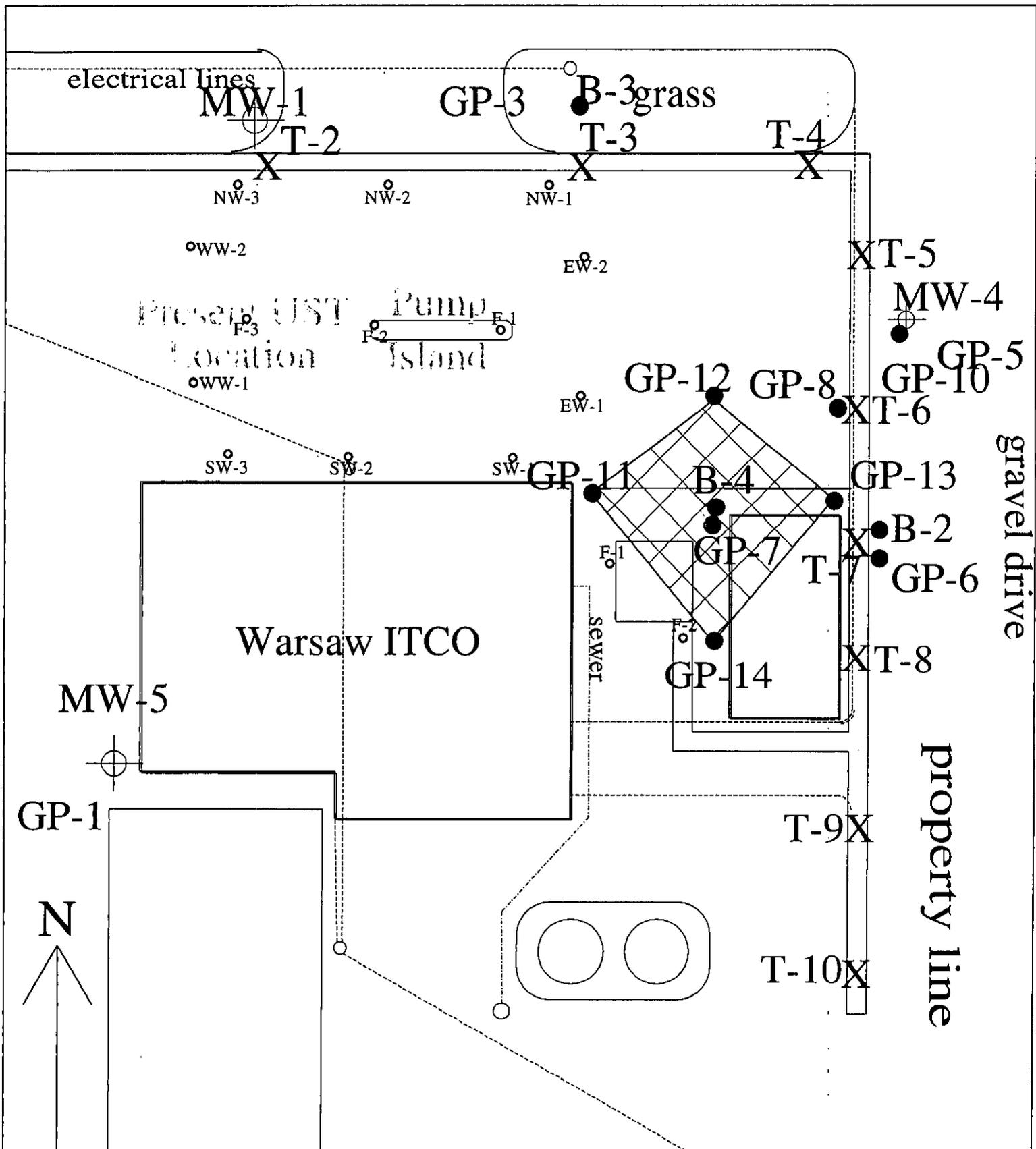


Figure 4  
 Proposed Excavation  
 Warsaw ITCO  
 Minier, IL

Date: 09/16/16	Drawn by: PLS
Job No.: 9890	Approved by: AMG
Midwest Environmental Consulting & Environmental Remediation, Inc.	

**Figure 5**  
**Extent of Contamination**

Agricultural

Route 122

Sump (cleanout)

COCs in soil > Tier 1

Sump (cleanout)

COCs in GW > Tier 1

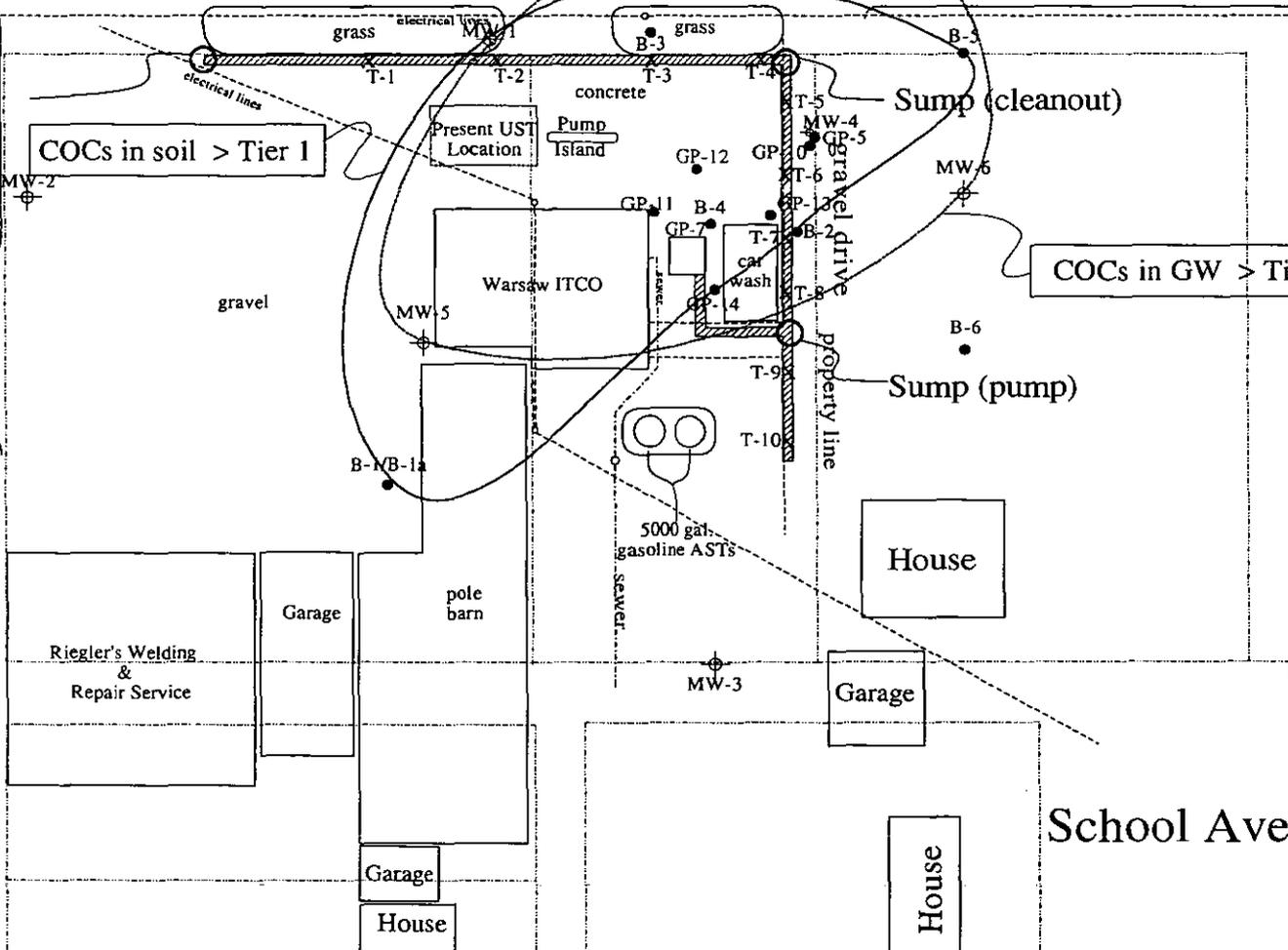
Sump (pump)

Maple Street

Agricultural



APPROXIMATE SCALE



MW-3  
 + = Existing Monitoring Well Location  
 B-2  
 • = Existing Boring Location

Figure 5.  
 Extent of Contamination  
 Warsaw ITCO  
 Minier, IL

Date: 9/19/16

Drawn by: PLS

Job No.: 9890

Approved by: AMG

M.E.C.R. Inc. 2009

**Appendix A**  
**Laboratory Data Reports**

August 25, 2016

Penny Silzer  
Midwest Environmental Consulting & Remediation  
PO Box 641  
22200 IL Rt. 9  
Tremont, IL 61568  
TEL: (309) 925-5551  
FAX:



**RE:** Warsaw IRO# 9890

**WorkOrder:** 16081267

Dear Penny Silzer:

TEKLAB, INC received 1 sample on 8/19/2016 2:49:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Michael L. Austin  
Project Manager  
(618)344-1004 ex 16  
MAustin@teklabinc.com



## Report Contents

<http://www.teklabinc.com/>

---

Client: Midwest Environmental Consulting & Remediation

Work Order: 16081267

Client Project: Warsaw IRO# 9890

Report Date: 25-Aug-16

---

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	4
Laboratory Results	5
Receiving Check List	6
Chain of Custody	Appended



## Definitions

<http://www.teklabinc.com/>

Client: Midwest Environmental Consulting & Remediation

Work Order: 16081267

Client Project: Warsaw IRO# 9890

Report Date: 25-Aug-16

### Abbr Definition

- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.
- DNI Did not ignite
- DUP Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).
- LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero.
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- ND Not Detected at the Reporting Limit
- NELAP NELAP Accredited
- PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).
- RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
- SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
- Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
- TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
- TNTC Too numerous to count ( > 200 CFU )

### Qualifiers

- |  |   |
|--|---|
| # - Unknown hydrocarbon                                      | B - Analyte detected in associated Method Blank |
| E - Value above quantitation range                           | H - Holding times exceeded                      |
| I - Associated internal standard was outside method criteria | J - Analyte detected below quantitation limits  |
| M - Manual Integration used to determine area response       | ND - Not Detected at the Reporting Limit        |
| R - RPD outside accepted recovery limits                     | S - Spike Recovery outside recovery limits      |
| T - TIC(Tentatively identified compound)                     | X - Value exceeds Maximum Contaminant Level     |



Case Narrative

<http://www.teklabinc.com/>

Client: Midwest Environmental Consulting & Remediation

Work Order: 16081267

Client Project: Warsaw IRO# 9890

Report Date: 25-Aug-16

Cooler Receipt Temp: 4.02 °C

Locations and Accreditations

	Collinsville	Springfield	Kansas City	Collinsville Air
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	3920 Pintail Dr Springfield, IL 62711-9415	8421 Nieman Road Lenexa, KS 66214	5445 Horseshoe Lake Road Collinsville, IL 62234-7425
Phone	(618) 344-1004	(217) 698-1004	(913) 541-1998	(618) 344-1004
Fax	(618) 344-1005	(217) 698-1005	(913) 541-1998	(618) 344-1005
Email	jhriley@teklabinc.com	KKlostermann@teklabinc.com	dthompson@teklabinc.com	EHurley@teklabinc.com

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2017	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2017	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2017	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2017	Collinsville
Texas	TCEQ	TI04704515-12-1	NELAP	7/31/2017	Collinsville
Arkansas	ADEQ	88-0966		3/14/2017	Collinsville
Illinois	IDPH	17584		5/31/2017	Collinsville
Kentucky	KDEP	98006		12/31/2016	Collinsville
Kentucky	UST	0073		1/31/2017	Collinsville
Missouri	MDNR	00930		5/31/2017	Collinsville
Missouri	MDNR	930		1/31/2017	Collinsville
Oklahoma	ODEQ	9978		8/31/2016	Collinsville



# Laboratory Results

<http://www.teklabinc.com/>

Client: Midwest Environmental Consulting & Remediation  
Client Project: Warsaw IRO# 9890  
Lab ID: 16081267-001  
Matrix: SOLID

Work Order: 16081267  
Report Date: 25-Aug-16

Client Sample ID: GP-10, 4-6 ft  
Collection Date: 08/18/2016 11:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
ASTM D2974								
FOC (0.58 conversion factor)		0.10		0.72	wt%	1	08/22/2016 14:51	R222626



# Receiving Check List

<http://www.teklabinc.com/>

Client: Midwest Environmental Consulting & Remediation

Work Order: 16081267

Client Project: Warsaw IRO# 9890

Report Date: 25-Aug-16

Carrier: Jacob Wilson

Received By: AMD

Completed by:

On:

19-Aug-16

*Amber M. Dilallo*

Amber M. Dilallo

Reviewed by:

On:

22-Aug-16

*Elizabeth A. Hurley*

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Temp °C 4.02
Type of thermal preservation?	None <input type="checkbox"/>	Ice <input checked="" type="checkbox"/>	Blue Ice <input type="checkbox"/>	Dry Ice <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Reported field parameters measured:	Field <input type="checkbox"/>	Lab <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
<i>When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.</i>				
Water – at least one vial per sample has zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials <input checked="" type="checkbox"/>	
Water - TOX containers have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No TOX containers <input checked="" type="checkbox"/>	
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	
NPDES/CWA TCN interferences checked/treated in the field?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	

Any No responses must be detailed below or on the COC.

Print Form

### Teklab Chain of Custody

Pg. \_\_\_ of \_\_\_ Workorder 11081207

5445 Horseshoe Lake Road ~ Collinsville, IL 62234 ~ Phone: (618)344-1004 ~ Fax:(618)344-1005

MEURS

Are the samples chilled?  Yes  No with:  Ice  Blue ice

Preserved in  Lab  Field

Box 614

Cooler Temp 4.00 Sampler Penny Sitzer

## TEKLAB

Tremont IL 61868

## Courier

Project Name/Number: Wauwau ITC #9890

Comments

Contact Penny Sitzer eMail

industenv@frontier.com

Phone 925-551

Requested Due Date

Billing/PO

Lab Use	Sample ID	Sample Date/Time	Preservative Matrix														
<u>11081207</u> <u>001</u>	<u>CP-10, 4-6'</u>	<u>8/18/16, 11:00</u>	Unpres	<u>Aqueous Soil</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>											
			Unpres	Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Unpres	Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Unpres	Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Unpres	Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Unpres	Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Unpres	Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Unpres	Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Relinquished By *	Date/Time	Received By	Date/Time
<u>[Signature]</u>		<u>[Signature]</u>	<u>8/19/16 12:15</u>
<u>[Signature]</u>	<u>8/19/16 1449</u>	<u>Orlando Orlano</u>	<u>8/19/16 1449</u>

\* The individual signing this agreement on behalf of client acknowledges that they have read and understand the terms of this agreement and that they have the authority to sign on behalf of client.

R1007

TAF  
8/19/16

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

### Illinois Environmental Protection Agency Leaking Underground Storage Tank Program Laboratory Certification for Chemical Analysis

#### A. Site Identification

IEMA Incident # (6- or 8-digit): 981987 IEPA LPC# (10-digit): 1790455007  
Site Name: Warsaw, Howard (Warsaw ITCO)  
Site Address (Not a P.O. Box): Route 122  
City: Minier County: Tazewell ZIP Code: 61759  
Leaking UST Technical File

#### B. Sample Collector

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
2. Chain-of-custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

PS  
(initial)  
PS  
(initial)  
PS  
(initial)  
PS  
(initial)

#### C. Laboratory Representative

I certify that: WD# 16081267

1. Proper chain-of-custody procedures were followed as documented on the chain-of-custody forms
2. Sample integrity was maintained by proper preservation.
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

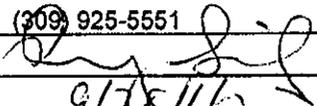
MLA  
(initial)  
MLA  
(initial)  
MLA  
(initial)  
MLA  
(initial)

- |    |  |                         |
|----|--|-------------------------|
| 5. | Sample holding times were not exceeded.  | <u>MLA</u><br>(initial) |
| 6. | SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses.   | <u>MLA</u><br>(initial) |
| 7. | An accredited lab performed quantitative analysis using test methods identified in 35 IAC 186.180 (for samples collected on or after January 1, 2003). | <u>MLA</u><br>(initial) |

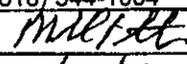
**D. Signatures**

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Sample Collector**

Name: Penny Silzer  
 Title: Sr. Geologist  
 Company: Midwest Environmental  
 Address: PO Box 614  
 City: Tremont  
 State: IL  
 ZIP Code: 61568  
 Phone: (309) 925-5551  
 Signature:   
 Date: 9/28/16

**Laboratory Representative**

Name: Michael L. Austin  
 Title: Project Manager  
 Company: Teklab, Inc.  
 Address: 5445 Horseshoe Lake Road  
 City: Collinsville  
 State: IL  
 ZIP Code: 62234  
 Phone: (618) 344-1004  
 Signature:   
 Date: 9/28/16



# PDC Laboratories, Inc.

PROFESSIONAL • DEPENDABLE • COMMITTED

September 12, 2016

Allan Green  
Midwest Environmental Tremont  
Box 614  
Tremont, IL 61568

Dear Allan Green:

Please find enclosed the analytical results for the sample(s) the laboratory received on 8/19/16 1:15 pm and logged in under work order 6083941. All testing is performed according to our current TNI certifications unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of PDC Laboratories, Inc.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

PDC Laboratories, Inc. appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the Vice President, John LaPayne with any feedback you have about your experience with our laboratory.

Sincerely,

Kurt Stepping  
Senior Project Manager  
(309) 692-9688 x1719  
kstepping@pdclab.com





ANALYTICAL RESULTS

Sample: 6083941-01
Name: GP-11, 4-5'
Alias: WARSAW IRO

Sampled: 08/18/16 11:28
Received: 08/19/16 13:15
Matrix: Soil - Grab
PO #: 9890

Table with 8 columns: Parameter, Result, Unit, Qualifier, Prepared, Analyzed, Analyst, Method. Includes sections for General Chemistry - PIA and Volatile Organics - PIA.

Sample: 6083941-01RE1
Name: GP-11, 4-5'
Alias: WARSAW IRO

Sampled: 08/18/16 11:28
Received: 08/19/16 13:15
Matrix: Soil - Grab
PO #: 9890

Table with 8 columns: Parameter, Result, Unit, Qualifier, Prepared, Analyzed, Analyst, Method. Includes section for Volatile Organics - PIA.

Sample: 6083941-02
Name: GP-12, 4-5'
Alias: WARSAW IRO

Sampled: 08/18/16 11:41
Received: 08/19/16 13:15
Matrix: Soil - Grab
PO #: 9890

Table with 8 columns: Parameter, Result, Unit, Qualifier, Prepared, Analyzed, Analyst, Method. Includes sections for General Chemistry - PIA and Volatile Organics - PIA.



## ANALYTICAL RESULTS

Sample: 6083941-02RE1  
Name: GP-12, 4-5'  
Alias: WARSAW IRO

Sampled: 08/18/16 11:41  
Received: 08/19/16 13:15  
Matrix: Soil - Grab  
PO #: 9890

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
-----------	--------	------	-----------	----------	----------	---------	--------

Volatile Organics - PIA

Ethylbenzene	25000	ug/kg dry		09/01/16 00:00	09/01/16 11:22	JJI	SW 8260B
Xylenes- Total	66000	ug/kg dry		09/01/16 00:00	09/01/16 11:22	JJI	SW 8260B

Sample: 6083941-03  
Name: GP-12, 7-8'  
Alias: WARSAW IRO

Sampled: 08/18/16 11:43  
Received: 08/19/16 13:15  
Matrix: Soil - Grab  
PO #: 9890

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
-----------	--------	------	-----------	----------	----------	---------	--------

General Chemistry - PIA

Solids - total solids (TS)	81	%		08/23/16 10:30	08/23/16 11:20	DMB	SM 2540G*
----------------------------	----	---	--	----------------	----------------	-----	-----------

Volatile Organics - PIA

Benzene	1400	ug/kg dry		09/01/16 00:00	09/01/16 11:50	JJI	SW 8260B
MTBE	< 230	ug/kg dry		09/01/16 00:00	09/01/16 11:50	JJI	SW 8260B
Toluene	1100	ug/kg dry		09/01/16 00:00	09/01/16 11:50	JJI	SW 8260B

Sample: 6083941-03RE1  
Name: GP-12, 7-8'  
Alias: WARSAW IRO

Sampled: 08/18/16 11:43  
Received: 08/19/16 13:15  
Matrix: Soil - Grab  
PO #: 9890

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
-----------	--------	------	-----------	----------	----------	---------	--------

Volatile Organics - PIA

Ethylbenzene	28000	ug/kg dry		09/01/16 00:00	09/01/16 15:41	JJI	SW 8260B
Xylenes- Total	96000	ug/kg dry		09/01/16 00:00	09/01/16 15:41	JJI	SW 8260B

Sample: 6083941-04  
Name: GP-13, 2-3'  
Alias: WARSAW IRO

Sampled: 08/18/16 11:50  
Received: 08/19/16 13:15  
Matrix: Soil - Grab  
PO #: 9890

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
-----------	--------	------	-----------	----------	----------	---------	--------

General Chemistry - PIA

Solids - total solids (TS)	78	%		08/23/16 10:30	08/23/16 11:20	DMB	SM 2540G*
----------------------------	----	---	--	----------------	----------------	-----	-----------



ANALYTICAL RESULTS

Sample: 6083941-04RE1
Name: GP-13, 2-3'
Alias: WARSAW IRO

Sampled: 08/18/16 11:50
Received: 08/19/16 13:15
Matrix: Soil - Grab
PO #: 9890

Table with 8 columns: Parameter, Result, Unit, Qualifier, Prepared, Analyzed, Analyst, Method. Rows include Benzene, Ethylbenzene, MTBE, Toluene, Xylenes- Total.

Sample: 6083941-05
Name: GP-13, 7-8'
Alias: WARSAW IRO

Sampled: 08/18/16 11:55
Received: 08/19/16 13:15
Matrix: Soil - Grab
PO #: 9890

Table with 8 columns: Parameter, Result, Unit, Qualifier, Prepared, Analyzed, Analyst, Method. Row includes Solids - total solids (TS).

Sample: 6083941-05RE1
Name: GP-13, 7-8'
Alias: WARSAW IRO

Sampled: 08/18/16 11:55
Received: 08/19/16 13:15
Matrix: Soil - Grab
PO #: 9890

Table with 8 columns: Parameter, Result, Unit, Qualifier, Prepared, Analyzed, Analyst, Method. Rows include Benzene, Ethylbenzene, MTBE, Toluene, Xylenes- Total.

Sample: 6083941-06
Name: GP-14, 2-3'
Alias: WARSAW IRO

Sampled: 08/18/16 12:05
Received: 08/19/16 13:15
Matrix: Soil - Grab
PO #: 9890

Table with 8 columns: Parameter, Result, Unit, Qualifier, Prepared, Analyzed, Analyst, Method. Row includes Solids - total solids (TS).



**ANALYTICAL RESULTS**

Sample: 6083941-06RE1  
 Name: GP-14, 2-3'  
 Alias: WARSAW IRO

Sampled: 08/18/16 12:05  
 Received: 08/19/16 13:15  
 Matrix: Soil - Grab  
 PO #: 9890

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
<b><u>Volatile Organics - PIA</u></b>							
Benzene	< 5.6	ug/kg dry		08/31/16 00:00	08/31/16 16:46	JJI	SW 8260B
Ethylbenzene	< 5.6	ug/kg dry		08/31/16 00:00	08/31/16 16:46	JJI	SW 8260B
MTBE	< 5.6	ug/kg dry		08/31/16 00:00	08/31/16 16:46	JJI	SW 8260B
Toluene	< 5.6	ug/kg dry		08/31/16 00:00	08/31/16 16:46	JJI	SW 8260B
Xylenes- Total	< 17	ug/kg dry		08/31/16 00:00	08/31/16 16:46	JJI	SW 8260B

Sample: 6083941-07  
 Name: GP-14, 7-8'  
 Alias: WARSAW IRO

Sampled: 08/18/16 12:10  
 Received: 08/19/16 13:15  
 Matrix: Soil - Grab  
 PO #: 9890

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
<b><u>General Chemistry - PIA</u></b>							
Solids - total solids (TS)	81	%		08/23/16 10:30	08/23/16 11:20	DMB	SM 2540G*

Sample: 6083941-07RE1  
 Name: GP-14, 7-8'  
 Alias: WARSAW IRO

Sampled: 08/18/16 12:10  
 Received: 08/19/16 13:15  
 Matrix: Soil - Grab  
 PO #: 9890

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
<b><u>Volatile Organics - PIA</u></b>							
Benzene	< 4.7	ug/kg dry		08/31/16 00:00	08/31/16 16:18	JJI	SW 8260B
Ethylbenzene	8.2	ug/kg dry		08/31/16 00:00	08/31/16 16:18	JJI	SW 8260B
MTBE	< 4.7	ug/kg dry		08/31/16 00:00	08/31/16 16:18	JJI	SW 8260B
Toluene	< 4.7	ug/kg dry		08/31/16 00:00	08/31/16 16:18	JJI	SW 8260B
Xylenes- Total	64	ug/kg dry		08/31/16 00:00	08/31/16 16:18	JJI	SW 8260B



**ANALYTICAL RESULTS**

Sample: 6083941-08  
 Name: GP-9  
 Alias: WARSAW IRO

Sampled: 08/18/16 12:30  
 Received: 08/19/16 13:15  
 Matrix: Ground Water - Grab  
 PO #: 9890

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
<b><u>Volatile Organics - PIA</u></b>							
Benzene	< 1.0	ug/L	Pc	08/30/16 00:00	08/30/16 15:43	MAB	SW 8260B
Ethylbenzene	6.7	ug/L	Pc	08/30/16 00:00	08/30/16 15:43	MAB	SW 8260B
MTBE	< 1.0	ug/L	Pc	08/30/16 00:00	08/30/16 15:43	MAB	SW 8260B
Toluene	< 1.0	ug/L	Pc	08/30/16 00:00	08/30/16 15:43	MAB	SW 8260B
Xylenes- Total	4.5	ug/L	Pc	08/30/16 00:00	08/30/16 15:43	MAB	SW 8260B

Sample: 6083941-09  
 Name: GP-10  
 Alias: WARSAW IRO

Sampled: 08/18/16 12:45  
 Received: 08/19/16 13:15  
 Matrix: Ground Water - Grab  
 PO #: 9890

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
<b><u>Volatile Organics - PIA</u></b>							
Benzene	< 10	ug/L	Pc	08/29/16 00:00	08/29/16 12:00	MAB	SW 8260B
Ethylbenzene	1500	ug/L	Pc	08/29/16 00:00	08/29/16 12:00	MAB	SW 8260B
MTBE	< 10	ug/L	Pc	08/29/16 00:00	08/29/16 12:00	MAB	SW 8260B
Toluene	< 10	ug/L	Pc	08/29/16 00:00	08/29/16 12:00	MAB	SW 8260B
Xylenes- Total	1000	ug/L	Pc	08/29/16 00:00	08/29/16 12:00	MAB	SW 8260B



**PDC Laboratories, Inc.**

2231 West Altorfer Drive

Peoria, IL 61615

(800) 752-6651

## NOTES

Specific method revisions used for analysis are available upon request.

### Certifications

#### PIA - Peoria, IL

TNI Accreditation for Drinking Water, Wastewater, Hazardous and Solid Wastes Fields of Testing through IL EPA Lab No. 100230

Illinois Department of Public Health Bacteriological Analysis in Drinking Water Approved Laboratory Registry No. 17553

Missouri Department of Natural Resources Certificate of Approval for Microbiological Laboratory Service No. 870

Drinking Water Certifications: Iowa (240); Kansas (E-10338); Missouri (870)

Wastewater Certifications: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

Hazardous/Solid Waste Certifications: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

#### SPMO - Springfield, MO

USEPA DMR-QA Program

#### STL - St. Louis, MO

TNI Accreditation for Wastewater, Hazardous and Solid Wastes Fields of Testing through KS Lab No. E-10389

Illinois Department of Public Health Bacteriological Analysis in Drinking Water Approved Laboratory Registry No. 171050

Drinking Water Certifications: Missouri (1050)

Missouri Department of Natural Resources

\* Not a TNI accredited analyte

### Qualifiers

E Estimated - concentration exceeds the instrument calibration range.

Pc Chemical preservation discrepancy noted at the time of analysis

Certified by: Kurt Stepping, Senior Project Manager



PDC Laboratories, Inc.  
2231 W. Altorfer Dr  
Peoria, IL 61615

### CHAIN OF CUSTODY RECORD

Phone: (800) 752-6651  
Fax: (309) 692-9689  
www.pdclab.com

State where samples were collected \_\_\_\_\_

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT <b>MECRS</b>		PO. NUMBER <b>9890</b>		PROJECT NAME <b>Warsaw ITO</b>		DATE SHIPPED		3 ANALYSIS REQUESTED			4 WORK ORDER (FOR LAB USE ONLY) LOGIN #: <b>L083941-9</b> LOGGED BY: <b>PLJ</b> PROJECT: PROJ MGR:		
ADDRESS <b>PO Box 614</b>		PHONE <b>925-5551</b>		EMAIL <b>industenv@me.com</b>		MEANS SHIPPED		MATRIX TYPES: WW - WASTE WATER DW - DRINKING WATER GW - GROUND WATER WWSL - SLUDGE NAS - SOLID LCHT - LEACHATE OTHER:			REMARKS		
CITY <b>Tremont</b>	STATE <b>IL</b>	ZIP <b>61368</b>	SAMPLER (PLEASE PRINT) <b>Penney S. Lee</b>		SAMPLER'S SIGNATURE <i>[Signature]</i>								
CONTACT PERSON <b>Penney S. Lee</b>		SAMPLER'S SIGNATURE <i>[Signature]</i>		MATRIX TYPE		BOTTLE COUNT							
2 SAMPLE DESCRIPTION AS YOU WANT TO REPORT		DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	COMPI	MATRIX TYPE	BOTTLE COUNT	5 TURNAROUND TIME REQUESTED (RUSH TAT IS SUBJECT TO APPROVAL AND SURCHARGE) <input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> RUSH					
CP-11, 4-5'		8/18/16	11:28	X		Sub	4	X	6 The sample temperature will be measured upon receipt at the lab. By initiating this area, you request that we notify you before proceeding with analysis if the sample temperature is outside of the range of 0.1-6.0°C. By not initiating this area, you allow the lab to proceed with analytical testing regardless of the sample temperature.				
CP-12, 4-5'		8/18/16	11:41	X		Sub	4	X	8 COMMENTS (FOR LAB USE ONLY) SAMPLE TEMPERATURE UPON RECEIPT <b>11°C</b> CHILL PROCESS STARTED PRIOR TO RECEIPT SAMPLE(S) RECEIVED ON ICE PROPER BOTTLES RECEIVED IN GOOD CONDITION BOTTLES FILLED WITH ADEQUATE VOLUME SAMPLES RECEIVED WITHIN HOLD TIME(S) (EXCLUDES TYPICAL FIELD PARAMETERS) DATE AND TIME TAKEN FROM SAMPLE BOTTLE				
CP-12, 7-8'		8/18/16	11:43	X		Sub	4	X					
CP-13, 2-3'		8/18/16	11:50	X		Sub	4	X					
CP-13, 7-8'		8/18/16	11:55	X		Sub	4	X					
CP-14, 2-3'		8/18/16	12:05	X		Sub	4	X					
CP-14, 7-8'		8/18/16	12:10	X		Sub	4	X					
CP-9		8/18/16	12:30	X		CW	2	X					
CP-10		8/18/16	12:45	X		CW	2	X					
CP-11													
CP-12													
7 RELINQUISHED BY (SIGNATURE)		DATE	RECEIVED BY (SIGNATURE)		DATE	8 COMMENTS (FOR LAB USE ONLY)							
<i>[Signature]</i>			<i>[Signature]</i>		8-19-16	11°C OR N OR N OR N OR N OR N							
RELINQUISHED BY (SIGNATURE)		DATE	RECEIVED BY (SIGNATURE)		DATE								
<i>[Signature]</i>		8-19-16	<i>[Signature]</i>		8/19/16								
RELINQUISHED BY (SIGNATURE)		DATE	RECEIVED BY (SIGNATURE)		DATE	8 COMMENTS (FOR LAB USE ONLY)							
<i>[Signature]</i>		8-19-16	<i>[Signature]</i>		8/19/16	11°C OR N OR N OR N OR N OR N							
RELINQUISHED BY (SIGNATURE)		DATE	RECEIVED BY (SIGNATURE)		DATE								
<i>[Signature]</i>		8-19-16	<i>[Signature]</i>		8/19/16								

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

## Illinois Environmental Protection Agency Leaking Underground Storage Tank Program Laboratory Certification for Chemical Analysis

### A. Site Identification

IEMA Incident # (6- or 8-digit): 981987      IEPA LPC# (10-digit): 1790455007  
Site Name: Warsaw, Howard (Warsaw ITCO)  
Site Address (Not a P.O. Box): Route 122  
City: Minier      County: Tazewell      ZIP Code: 61759  
Leaking UST Technical File

### B. Sample Collector

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
2. Chain-of-custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

PS  
(initial)  
PS  
(initial)  
PS  
(initial)  
PS  
(initial)

### C. Laboratory Representative

I certify that: FOR PDL # 608394

1. Proper chain-of-custody procedures were followed as documented on the chain-of-custody forms
2. Sample integrity was maintained by proper preservation.  
2 WATER SAMPLES HAD PH > 2  
SAMPLES RECD AT 11°C
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

JS  
(initial)  
JS  
(initial)  
JS  
(initial)  
JS  
(initial)

5. Sample holding times were not exceeded.

*MS*  
(initial)

6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses.

*MS*  
(initial)

7. An accredited lab performed quantitative analysis using test methods identified in 35 IAC 186.180 (for samples collected on or after January 1, 2003).

*MS*  
(initial)

**D. Signatures**

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Sample Collector**

Name: Penny Silzer

Title: Sr. Geologist

Company: Midwest Environmental

Address: PO Box 614

City: Tremont

State: IL

ZIP Code: 61568

Phone: (309) 925-5551

Signature: *Penny Silzer*

Date: 9-26-16

**Laboratory Representative**

Name: Kurt Stepping

Title: Sr. Project Manager

Company: PDC Laboratories

Address: 2231 W Altorfer

City: Peoria

State: IL

ZIP Code: 61615

Phone: (309) 392-9688

Signature: *Kurt Stepping*

Date: 9-26-16

**Appendix B**  
**Soil Boring Logs**

LUST Incident No.: 981987	Boring Number: <u>GP-9</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to MW-7</u>	Date: Start <u>8/18/16</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>8/18/16</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
	BS	85%		1	SILT LOAM (OL); Black, moist, firm			0	
				2	SILTY CLAY (CL); Brown, w/gray mottling, moist, firm				
				3				0	
				4				0	
				5				0	
				6				0	
	BS	100%		7	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			0	
				8					
				9				0	
				10					
				11					
				12					
				13					
				14					
				15					
				16					
				17					
				18					
				19					
				20					
				21					
				22					
				23					
				24					
				25					
				26					
				27					
				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>7'</u>	Rotary Depth _____ Geologist <u>PLS</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

**R1021**

LUST Incident No.: 981987	Boring Number: <u>GP-10</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to MW-4</u>	Date: Start <u>8/18/16</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>8/18/16</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks	
4-6	BS	80%		1	Gravel Drive, gravel road base fill			0	4-6' for f <sub>sc</sub>	
				2	SILTY CLAY (CL): Brown, w/gray mottling, moist, firm			0		
3						0				
4										
5							0			
6										
BS	100%			7	SILTY SAND (SM): Dark brown/gray, wet, fine to medium grained			0		
				8				0		
				9						
				10						
				11						
				12						
				13						
				14						
				15						
				16						
				17						
				18						
				19						
				20						
				21						
				22						
				23						
				24						
				25						
				26						
				27						
				28						
				29						

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>7'</u>	Rotary Depth _____ Geologist _____	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

LUST Incident No.: 981987	Boring Number: <u>GP-11</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location: <u>Next to MW-4</u>	Date: Start <u>8/18/16</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>8/18/16</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
	BS	80%	[Hatched Box]	1	Gravel Drive, gravel road base fill			4	4-6' collected for $f_{sc}$
				2	SILTY CLAY (CL); Brown, w/gray mottling, moist, firm			12	
				3					
				4					
				5			2800		
				6					
	BS	100%	[Hatched Box]	7	SILTY SAND (SM); Dark brown/gray, wet, fine to medium grained			1400	
				8				2200	
				9					
				10					
				11					
				12					
				13					
				14					
				15					
				16					
				17					
				18					
				19					
				20					
				21					
				22					
				23					
				24					
				25					
				26					
				27					
				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data		Auger Depth _____ Rig GeoProbe _____	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling _____	Rotary Depth _____ Geologist <u>PLS</u>		
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>		
	Note: Boring backfilled unless otherwise noted		

LUST Incident No.: 981987	Boring Number: <u>GP-12</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location:	Date: Start <u>8/18/16</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>8/18/16</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
	BS	80%	[Hatched]	1	Gravel Drive, gravel road base fill			51	
				2	SILTY LOAM (OL); Black, moist, firm				
	BS	100%	[Hatched]	3	SILTY CLAY (CL); gray, hard, moist			196	
4-5				4					368
	BS	100%	[Hatched]	5					
7-8				6					
				7				4600	7-8' collected for BTEX
				8	SAND (SM); gray, fine grained, wet				
				9				1490	
				10					
				11					
				12					
				13					
				14					
				15					
				16					
				17					
				18					
				19					
				20					
				21					
				22					
				23					
				24					
				25					
				26					
				27					
				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig GeoProbe _____	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling _____	Rotary Depth _____ Geologist <u>PLS</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

LUST Incident No.: 981987	Boring Number: <u>GP-13</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location:	Date: Start <u>8/18/16</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>8/18/16</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	Gravel Drive, gravel road base fill			500	
2-3'	BS	90%		2	SILTY LOAM (OL); Black, moist, firm				2-3' collected for BTEX
				3	SILTY CLAY (CL); gray, hard, moist			958	
				4				310	
				5					
7-8'	BS	95%		6					
				7				19	7-8' collected for BTEX
				8	SAND (SM); gray, fine grained, wet			949	
				9					
				10					
				11					
				12					
				13					
				14					
				15					
				16					
				17					
				18					
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				21					
				22					
				23					
				24					
				25					
				26					
				27					
				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>8'</u>	Rotary Depth _____ Geologist <u>PLS</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

LUST Incident No.: 981987	Boring Number: <u>GP-14</u>	Page <u>1</u> of <u>1</u>
Site Name: Warsaw ITCO	Boring Location:	Date: Start <u>8/18/16</u>
Address: <u>Rt 122</u> <u>Minier, IL</u>		Finish <u>8/18/16</u>

Sample Number	Sample Device	Sample Recovery	Lithology Symbol	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	Hand Penetrometer	PID Reading	Remarks
				1	SILTY LOAM (OL); Black, moist, firm			6	
2-3'	BS	95%		2	SILTY CLAY (CL); gray, hard, moist			3	2-3' collected for BTEX
				3				3	
				4					
				5				3	
				6					
7-8	BS	100%		7				40	7-8' collected for BTEX
				8	SAND (SM); gray, fine grained, wet			880	
				9					
				10					
				11					
				12					
				13					
				14					
				15					
				16					
				17					
				18					
				19					
				20					
				21					
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				23					
				24					
				25					
				26					
				27					
				28					
				29					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth _____ Rig <u>GeoProbe</u>	Midwest Environmental Consulting & Remediation Services, Inc.
▼ Depth While Drilling <u>8'</u>	Rotary Depth _____ Geologist <u>PLS</u>	
▽ Depth After Drilling _____	Driller/Co <u>Doug/Reynolds</u>	
	Note: Boring backfilled unless otherwise noted	

**Appendix C**  
**Soil and Groundwater Sampling Protocol**

## SOIL SAMPLING PROTOCOL

To be used when sampling L.U.S.T. site excavations for IEPA closure.

### 1. Sampling Methodology

- A. All sampling equipment to be used will be cleaned and decontaminated using deionized water prior to and between samples.
- B. Soil samples will be taken from excavation extents using a stainless steel trowel. The trowel will be inserted into the soil several inches so as to take a sample of undisturbed material. The sample will be immediately placed into a new, airtight, glass jar with a teflon lined lid.
- C. The sample will be allowed to sit undisturbed for a period of time sufficient for vapor equilibrium to be reached. A headspace analysis of the sample will then be conducted using a portable photoionization detector.
- D. Sampled extents showing contamination levels above 10 ppm on the PID will be continued. Sampled extents showing below 10 ppm on the PID will be resampled for laboratory analysis.

### 2. Sample Storage and Transport

- A. Soil samples will be collected in new, airtight, glass jars\* with teflon lined lids. Samples for analysis will be immediately cooled using a thermally insulated cooler and ice. The samples will be transported, on ice, as soon as possible, to the laboratory or to the engineering office cooler to await transport to the laboratory.
- B. No sample will be allowed to remain in the possession of the engineer or laboratory for more than two weeks prior to analysis.
- C. A chain of custody record will be kept for all samples taken for laboratory analysis.

### 3. Samples will be taken from the excavation sidewalls and floor at the following intervals.

- A. A minimum of one sample per twenty feet for sidewall extents. When lengths of sidewall exceed twenty feet, samples will be taken at equally spaced intervals, not to exceed twenty feet.
- B. Samples will be taken at a height relating to the projection of the lower one third of the former under ground storage tanks onto the sidewall extents. Samples will be taken at a distance relating to one-third the total excavation height from the floor if tank elevations are unknown.

- C. A minimum of one sample per 400 square feet of excavation floor. Samples at minimum will be taken from the locations representing the bottoms of the former underground storage tanks.
- D. Composited samples of excavated materials may also be taken for background reference and landfill verification.

\*Encore sampling system will be substituted for glass jars when required.

## **SOIL SAMPLING PROTOCOL For Subsurface Investigations**

### 1. Sampling Methodology - Split Spoon Sampling

- A. All sampling equipment to be used will be cleaned and decontaminated using deionized water prior to and between samples.
- B. Verification will be made that all boring equipment to include augers, split spoon samplers and associated equipment has been properly cleaned and decontaminated prior to initiating investigation.
- C. All boring and associated samplers will be decontaminated in accordance with the following schedule.
  - 1.) Augers and center plugs will be decontaminated between borings using a high pressure washer or steam cleaner.
  - 2.) Split Spoon Samplers will be decontaminated between samples using a warm water Alconox wash and triple rinsing.
- D. Samples representative of the interval retrieved will be removed and placed into new, glass jars with teflon lined lids\*. Proper care will be taken to minimize volatilization of possible contaminants from the sample during handling.
- E. The sample will be allowed to sit undisturbed for a period of time sufficient for vapor equilibrium to be reached. A headspace analysis of the sample will then be conducted using a portable photoionizer detector.
- F. A log of all borings will be recorded during sampling. The logs will include data regarding soil types and depths, anomalies, odor, HNU readings, and moisture contents.

### 2. Sample Storage, Handling and Transport

- A. Samples for analysis will be immediately cooled using a thermally insulated cooler and ice. The samples will be transported, on ice, as soon as possible, to the laboratory or to the engineering office cooler to await transport to the laboratory.
- B. No sample will be allowed to remain in the possession of the geologist or laboratory for more than two weeks prior to analysis.
- C. A chain of custody record will be kept for all samples taken for laboratory analysis.

\*Encore sampling system will be substituted for glass jars when required.

## SOIL SAMPLING PROTOCOL

### 1. Sampling Methodology - Shelby Tube Samples

- A. All sampling equipment to be used will be cleaned and decontaminated using deionized water prior to and between samples.
- B. Verification will be made that all boring equipment to include augers, shelby tube samplers and associated equipment has been properly cleaned and decontaminatdd prior to initiating investigation.
- C. All boring and associated samplers will be decontaminated in accordance with the following schedule.
  - 1.) Augers and center plugs will be decontaminated between borings using a high pressure washer or steam cleaner.
  - 2.) Shelby tube samplers will be inspected prior to use. No samplers will be used showing indications of damage, corrosion or contamination. Samplers will not be reused or washed in the field.
- D. Shelby tube samplers will be carefully removed to minimize sample disturbance and volatilization or contamination.
- E. Plastic end caps will immediately be placed on the shelby tubes as they are removed.

### 2. Sample Storage, Handling, & Transport

- A. Shelby tube samples will be placed in a thermally insulated cooler with ice or cooler packs (Blue Ice).
- B. No sample will be allowed to remain in the possession of the engineer or laboratory for more than two weeks prior to analysis.
- C. A chain of custody record will be kept for all samples taken for laboratory analysis.
- D. No samples will be removed from the Shelby tubes except by the laboratory performing analysis.

## GROUNDWATER SAMPLING PROTOCOL

To be used when sampling groundwater monitoring wells for IEPA approved investigations.

### 1. Sampling Methodology - Bailer Method

A. Verification will be made that all sampling equipment to include bailers, buckets, chords, water level meters, have been properly decontaminated prior to sampling initiation.

B. All equipment will be decontaminated in accordance with the following protocol:

1.) Bailers will be decontaminated between samples using Alconox wash, a 30% methanol/distilled water rinse, and a final triple rinse with distilled water.

2.) Water level probes and associated equipment will be decontaminated between readings using an Alconox wash and distilled water rinse.

3.) A new section of line will be used for bailing and sampling each individual well.

C. A record of the following will be made at the time of well sampling:

- 1.) Depth to water from top of well casing.
- 2.) Total well depth from top of well casing.
- 3.) Total vertical feet of water in well.
- 4.) Number of well volumes purged.
- 5.) Number of gallons purged.
- 6.) Sampling methods.
- 7.) Sample appearance.

D. Wells will be purged and sampled using the following method:

The total vertical feet of water in the 2" ID monitor well will be multiplied by 0.163 gal./ft. in order to determine the total volume of water in the well. A total of three well volumes will be purged from the well. Groundwater samples will then be withdrawn via a stainless steel bailer and collected in 40 milliliter, properly labeled vials. The samples will be immediately placed on ice for temporary storage until the samples can be transported to an IEPA certified laboratory.

**Appendix D**  
**C<sub>sat</sub> Calculations**

S-29 For Benzene

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = 996 \text{ ppm}$$

$$S = 1.80E+03 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 0.385 \text{ S19}$$

$$\Theta_w = 0.29 \text{ S20}$$

$$\Theta_a = 0.05 \text{ S21}$$

$$H' = 0.23 \text{ Table E}$$

S19

$$K_d = K_{oc} * f_{oc} = 0.385$$

$$K_{oc} = 50 \text{ Table E}$$

$$f_{oc} = 0.008 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b/\rho_s = 0.33$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$l = 0.3$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) : 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = 0.33 * (.3/8)^{0.042}$$

$$\Theta_w = 0.29$$

$$S21 = \Theta_a = \eta - \Theta_w = 0.05$$

S-29 For Toluene

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = \mathbf{735 \text{ ppm}}$$

$$S = 5.30E+02 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 1.2166 \text{ S19}$$

$$\Theta_w = 0.29 \text{ S20}$$

$$\Theta_a = 0.05 \text{ S21}$$

$$H' = 0.271 \text{ Table E}$$

S19

$$K_d = K_{oc} * f_{oc} = 1.2166$$

$$K_{oc} = 158 \text{ Table E}$$

$$f_{oc} = 0.008 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b / \rho_s = \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$I = 0.3$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) : 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = 0.33 * (.3/8)^{0.042}$$

$$\Theta_w = \mathbf{0.29}$$

$$S21 = \Theta_a = \eta - \Theta_w = \mathbf{0.05}$$

S-29 For Ethylbenzene

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = \quad \mathbf{448 \text{ ppm}}$$

$$S = 1.70\text{E}+02 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 2.464 \text{ S19}$$

$$\Theta_w = 0.29 \text{ S20}$$

$$\Theta_a = 0.05 \text{ S21}$$

$$H' = 0.324 \text{ Table E}$$

S19

$$K_d = K_{oc} * f_{oc} = \quad \mathbf{2.464}$$

$$K_{oc} = 3.20\text{E}+02 \text{ Table E}$$

$$f_{oc} = 0.008 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b/\rho_s = \quad \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$l = 0.3$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) : 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = 0.33 * (.3/8)^{0.042}$$

$$\Theta_w = \quad \mathbf{0.29}$$

$$S21 = \Theta_a = \eta - \Theta_w = \quad \mathbf{0.05}$$

S-29 For Xylenes

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = \quad \mathbf{356 \text{ ppm}}$$

$$S = 1.10\text{E}+02 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 3.0646 \text{ S19}$$

$$\Theta_w = 0.29 \text{ S20}$$

$$\Theta_a = 0.05 \text{ S21}$$

$$H' = 0.271 \text{ Table E}$$

S19

$$K_d = K_{oc} * f_{oc} = 3.0646$$

$$K_{oc} = 3.98\text{E}+02 \text{ Table E}$$

$$f_{oc} = 0.008 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b / \rho_s = \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (I / K_s)^{1/(2b+3)}$$

$$I = 0.3$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) = 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = 0.33 * (.3/8)^{0.042}$$

$$\Theta_w = \mathbf{0.29}$$

$$S21 = \Theta_a = \eta - \Theta_w = \mathbf{0.05}$$

**Appendix E**

**Institutional Controls**

**HAA and Groundwater Ordinance with MUO**

**CERTIFICATION OF ORDINANCE**

I SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that on March 15, 2011 the Corporate Authorities of the above municipality passed and approved Ordinance No. 785.

Ordinance No. 785, including the cover sheet thereof, was prepared and published in pamphlet form on the 15<sup>th</sup> day of March, 2011. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

Dated at Minier, Illinois, this 15<sup>th</sup> day of March, 2011.

(SEAL)

  
Sandy Lancaster, Village Clerk

MEMORANDUM OF UNDERSTANDING BETWEEN  
VILLAGE OF MINIER AND THE ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY REGARDING THE USE OF A LOCAL GROUNDWATER OR  
WATER WELL ORDINANCE AS AN ENVIRONMENTAL INSTITUTIONAL CONTROL

I. PURPOSE AND INTENT

- A. This Memorandum of Understanding ("MOU") between Village of Minier and the Illinois Environmental Protection Agency ("Illinois EPA") is entered into for the purpose of satisfying the requirements of 35 Ill. Adm. Code 742.1015 for the use of groundwater or water well ordinances as environmental institutional controls. The Illinois EPA has reviewed the groundwater or water well ordinance of Village of Minier (Attachment A) and determined that the ordinance prohibits the use of groundwater for potable purposes and/or the installation and use of new potable water supply wells by private entities but does not expressly prohibit those activities by the unit of local government itself. In such cases, 35 Ill. Adm. Code 742.1015(a) provides that the unit of local government may enter into an MOU with the Illinois EPA to allow the use of the ordinance as an institutional control.
- B. The intent of this Memorandum of Understanding is to specify the responsibilities that must be assumed by the unit of local government to satisfy the requirements for MOUs as set forth at 35 Ill. Adm. Code 742.1015(i).

II. DECLARATIONS AND ASSUMPTION OF RESPONSIBILITY

In order to ensure the long-term integrity of the groundwater or water well ordinance as an environmental institutional control and that risk to human health and the environment from contamination left in place in reliance on the groundwater or water well ordinance is effectively managed, Village of Minier hereby assumes the following responsibilities pursuant to 35 Ill. Adm. Code 742.1015(d)(2) and (i):

- A. Village of Minier will notify the Illinois EPA Bureau of Land of any proposed ordinance changes or requests for variance at least 30 days prior to the date the local government is scheduled to take action on the proposed change or request (35 Ill. Adm. Code 742.1015(i)(4));
- B. Village of Minier will maintain a registry of all sites within its corporate limits that have received "No Further Remediation" determinations in reliance on the ordinance from the Illinois EPA (35 Ill. Adm. Code 742.1015(i)(5));
- C. Village of Minier will review the registry of sites established under paragraph II. B. prior to siting public potable water supply wells within the area covered by the ordinance (35 Ill. Adm. Code 742.1015(i)(6)(A));



- D. Village of Minier will determine whether the potential source of potable water has been or may be affected by contamination left in place at the sites tracked and reviewed under paragraphs II. B. and C. (35 Ill. Adm. Code 742.1015(i)(6)(B)); and
- E. Village of Minier will take action as necessary to ensure that the potential source of potable water is protected from contamination or treated before it is used as a potable water supply (35 Ill. Adm. Code 742.1015(i)(6)(C)).

NOTE: Notification under paragraph II. A. above or other communications concerning this MOU should be directed to:

Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, IL 62794-9276

### III. SUPPORTING DOCUMENTATION

The following documentation is required by 35 Ill. Adm. Code 742.1015(i) and is attached to this MOU:

- A. Attachment A: A copy of the groundwater or water well ordinance certified by the city clerk or other official as the current, controlling law (35 Ill. Adm. Code 742.1015(i)(3));
- B. Attachment B: Identification of the legal boundaries within which the ordinance is applicable (certification by city clerk or other official that the ordinance is applicable everywhere within the corporate limits; if ordinance is not applicable throughout the entire city or village, legal description and map of area showing sufficient detail to determine where ordinance is applicable) (35 Ill. Adm. Code 742.1015(i)(2));
- C. Attachment C: A statement of the authority of the unit of local government to enter into the MOU (council resolution, code of ordinances, inherent powers of mayor or other official signing MOU -- attach copies) (35 Ill. Adm. Code 742.1015(i)(1)).

IN WITNESS WHEREOF, the lawful representatives of the parties have caused this MOU to be signed as follows:

FOR: Village of Minier  
(Name of city or village)

BY: Neill Keneipp  
(Name and title of signatory)  
Neill Keneipp, Village President

DATE: 3/15/11

FOR: Illinois Environmental Protection Agency

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
Manager, Division of Remediation Management  
Bureau of Land

# Village of Minier

Neill Keneipp  
Village President



Sandy Lancaster  
Village Clerk

110 W. Central • Box 350 • Minier, Illinois 61759  
Phone: 309/392-2442 • Fax: 309/392-2906

February 2, 2015

Penny Silzer  
Midwest Environmental Consulting &  
Remediation Services Inc.  
22200 IL. Rte. 9, P.O. Box 614  
Tremont, IL. 61568-0614

Dear Penny:

Enclosed please find Ordinance #808, Ordinance #785, Ordinance #783 and Resolution #278 with an updated Certification for these documents.

If you have any other questions, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Sandy Lancaster".

Sandy Lancaster  
Village Clerk

Enclosure

R1043

**VILLAGE OF MINIER**

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**RESOLUTION NO. 278**

**A RESOLUTION OF THE VILLAGE OF MINIER,  
ILLINOIS, AUTHORIZING ENTERING INTO A  
MEMORANDUM OF UNDERSTANDING**

---

**ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS**

**THIS 1<sup>ST</sup> DAY OF APRIL, 2014**

---

**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 1<sup>st</sup> day of April, 2014.**

RESOLUTION NO. 278

A RESOLUTION OF THE VILLAGE OF MINIER, ILLINOIS, AUTHORIZING  
ENTERING INTO A MEMORANDUM OF UNDERSTANDING

WHEREAS, it is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois, enter into a Memorandum of Understanding with the Illinois Environmental Protection Agency; and

WHEREAS, pursuant to the Illinois Municipal Code, a municipality is authorized to enter into agreements with other governmental entities for lawful public purposes; and

WHEREAS, the Memorandum of Understanding is attached as Exhibit A.

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

SECTION 1. The foregoing recitals are incorporated herein as findings of the Village of Minier.

SECTION 2. The Village of Minier hereby determines that it is advisable, necessary, and in the interests of the public health, safety and welfare that the Municipality enter into a memorandum of understanding with the Illinois Environmental Protection Agency pursuant to the terms of the agreement that is attached as Exhibit A.

SECTION 3. The Village of Minier hereby approves and authorizes the Village president to execute the Memorandum of Understanding which is attached as Exhibit A.

SECTION 4. This Resolution is hereby published in pamphlet form by authority of the Village Board of the Village of Minier.

PASSED at a regular meeting of the Village Board of the Village of Minier held the 1<sup>st</sup> day of April, 2014.

A YES: Devine, Burt, LaDew, Crawford, Beccue & Needles

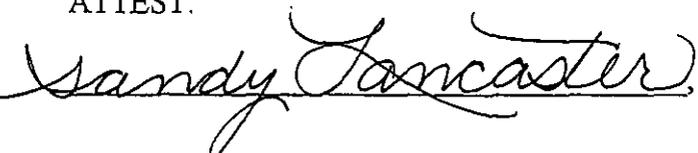
NAYS: None

ABSENT: None

APPROVED this 1<sup>st</sup> day of April, 2014.

  
\_\_\_\_\_  
Village President

ATTEST:

  
\_\_\_\_\_  
Village Clerk

**EXHIBIT A**  
**MEMORANDUM OF UNDERSTANDING**  
**BETWEEN THE VILLAGE OF MINIER AND THE ILLINOIS ENVIRONMENTAL**  
**PROTECTION AGENCY REGARDING THE USE OF A LOCAL GROUNDWATER OR**  
**WATER WELL ORDINANCE AS AN**  
**ENVIRONMENTAL INSTITUTIONAL CONTROL**

**I. PURPOSE AND INTENT**

- A. This Memorandum of Understanding ("MOU") between the Village of Minier and the Illinois Environmental Protection Agency ("Illinois EPA") is entered into for the purpose of satisfying the requirements of 35 Ill. Adm. Code 742.1015 for the use of groundwater or water well ordinances as environmental institutional controls. The Illinois EPA has reviewed the groundwater or water well ordinance of the Village of Minier (Attachment A) and determined that the ordinance prohibits the use of groundwater for potable purposes and/or the installation and use of new potable water supply wells by private entities but does not expressly prohibit those activities by the unit of local government itself. In such cases, 35 Ill. Adm. Code 742.1015(a) provides that the unit of local government may enter into an MOU with the Illinois EPA to allow the use of the ordinance as an institutional control.
- B. The intent of this Memorandum of Understanding is to specify the responsibilities that must be assumed by the unit of local government to satisfy the requirements for MOUs as set forth at 35 Ill. Adm. Code 742.1015(i):

**II. DECLARATIONS AND ASSUMPTION OF RESPONSIBILITY**

In order to ensure the long-term integrity of the groundwater or water well ordinance as an environmental institutional control and that risk to human health and the environment from contamination left in place in reliance on the groundwater or water well ordinance is effectively managed, the Village of Minier hereby assumes the following responsibilities pursuant to 35 Ill. Adm. Code 742.1015(d)(2) and (i):

- A. The Village of Minier will notify the Illinois EPA Bureau of Land of any proposed ordinance changes or requests for variance at least 30 days prior to the date the local government is scheduled to take action on the proposed change or request (35 Ill. Adm. Code 742.1015(i)(4));
- B. The Village of Minier will maintain a registry of all sites within its corporate limits that have received "No Further Remediation" determinations in reliance on the ordinance from the Illinois EPA (35 Ill. Adm. Code 742.1015(i)(5));
- C. The Village of Minier will review the registry of sites established under Paragraph II. B. prior to siting public potable water supply wells within the area covered by the ordinance (35 Ill. Adm. Code 742.1015(i)(6)(A));  
The Village of Minier will determine whether the potential source of potable water has been or may be affected by contamination left in place at the sites tracked and reviewed under paragraphs II. B. and C. (35 Ill. Adm. Code

742.1015(i)(6)(B)); and

- D. The Village of Minier will take action as necessary to ensure that the potential source of potable water is protected from contamination or treated before it is used as a potable water supply (35 Ill. Adm. Code 742.1015(i)(6)(C)).

NOTE: Notification under paragraph II. A. above or other communications concerning this MOU should be directed to:

**Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, Illinois 62794-9276**

### III. SUPPORTING DOCUMENTATION

The following documentation is required by 35 Ill. Adm. Code 742.1015(i) and is attached to this MOU:

- A. Attachment A: A copy of the groundwater or water well ordinance certified by the city clerk or other official as the current, controlling law (35 Ill. Adm. Code 742.1015(i)(3));
- B. Attachment B: Identification of the legal boundaries within which the ordinance is applicable (certification by city clerk or other official that the ordinance is applicable everywhere within the corporate limits; if ordinance is not applicable throughout the entire city or village, legal description and map of area showing sufficient detail to determine where ordinance is applicable) (35 Ill. Adm. Code 742.1015(i)(2));
- C. Attachment C: A statement of the authority of the unit of local government to enter into the MOU (council resolution, code of ordinances, inherent powers of mayor or other official signing MOU – attach copies) (35 Ill. Adm. Code 742.1015(i)(1)).

IN WITNESS WHEREOF, the lawful representatives of the parties have caused this MOU to be signed as follows:

**FOR: The Village of Minier**

BY: Neill Keneipp  
Neill Keneipp, Village President

DATE: 04/01/2014

**FOR: Illinois Environmental Protection Agency**

BY: \_\_\_\_\_  
Manager, Division of Remediation Management  
Bureau of Land

DATE: \_\_\_\_\_

**R1047**

**CERTIFICATION OF RESOLUTION**

I, Sandy Landcaster, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that on April 1<sup>st</sup>, 2014, the Corporate Authorities of the above municipality passed and approved the resolution authorizing the Village to enter into a Memorandum of Understanding with the Illinois Environmental Protection Agency.

Resolution No. 278, including the cover sheet thereof, was prepared, and published in pamphlet form on the 1st day of April, 2014. Copies of the Resolution were also available for public inspection upon request in the office of the Village Clerk.

Dated at Minier, Illinois, this 1<sup>st</sup> day of April, 2014.

  
Sandy Landcaster, Village Clerk

(SEAL)

**VILLAGE OF MINIER**

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**ORDINANCE NO. 783**

AN ORDINANCE OF THE VILLAGE OF MINIER,  
ILLINOIS AMENDING CHAPTER 9, ARTICLE 1,  
SECTION 9-1-16 OF THE VILLAGE CODE

---

**ADOPTED BY THE**

**VILLAGE BOARD**

**OF THE**

**VILLAGE OF MINIER, ILLINOIS**

**THIS 4<sup>th</sup> DAY OF JANUARY, 2011**

---

**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 4<sup>th</sup> day of January, 2011.**

**ORDINANCE NO. 783**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS  
AMENDING THE WATER SYSTEM ORDINANCE**

---

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

SECTION 1. It is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois ("Village"), amend Chapter 9, Article 1, Section 9-1-16 the Water System Ordinance; and

SECTION 2. Certain properties in the Village have been used over a period of time for commercial/industrial purposes; and

SECTION 3. Because of said use, concentrations of certain chemical constituents in the groundwater beneath the Village may exceed Class I groundwater quality standards for potable resource groundwater as forth in 35 Illinois Administrative Code 620, or Tier 1 residential remediation objectives as set forth in 35 Illinois Administrative Code 742; and

SECTION 4. The Village desires to limit potential threats to human health from groundwater contamination while facilitating the redevelopment and productive use of properties that are the source of said chemical constituents; and

SECTION 5. Section 9-1-16 of Chapter 9 of the Code of the Village provides a listing of all properties where the use of private water systems is prohibited; and

SECTION 6. Chapter 9, Article 1, Section 9-1-16 of the Village Code of the Village of Minier is hereby amended to add the language set forth below; and

**NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER, ILLINOIS,** that Section 9-1-16 of Chapter 9 of the Code of the Village is amended as follows:

9-16-16: PRIVATE WATER SYSTEMS PROHIBITED: No person having his residence or place of business within the territorial limits of the Village waterworks and sewerage system shall be permitted to secure water for such residence, or place of business, located in the Village, otherwise than through the water mains of the Village, whenever the water mains of the water system of the Village are adjacent to any subdivided lot, or parcel of real estate upon which said residence or place of business is located, unless such system existed prior to installation of the public water main.

Notwithstanding the preceding paragraph, the use of private water systems is expressly prohibited because of the possibility of ground water contamination at the following location:

A. 208 Route 122, Minier, IL 61759

A tract described as follows: Starting at the Northeast corner of Lot 16 in Livesay's Addition to the Village of Minier, thence North to the south line of the public highway; thence East 166' to the place of beginning; thence east 90'; thence South to the North line of Livesay's addition; thence West 90'; thence north to POB in the NW 1/4 of the NE 1/4 Section 22, TWP 23 N, R2E, Tazewell County, ILL (Also known as part of Lot 17).

PIN: 19-19-22-201-013

SECTION 7. All ordinances or parts of ordinances in conflict herewith are hereby repealed;  
and

SECTION 8. This ordinance is hereby published in pamphlet form by authority of the Village Board of the Village of Minier; and

PASSED at a regular meeting of the Village Board of the Village of Minier held the 4<sup>th</sup> day of January, 2011.

AYES: Devine, Burt, Crawford & Needles

NAYS: None

ABSENT: J. Beccue & M. Beccue

APPROVED this 4<sup>th</sup> day of January, 2011.

Neil Kenney  
Village President

ATTEST:

Yandy Lancaster  
Village Clerk

VILLAGE OF MINIER

---

ORDINANCE NO. 785

AN ORDINANCE OF THE VILLAGE OF MINIER,  
ENTERING INTO A MEMORANDUM OF  
UNDERSTANDING WITH THE ILLINOIS  
ENVIRONMENTAL PROTECTION AGENCY

---

ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS

THIS 15TH DAY OF MARCH, 2011

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Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 15th day of March, 2011.

ORDINANCE NO. 785

AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS  
ENTERING INTO A MEMORANDUM OF UNDERSTANDING WITH  
THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE  
VILLAGE OF MINIER, ILLINOIS:

SECTION 1. Certain properties in the Village have been used over a period of time for commercial/industrial purposes; and

SECTION 2. Because of said use, concentrations of certain chemical constituents in the groundwater beneath the Village may exceed Class I groundwater quality standards for potable resource groundwater as forth in 35 Illinois Administrative Code 620, or Tier 1 residential remediation objectives as set forth in 35 Illinois Administrative Code 742; and

SECTION 3. The Village desires to limit potential threats to human health from groundwater contamination while facilitating the redevelopment and productive use of properties that are the source of said chemical constituents; and

SECTION 4. Section 9-1-16 of Chapter 9 of the Code of the Village provides a listing of all properties where the use of private water systems is prohibited; and

SECTION 5. It is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois ("Village"), to enter into a Memorandum of Understanding with the Illinois Environmental Protection Agency to memorialize the institutional controls established to insure that the public water system is safe from contaminates; and

SECTION 7. All ordinances or parts of ordinances in conflict herewith are hereby repealed; and

SECTION 8. This ordinance is hereby published in pamphlet form by authority of the Village Board of the Village of Minier; and

NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER, ILLINOIS, that the Village President may enter into and execute the Memorandum of Understanding with the Illinois Environmental Protection Agency attached hereto as Exhibit A.

PASSED at a regular meeting of the Village Board of the Village of Minier held the  
15th day of March, 2011.

AYES: Devine, Burt, Crawford & Needles

NAYS: None

ABSENT: J. Beccue & M. Beccue

APPROVED this 15th day of March, 2011.

Neil Kenegy  
Village President

ATTEST:

Vandy Lancaster  
Village Clerk

**CERTIFICATION OF RESOLUTION**

I, Sandy Landcaster, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that on April 1<sup>st</sup>, 2014, the Corporate Authorities of the above municipality passed and approved the resolution authorizing the Village to enter into a Memorandum of Understanding with the Illinois Environmental Protection Agency.

Resolution No. 278, including the cover sheet thereof, was prepared, and published in pamphlet form on the 1st day of April, 2014. Copies of the Resolution were also available for public inspection upon request in the office of the Village Clerk.

Dated at Minier, Illinois, this 1<sup>st</sup> day of April, 2014.

  
Sandy Landcaster, Village Clerk

(SEAL)

**VILLAGE OF MINIER**

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**RESOLUTION NO. 278**

A RESOLUTION OF THE VILLAGE OF MINIER,  
ILLINOIS, AUTHORIZING ENTERING INTO A  
MEMORANDUM OF UNDERSTANDING

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**ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS**

**THIS 1<sup>ST</sup> DAY OF APRIL, 2014**

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Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 1<sup>st</sup> day of April, 2014.

RESOLUTION NO. 278

A RESOLUTION OF THE VILLAGE OF MINIER, ILLINOIS, AUTHORIZING ENTERING INTO A MEMORANDUM OF UNDERSTANDING

WHEREAS, it is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois, enter into a Memorandum of Understanding with the Illinois Environmental Protection Agency; and

WHEREAS, pursuant to the Illinois Municipal Code, a municipality is authorized to enter into agreements with other governmental entities for lawful public purposes; and

WHEREAS, the Memorandum of Understanding is attached as Exhibit A.

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

SECTION 1. The foregoing recitals are incorporated herein as findings of the Village of Minier.

SECTION 2. The Village of Minier hereby determines that it is advisable, necessary, and in the interests of the public health, safety and welfare that the Municipality enter into a memorandum of understanding with the Illinois Environmental Protection Agency pursuant to the terms of the agreement that is attached as Exhibit A.

SECTION 3. The Village of Minier hereby approves and authorizes the Village president to execute the Memorandum of Understanding which is attached as Exhibit A.

SECTION 4. This Resolution is hereby published in pamphlet form by authority of the Village Board of the Village of Minier.

PASSED at a regular meeting of the Village Board of the Village of Minier held the 1<sup>st</sup> day of April, 2014.

AYES: Devine, Burt, LaDew, Crawford, Beccue & Needles

NAYS: None

ABSENT: None

APPROVED this 1<sup>st</sup> day of April, 2014.

Neil Kemp  
Village President

ATTEST:  
Sandy Lancaster, Village Clerk

**EXHIBIT A**  
**MEMORANDUM OF UNDERSTANDING**  
**BETWEEN THE VILLAGE OF MINIER AND THE ILLINOIS ENVIRONMENTAL**  
**PROTECTION AGENCY REGARDING THE USE OF A LOCAL GROUNDWATER OR**  
**WATER WELL ORDINANCE AS AN**  
**ENVIRONMENTAL INSTITUTIONAL CONTROL**

**I. PURPOSE AND INTENT**

- A. This Memorandum of Understanding ("MOU") between the Village of Minier and the Illinois Environmental Protection Agency ("Illinois EPA") is entered into for the purpose of satisfying the requirements of 35 Ill. Adm. Code 742.1015 for the use of groundwater or water well ordinances as environmental institutional controls. The Illinois EPA has reviewed the groundwater or water well ordinance of the Village of Minier (Attachment A) and determined that the ordinance prohibits the use of groundwater for potable purposes and/or the installation and use of new potable water supply wells by private entities but does not expressly prohibit those activities by the unit of local government itself. In such cases, 35 Ill. Adm. Code 742.1015(a) provides that the unit of local government may enter into an MOU with the Illinois EPA to allow the use of the ordinance as an institutional control.
- B. The intent of this Memorandum of Understanding is to specify the responsibilities that must be assumed by the unit of local government to satisfy the requirements for MOUs as set forth at 35 Ill. Adm. Code 742.1015(i).

**II. DECLARATIONS AND ASSUMPTION OF RESPONSIBILITY**

In order to ensure the long-term integrity of the groundwater or water well ordinance as an environmental institutional control and that risk to human health and the environment from contamination left in place in reliance on the groundwater or water well ordinance is effectively managed, the Village of Minier hereby assumes the following responsibilities pursuant to 35 Ill. Adm. Code 742.1015(d)(2) and (i):

- A. The Village of Minier will notify the Illinois EPA Bureau of Land of any proposed ordinance changes or requests for variance at least 30 days prior to the date the local government is scheduled to take action on the proposed change or request (35 Ill. Adm. Code 742.1015(i)(4));
- B. The Village of Minier will maintain a registry of all sites within its corporate limits that have received "No Further Remediation" determinations in reliance on the ordinance from the Illinois EPA (35 Ill. Adm. Code 742.1015(i)(5));
- C. The Village of Minier will review the registry of sites established under Paragraph II. B. prior to siting public potable water supply wells within the area covered by the ordinance (35 Ill. Adm. Code 742.1015(i)(6)(A));  
The Village of Minier will determine whether the potential source of potable water has been or may be affected by contamination left in place at the sites tracked and reviewed under paragraphs II. B. and C. (35 Ill. Adm. Code

742.1015(i)(6)(B)); and

- D. The Village of Minier will take action as necessary to ensure that the potential source of potable water is protected from contamination or treated before it is used as a potable water supply (35 Ill. Adm. Code 742.1015(i)(6)(C)).

NOTE: Notification under paragraph II. A. above or other communications concerning this MOU should be directed to:

**Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, Illinois 62794-9276**

### **III. SUPPORTING DOCUMENTATION**

The following documentation is required by 35 Ill. Adm. Code 742.1015(i) and is attached to this MOU:

- A. Attachment A: A copy of the groundwater or water well ordinance certified by the city clerk or other official as the current, controlling law (35 Ill. Adm. Code 742.1015(i)(3));
- B. Attachment B: Identification of the legal boundaries within which the ordinance is applicable (certification by city clerk or other official that the ordinance is applicable everywhere within the corporate limits; if ordinance is not applicable throughout the entire city or village, legal description and map of area showing sufficient detail to determine where ordinance is applicable) (35 Ill. Adm. Code 742.1015(i)(2));
- C. Attachment C: A statement of the authority of the unit of local government to enter into the MOU (council resolution, code of ordinances, inherent powers of mayor or other official signing MOU – attach copies) (35 Ill. Adm. Code 742.1015(i)(1)).

IN WITNESS WHEREOF, the lawful representatives of the parties have caused this MOU to be signed as follows:

**FOR: The Village of Minier**

BY: Neill Keneipp  
Neill Keneipp, Village President

DATE: 04/01/2014

**FOR: Illinois Environmental Protection Agency**

BY: \_\_\_\_\_  
Manager, Division of Remediation Management  
Bureau of Land

DATE: \_\_\_\_\_

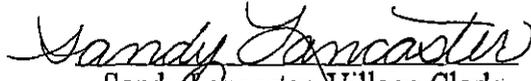
**CERTIFICATION**

I SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that the attached map is a true and correct legal boundary of the Village of Minier and that the Groundwater ordinance is applicable everywhere within the Village limits.

Dated at Minier, Illinois, this 15<sup>th</sup> day of March, 2011.

(SEAL)

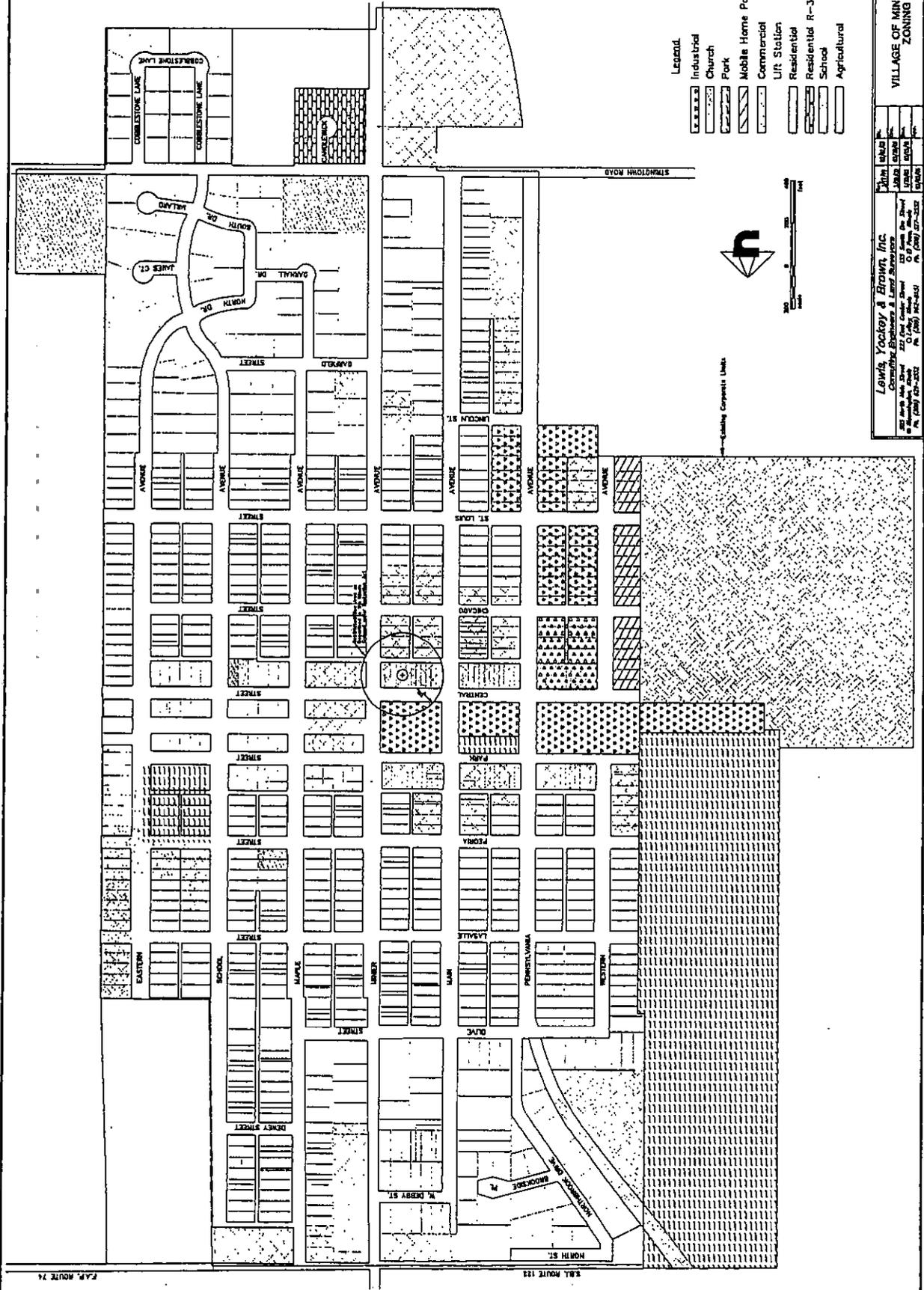
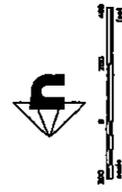
  
Sandy Lancaster, Village Clerk

VILLAGE OF MINIER, ILLINOIS  
ZONING MAP

**Lewis, Yockey & Brown, Inc.**  
Consulting Engineers & Land Surveyors  
222 North Main Street  
Minier, Illinois 62451  
P. (618) 424-2322  
F. (618) 424-2323

Map Sheet No.	Scale
1	1" = 100'
2	1" = 100'
3	1" = 100'
4	1" = 100'
5	1" = 100'
6	1" = 100'
7	1" = 100'
8	1" = 100'
9	1" = 100'
10	1" = 100'
11	1" = 100'
12	1" = 100'
13	1" = 100'
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15	1" = 100'
16	1" = 100'
17	1" = 100'
18	1" = 100'
19	1" = 100'
20	1" = 100'

- Legend**
- Industrial
  - Church
  - Park
  - Mobile Home Park
  - Commercial
  - Ulf. Station
  - Residential R-3
  - School
  - Agricultural



F.A.R. ROUTE 74

S.B.L. ROUTE 123

**CERTIFICATION OF ORDINANCE**

I SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that on January 04, 2011 the Corporate Authorities of the above municipality passed and approved Ordinance No. 783.

Ordinance No. 783, including the cover sheet thereof, was prepared and published in pamphlet form on the 04<sup>th</sup> day of January, 2011. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

I further certify that on March 15, 2011 the Corporate Authorities of the above municipality passed and approved Ordinance No. 785.

Ordinance No. 785, including the cover sheet thereof, was prepared and published in pamphlet form on the 15<sup>th</sup> day of March, 2011. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

I further certify that on March 29, 2013 the Corporate Authorities of the above Municipality passed and approved Ordinance No. 808.

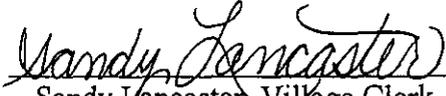
Ordinance No. 808, including the cover sheet thereof, was prepared and published in pamphlet form on the 29<sup>th</sup> day of March, 2013. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

I further certify that on April 1, 2014 the Corporate Authorities of the above municipality passed and approve Resolution No. 278.

Resolution No. 278, including the cover sheet thereof, was prepared and published in pamphlet form on the 01<sup>st</sup> day of April, 2014. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

Dated at Minier, Illinois, this 02<sup>nd</sup> day of February, 2015.

(SEAL)

  
Sandy Lancaster, Village Clerk

**VILLAGE OF MINIER**

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**ORDINANCE NO. 808**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS PROHIBITING THE  
USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE  
INSTALLATION OR THE USE OF POTABLE WATER SUPPLY WELLS OR BY ANY  
OTHER METHOD**

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**ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS  
THIS 19th DAY OF MARCH 2013**

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Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 19th day of March, 2013.

**ORDINANCE NO. 808**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS PROHIBITING THE  
USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE  
INSTALLATION OR THE USE OF POTABLE WATER SUPPLY WELLS OR BY ANY  
OTHER METHOD**

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BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE  
VILLAGE OF MINIER, ILLINOIS:

WHEREAS, certain properties in the Village of Minier ("Village"), Illinois have been used  
over a period of time for commercial/industrial purposes; and

WHEREAS, because of said use, concentrations of certain chemical constituents in the  
groundwater beneath the Village may exceed Class I groundwater quality standards for potable  
resource groundwater as set forth in 35 Illinois Administrative Code 620 or Tier 1 remediation  
objectives as set forth in 35 Illinois Administrative Code 742; and

WHEREAS, the Village to limit potential threats to human health from groundwater  
contamination while facilitating the redevelopment and productive use of properties that are  
the source of said chemical constituents;

**NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER,  
ILLINOIS:**

**Section One.** Use of groundwater as a potable water supply prohibited.

Except for such uses or methods in existence before the effective date of  
this ordinance, the use or attempt to use as a potable water supply  
groundwater from within the corporate limits of the Village of Minier, as a  
potable water supply, by the installation or drilling of wells or by any other  
method is hereby prohibited. This prohibition does not include the Village  
of Minier.

**Section Two.** Penalties.

Any person violating the provisions of this ordinance shall be subject to a fine of  
up to \$250.00 for each violation.

**Section Three.** Definitions.

"Person" is any individual, partnership, co-partnership, firm, company, limited

liability company, corporation, association, joint stock company, trust, estate, political subdivision, or any other legal entity, or their legal representatives, agents or assigns.

"Potable water" is any water used for human or domestic consumption, including, but not limited to, water used for drinking, bathing, swimming, washing dishes, or preparing foods.

**Section Four.** Memorandum of Understanding.

The President of the Village of Minier was previously authorized and directed to enter into a Memorandum of Understanding on or about January 4, 2011 with the Illinois Environmental Protection Agency ("Illinois EPA") in which the Village of Minier assumes responsibility for tracking all sites that have received no further remediation determinations from the Illinois EPA, notifying the Illinois EPA of changes to this ordinance, and taking certain precautions when siting public potable water supply wells.

**Section Five.** Repealer.

All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed insofar as they are in conflict with this ordinance.

**Section Six.** Severability.

If any provision of this ordinance or its application to any person or under any circumstances is adjudged invalid, such adjudication shall not affect the validity of the ordinance as a whole or of any portion not adjudged invalid.

**Section Seven.** Effective date.

This ordinance shall be in full force and effect from and after its passage, approval and publication as required by law.

PASSED at a regular meeting of the Village Board of the Village of Minier held the 19th day of March, 2013.

AYES: Devine, Burt, LaDew, Crawford, Beccue & Neddles

NAYS: None

ABSENT: None

APPROVED this 19th day of March, 2013.

*Neil Kenney*  
\_\_\_\_\_  
Village President

ATTEST:

*Gandy Lancaster*  
\_\_\_\_\_  
Village Clerk



# Illinois Department of Transportation

Office of Chief Counsel  
2300 South Dirksen Parkway / Springfield, Illinois / 62764

October 4, 2013

Midwest Environmental Consulting & Remediation Services, Inc.  
Attn: Penny Silzer  
PO Box 614  
Tremont, IL 61568-0614

Re: TACO Agreement: HAA 1342 in Minier, IL

Dear Ms. Silzer:

I have enclosed a fully executed original Highway Authority Agreement for the above site.

Please submit the agreement to the Illinois Environmental Protection Agency for their approval.

Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Prater".

Michael Prater  
Assistant Chief Counsel

Enclosure

R1068

## HIGHWAY AUTHORITY AGREEMENT

This Agreement is entered into this 6<sup>th</sup> day of September, 2013 pursuant to 35 Ill. Adm. Code 742.1020 by and between the **Warsaw ITCO** "Owner/Operator" and Illinois Department of Transportation "Highway Authority," collectively known as the "Parties."

**WHEREAS**, Warsaw ITCO is the owner or operator of one or more leaking underground storage tanks presently or formerly located at *IL Route 122, Minier, Illinois* ("the Site");

**WHEREAS**, as a result of one or more releases of contaminants from the above referenced underground storage tanks "the Release(s)", soil and/or groundwater contamination at the Site exceeds the Tier-1 residential remediation objectives of 35 Ill. Adm. Code 742;

**WHEREAS**, the soil and/or groundwater contamination exceeding Tier 1 residential remediation objectives extends or may extend into the Highway Authority's right-of-way;

**WHEREAS**, the Owner/Operator is conducting corrective action in response to the Release(s);

**WHEREAS**, the Parties desire to prevent groundwater beneath the Highway Authority's right-of-way that exceeds Tier 1 remediation objectives from use as a supply of potable or domestic water and to limit access to soil within the right-of-way that exceeds Tier 1 residential remediation objectives so that human health and the environment are protected during and after any access;

**NOW, THEREFORE**, the Parties agree as follows:

1. The recitals set forth above are incorporated by reference as if fully set forth herein.
2. The Illinois Emergency Management Agency has assigned incident number **981987** to the Release(s).
3. Attached as Exhibit A is a scaled map(s) prepared by the Owner/Operator that shows the Site and surrounding area and delineates the current and estimated future extent of soil and groundwater contamination above the applicable Tier 1 residential remediation objectives as a result of the Release(s).
4. Attached as Exhibit B is a table(s) prepared by the Owner/Operator that lists each contaminant of concern that exceeds its Tier 1 residential remediation objective, its Tier 1 residential remediation objective and its concentrations within the zone where Tier 1 residential remediation objectives are exceeded. The locations of the concentrations listed in Exhibit B are identified on the map(s) in Exhibit A.
5. Attached as Exhibit C is a scaled map prepared by the Owner/Operator showing the area of the Highway Authority's right-of-way that is governed by this agreement ("Right-of-Way"). Because Exhibit C is not a surveyed plat, the Right-of-Way boundary may be an approximation of the actual Right-of-Way lines.
6. The Highway Authority stipulates it has jurisdiction over the Right-of-Way that gives it sole control over the use of the groundwater and access to the soil located within or beneath the Right-of-Way.
7. The Highway Authority agrees to prohibit within the Right-of-Way all potable and domestic uses of groundwater exceeding Tier 1 residential remediation objectives.

8. The Highway Authority further agrees to limit access by itself and others to soil within the Right-of-Way exceeding Tier 1 residential remediation objectives. Access shall be allowed only if human health (including worker safety) and the environment are protected during and after any access. The Highway Authority may construct, reconstruct, improve, repair, maintain and operate a highway upon the Right-of-Way, or allow others to do the same by permit. In addition, the Highway Authority and others using or working in the Right-of-Way under permit have the right to remove soil or groundwater from the Right-of-Way and dispose of the same in accordance with applicable environmental laws and regulations. The Highway Authority agrees to issue all permits for work in the Right-of-Way, and make all existing permits for work in the Right-of-Way, subject to the following or a substantially similar condition:

As a condition of this permit the permittee shall request the office issuing this permit to identify sites in the Right-of-Way where a Highway Authority Agreement governs access to soil that exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742. The permittee shall take all measures necessary to protect human health (including worker safety) and the environment during and after any access to such soil.

9. This agreement shall be referenced in the Agency's no further remediation determination issued for the Release(s).
10. The Agency shall be notified of any transfer of jurisdiction over the Right-of-Way at least 30 days prior to the date the transfer takes effect. This agreement shall be null and void upon the transfer unless the transferee agrees to be bound by this agreement as if the transferee were an original party to this agreement. The transferee's agreement to be bound by the terms of this agreement shall be memorialized at the time of transfer in a writing ("Rider") that references this Highway Authority Agreement and is signed by the Highway Authority, or subsequent transferor, and the transferee.
11. This agreement shall become effective as a Highway Authority Agreement on the date the Agency issues a no further remediation determination for the Release(s). It shall remain effective as a Highway Authority Agreement until the Right-of-Way is demonstrated to be suitable for unrestricted use and the Agency issues a new no further remediation determination to reflect there is no longer a need for this agreement, or until the agreement is otherwise terminated or voided.
12. In addition to any other remedies that may be available, the Agency may bring suit to enforce the terms of this agreement or may, in its sole discretion, declare this agreement null and void if any of the Parties or any transferee violates any term of this agreement. The Parties or transferee shall be notified in writing of any such declaration.
13. This agreement shall be null and void as a Highway Authority Agreement if a court of competent jurisdiction strikes down any part or provision of the agreement.
14. This agreement supersedes any prior written or oral agreements or understandings between the Parties on the subject matter addressed herein. It may be altered, modified or amended only upon the written consent and agreement of the Parties.
15. Any notices or other correspondence regarding this agreement shall be sent to the Parties at following addresses:

Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, IL 62974-9276

If to Owner/Operator:

John Warsaw  
P. O. Box 886  
Minier, Illinois 61759

If to Department:

Illinois Department of Transportation  
Region Three Engineer  
Attn: District Four Environmental Studies Unit  
401 Main Street  
Peoria, Illinois 61602

And to:

Midwest Environmental Consulting  
Attn: Penny Silzer  
PO Box 614  
Tremont, Illinois 61568

And to:

Illinois Department of Transportation  
Attn: Assistant Chief Counsel  
2300 S. Dirksen Parkway, Room 313  
Springfield, Illinois 62764

16. This Agreement is not binding upon the Department until it is executed by the undersigned representative of the Department. Prior to execution by the undersigned representative of the Department this Agreement constitutes an offer by Owner/Operator. The duly authorized representatives of Owner/Operator have signed this Agreement and this Agreement is binding upon them, their successors and assigns.
17. The IEPA and Illinois Attorney General "AG" must review and approve this Agreement, and this Agreement shall be referenced in the IEPA's "No Further Remediation" determination in the chain of title for the Site in the county where the Site is located. This Agreement shall be null and void as a Highway Authority Agreement should the IEPA or AG not approve it or should it not be referenced in the "No Further Remediation" determination, provided, however, that this Agreement shall be effective between the Owner/Operator and the Department immediately upon signature by their representatives.
18. The Owner/Operator agrees to defend, indemnify and hold harmless the Department, and other highway authorities, if any, maintaining the highway Right-of-Way by an agreement with the Department, and the Department's agents, contractors or employees for all obligations asserted against or costs incurred by them, including reasonable attorney's fees and court costs, associated with the release of Contaminants from the Site, regardless whether said obligations or costs were caused by the negligence, but not the gross negligence, of them.
19. As an additional consideration, Owner/Operator agrees to reimburse the Department for reasonable costs to protect human health and the environment, including, but not limited to, identifying, investigating, handling, storing and disposing of contaminated soil and/or groundwater in the Right-of-Way as a result of the release of contaminants at this Site. It has been determined that the Department has not incurred any reimbursable costs at the time this Agreement is executed by the undersigned representative of the Department. If future costs are incurred, a cashier's check made payable to "Treasurer, State of Illinois" shall be tendered to the Department of Transportation upon demand by the Department.
20. Violation of the terms of this Agreement by Owner/Operator, or their successors in interest, may be grounds for avoidance of this Agreement as a Highway Authority Agreement. Violation of the terms of this Agreement by the Department will not void this Agreement, unless the IEPA has determined that the violation is grounds for voiding this Agreement as a Highway Authority Agreement and the Department has not cured the violation within such time as IEPA has granted to cure the violation.

21. This Agreement is in settlement of claims the Department may have arising from the release of Contaminants into the Right-of-Way associated with IEMA incident number 981987.
22. Prior to accessing or granting access to the soil as provided in Paragraph 8 herein, the Department will first give Owner/Operator written notice, unless there is an immediate threat to the health or safety to any individual or to the public, that it intends to perform a site investigation in the Right-of-Way and remove or dispose of contaminated soil or groundwater to the extent necessary for its work. Failure to give notice is not a violation of this Agreement. The removal or disposal shall be based upon the site investigation (which may be modified by field conditions during excavation). A copy of the site investigation report will be provided to Owner/Operator. If practicable, as reasonably determined by the Department, the Department may provide Owner/Operator with an opportunity to perform the Site investigation and to remove and dispose of the contaminated soil and/or groundwater necessary for the Department's work in advance of that work.

The Owner/Operator shall reimburse the reasonable costs incurred by the Department to perform the site investigation and to dispose of any contaminated soil or groundwater, provided, however, that if notice to Owner/Operator has not been given and there was no immediate threat to health or safety, reimbursement for those costs shall be limited to \$10,000.00. There is a rebuttable presumption that the Contaminants found in the highway Right-of-Way arose from the release of Contaminants from the Site. Should Owner/Operator not reimburse the reasonable costs under the conditions set forth herein, this Agreement shall be null and void, at the Department's option, upon written notice to Owner/Operator by the Department that those costs have not been reimbursed. Owner/Operator may cure that problem within twenty working days by making payment, or may seek to enjoin that result.

23. The Department's sole responsibility under this Agreement with respect to others using the highway Right-of-Way under permit from the Department is to include the following, or similar language, in the future standard permit provisions and to make an effort to notify its current permit holders of the following:

As a condition of this permit the permittee shall request the office issuing this permit to identify sites in the Right-of-Way where a Highway Authority Agreement governs access to soil that exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742. The permittee shall take all measures necessary to protect human health (including worker safety) and the environment during and after any access to such soil.

Owner/Operator hereby releases the Department from liability for breach of this Agreement by others under permit and agrees to defend and indemnify the Department against claims that may arise from others under permit causing a breach of this Agreement. Owner/ Operator agrees that its personnel, if any, at the Site who are aware of this Agreement will notify anyone they know is excavating in the Right-of-Way about this Agreement.

24. Should the Department breach this Agreement, Owner/Operator's sole remedy is for an action for damages in the Illinois Court of Claims. Any and all claims for damages against the Department, its agents, contractors, employees or its successors in interest arising at any time for a breach of paragraphs 7 and 8 of this Agreement are limited to an aggregate maximum of \$20,000.00. No other breach by the Department, its agents, contractors, employees and its successors in interest of a provision of this Agreement is actionable in either law or equity by Owner/Operator against the Department or them and Owner/Operator hereby releases the Department, its agents, contractors, employees and its successors in interest for any cause of action it may have against them, other than as allowed in this paragraph, arising under this Agreement or environmental laws, regulations or common law governing the contaminated soil or groundwater in the highway Right-of-Way. Should the Department convey, vacate or transfer jurisdiction of that highway Right-of-Way, Owner/Operator

may pursue an action under this Agreement against the successors in interest, other than a State agency, in a court of law.

25. This Agreement is entered into by the Department in recognition of laws passed by the General Assembly and regulations adopted by the Pollution Control Board which encourage a tiered-approach to remediating environmental contamination. This Agreement is entered into by the Department in the spirit of those laws and under its right and obligations as a highway authority.

Should any provisions of this Agreement be struck down as beyond the authority of the Department, however, this Agreement shall be null and void.

**IN WITNESS WHEREOF**, Owner/Operator, Warsaw ITCO, has caused this Agreement to be signed by its duly authorized representative.

BY: *John Warsaw*  
John Warsaw  
President

DATE: 15 August 2013

IN WITNESS WHEREOF, the Department has caused this Agreement to be signed by its Secretary.

Illinois Department of Transportation

BY: *Ann L. Schneider*  
Ann L. Schneider  
Secretary

DATE: 9/6/13

This Agreement is approved on behalf of the Office of the Illinois Attorney General.

BY: *Matthew J. Dunn*  
Matthew J. Dunn  
Assistant Attorney General  
Chief, Division of Environmental/Asbestos Litigation

DATE: 9/30/13

**Exhibit: A**

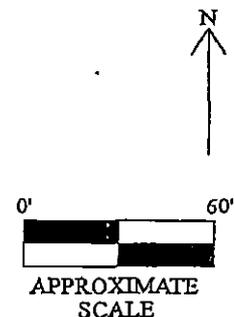
Agricultural

Route 122

Agricultural

Maple Street

School Ave



EPA DIVISION OF RECORDS MANAGEMENT  
 RELEASEABLE  
 JAN 19 2017  
 REVIEWER JRJM

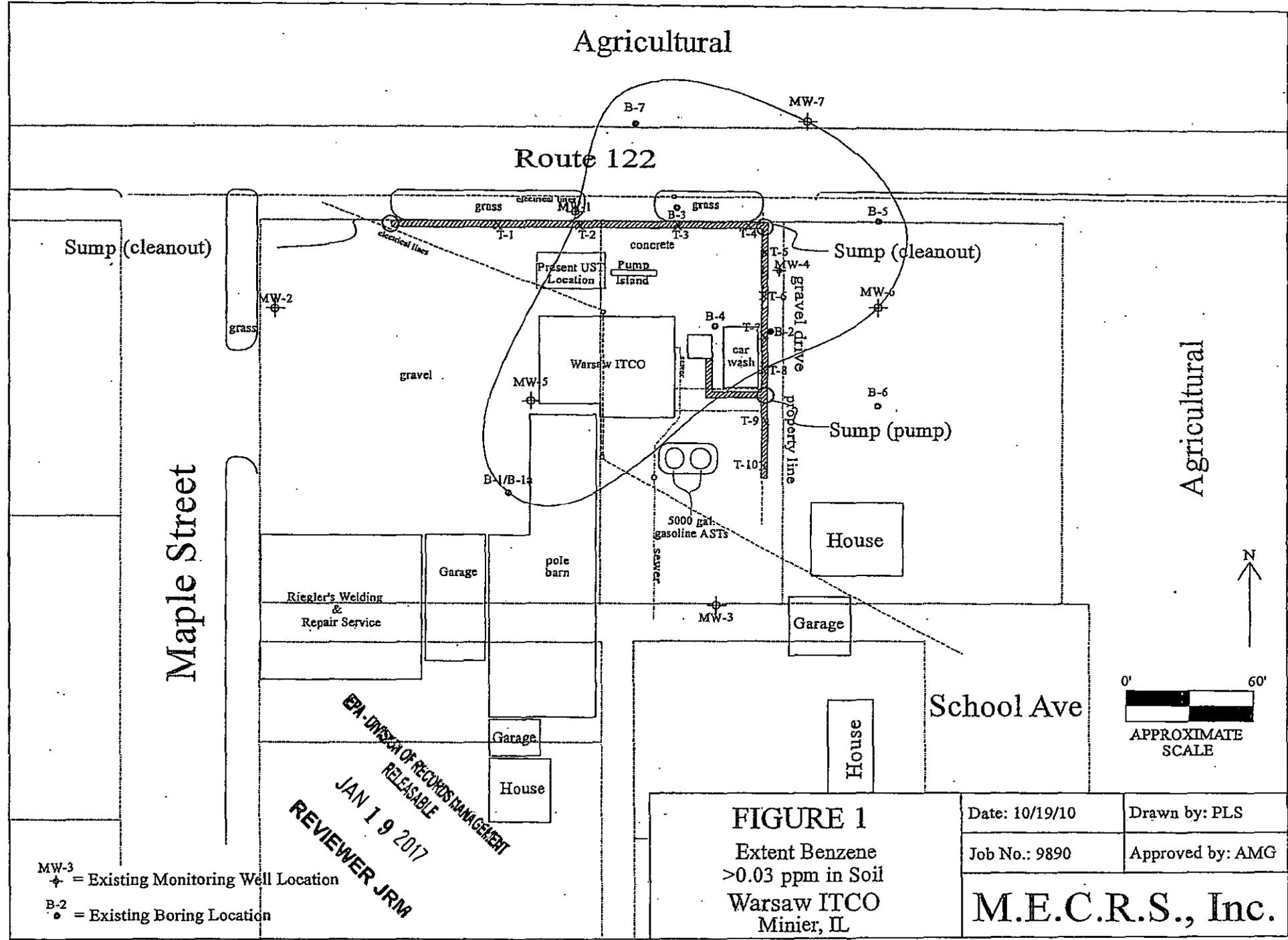
MW-3  
 + = Existing Monitoring Well Location  
 B-2  
 • = Existing Boring Location

**FIGURE 1**  
 Extent Benzene  
 >0.03 ppm in Soil  
 Warsaw ITCO  
 Minier, IL

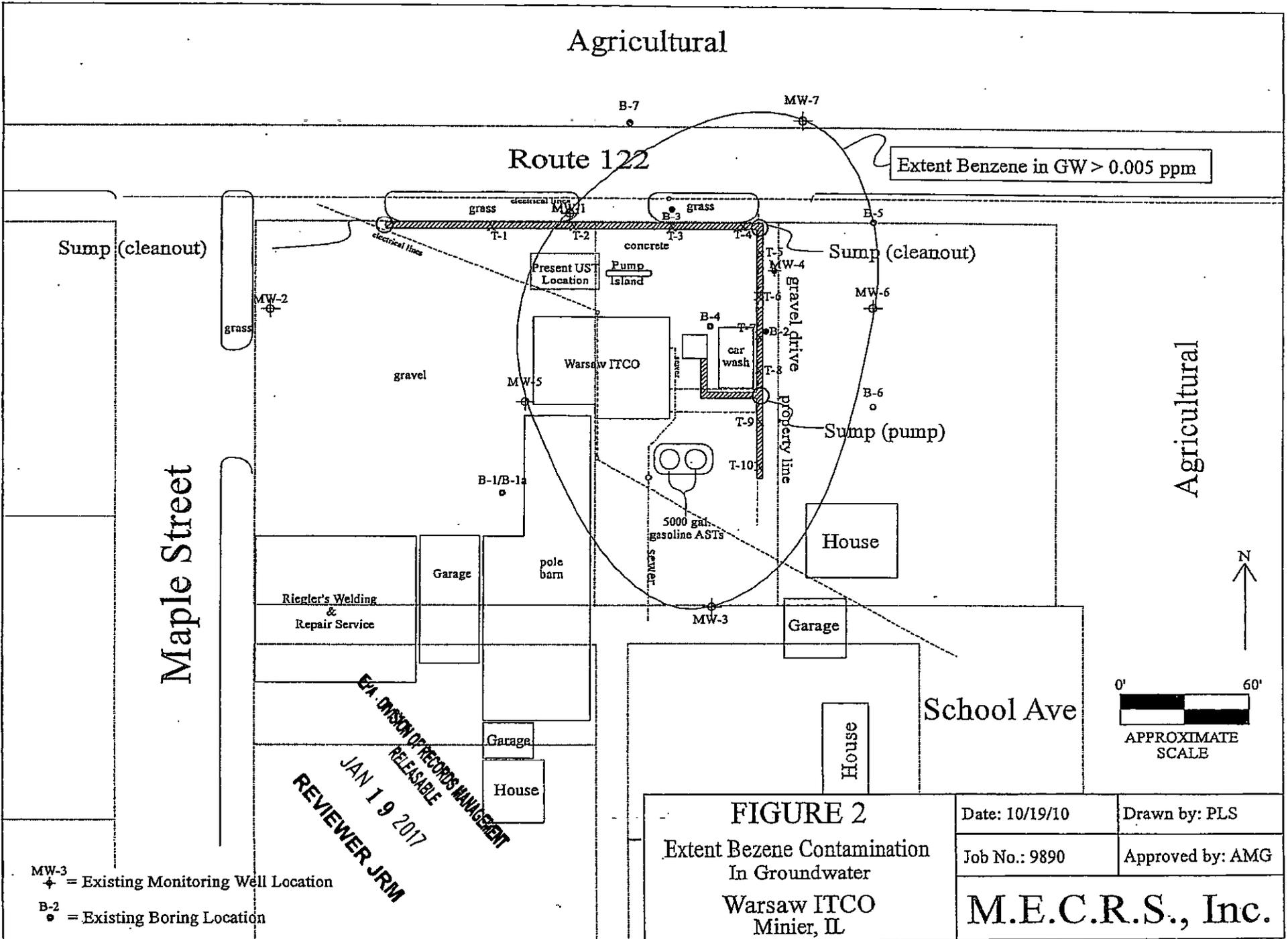
Date: 10/19/10	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**

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**FIGURE 2**  
Extent Benzene Contamination  
In Groundwater  
Warsaw ITCO  
Minier, IL

Date: 10/19/10	Drawn by: PLS
Job No.: 9890	Approved by: AMG
<b>M.E.C.R.S., Inc.</b>	

HAA 1342

**Exhibit: B**

**TABLE 1.**  
**Soil Analytical Results**  
**Warsaw-ITCO**  
**Minier, IL**

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/2000	<0.002	<0.002	<0.002	<0.005	<0.011
B-2, 4-6'	5/3/2000	0.810	1.300	1.700	6.500	10.310
B-2, 6-8'	5/3/2000	0.600	0.220	0.420	1.900	3.140
B-2, 8-10'	5/3/2000	21.0	41.0	47.0	190.0	299.0
B-3, 6-8'	5/3/2000	0.400	0.120	0.210	0.460	1.190
B-3, 8-10'	5/3/2000	2.300	2.100	21	110	135.400
MW-1, 6-8'	5/4/2000	<0.002	<0.002	<0.002	<0.005	<0.011
MW-2, 8-10'	5/3/2000	<0.002	<0.002	<0.002	<0.005	<0.011
MW-3, 8-10'	5/3/2000	<0.002	<0.002	0.006	<0.005	<0.0147
MW-4, 4-6'	5/4/2000	0.230	0.220	0.870	2.500	3.820
MW-4, 6-8'	5/4/2000	0.300	1.200	5.400	20.000	26.900
B-4, 0.5-2.5'	8/23/2001	0.0081 M	0.019 M	0.0447 M	0.0772 M	0.149 M
B-4, 4-6'	8/23/2001	11.6 ME	42.7 ME	9.72 ME	38.0 ME	102.02 ME
B-5, 6-8'	8/23/2001	0.049	0.186 E	0.038	0.130	0.403
B-6, 4-6'	8/23/2001	0.020	0.053	0.031	0.090	0.194
B-6, 8-10'	8/23/2001	0.007	0.012	<0.0024	0.011	<0.0323
B-7, 8-10'	8/23/2001	0.0167 M	0.0615 M	0.0139 M	0.0395 M	0.1316 M
B-7, 12-14'	8/23/2001	0.754	<0.0613	<0.0613	<0.153	<1.0296
MW-5, 8-10'	8/23/2001	0.494 M	4.75 M	5.89 M	7.57 M	18.704 M
MW-6, 6-8'	8/23/2001	0.007	0.012	0.006	0.011	0.037
MW-7, 4-6'	8/23/2001	0.012	0.025	0.011	0.020	0.068
MW-7, 8-10	8/23/2001	0.0155 M	0.0202 M	0.007	0.012	0.054
T-1	10/20/2003	<0.0026	0.0032	<0.0026	<0.0065	<0.0149
T-2	10/20/2003	<0.0026	<0.0026	<0.0026	<0.0065	<0.0143
T-3	10/20/2003	<0.0024	0.0051	0.0051	0.0142	<0.0268
T-4	10/20/2003	<0.0024	<0.0024	<0.0024	<0.0059	<0.0131
T-5	10/20/2003	0.0034	0.0408	0.3600	0.9470	1.3512
T-6	10/20/2003	0.0853	0.6350	1.8400	7.1400	9.7003
T-7	10/20/2003	0.0855	0.0438	1.1200	2.4600	3.7093
T-8	10/20/2003	<0.0025	0.0066	0.0189	0.0568	<0.0848
T-9	10/20/2003	<0.0024	<0.0024	<0.0024	<0.0061	<0.0133
T-10	10/20/2003	<0.0025	<0.0025	<0.0025	<0.0062	<0.0137

## Notes:

- All results in mg/kg (parts per million, ppm).
- IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
0.03	12	13	150

- All bolded values are above Tier 1 Residential Cleanup Objectives
- M = Matrix interferences identified.
- E = Estimated - Value outside linear calibration curve.

Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois

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SMITH #	Date	DTW	GWE	Benzene	Toluene	Ethylbenzene	Xylenes	TOTAL BTEX
---------	------	-----	-----	---------	---------	--------------	---------	------------

MW-2	Elevation Top of Casing	99.62						
SC	5/12/2000	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3
1	10/24/2000	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4
2	8/23/2001	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E
3	11/13/2001	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.41	94.21	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.65	94.97	NS	NS	NS	NS	NS

MW-2	Elevation Top of Casing	99.28						
SC	5/9/2000	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7
3	11/13/2001	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.12	94.16	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.38	94.90	NS	NS	NS	NS	NS

MW-3	Elevation Top of Casing	100						
SC	5/9/2000	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
3	11/13/2001	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.37	94.63	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.34	95.66	NS	NS	NS	NS	NS

MW-4	Elevation Top of Casing	99.84						
SC	5/9/2000	5.90	93.94	2,600	12,000	4,500	18,000	37,100
1	10/24/2000	7.80	92.04	2,300	5,200	4,000	13,000	24,500
2	8/23/2001	6.67	93.17	2,290 M	2,380 M	8,150	23,600 E	36,420 E
3	11/13/2001	6.11	93.73	1,910	3,960	3,360	10,000	19,230
4	2/14/2002	5.00	94.84	1,100	1,200	2,900	5,500	10,700
5	1/24/2005	4.47	95.37	NS	NS	NS	NS	NS

MW-5	Elevation Top of Casing	99.57						
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9
3	11/13/2001	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.86	1.4	2.2	1.5	4.5	9.6
5	1/24/2005	3.89	95.68	NS	NS	NS	NS	NS

MW-6	Elevation Top of Casing	99.37						
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5
3	11/13/2001	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.66	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	WELL ICED OVER	NS	NS	NS	NS	NS	NS

MW-7	Elevation Top of Casing	100.07						
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	7.28	92.79	<2.0	<2.0	<2.0	5.9	<11.9
3	11/13/2001	6.23	93.84	117 E	<2.0	<2.0	<5.0	<126 E
4	2/14/2002	5.52	94.55	7	<1.0	<1.0	<3.0	<12.0
5	1/24/2005	--	--	NS	NS	NS	NS	NS

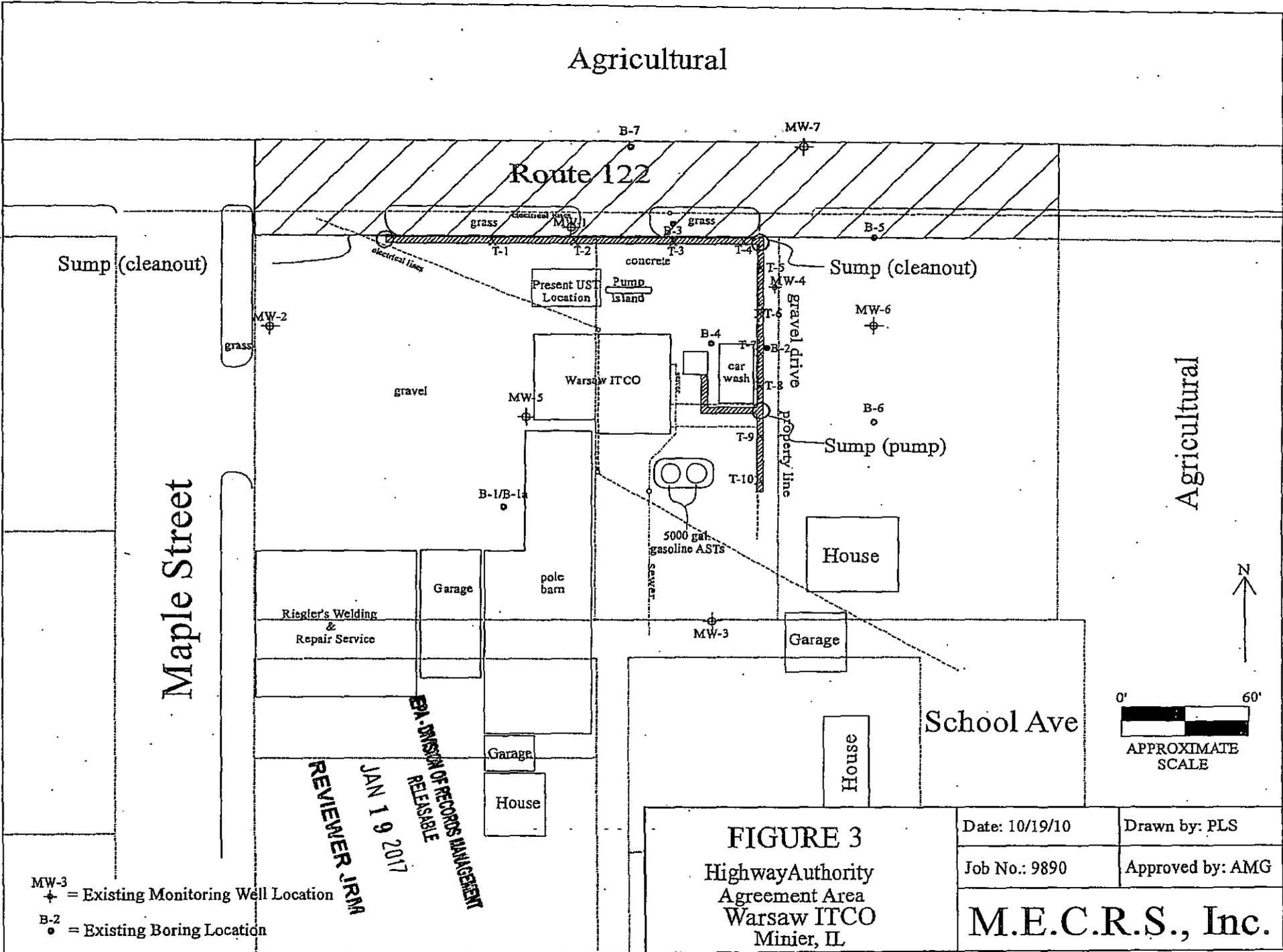
- All results reported in ug/kg (i.e. parts per billion, ppb)
- DEPA Tier I Cleanup Objectives (ug/kg):
- = No data available
- MDL = Method Detection Limit
- DTW = Depth to Water
- GWE = Groundwater Elevation referenced to datum point
- NA/NS = Not analyzed/not sampled this event
- E = Estimated - value outside linear range
- M = Matrix interferences identified.

Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

Date	Average DTW
5/9/2000	5.85
10/24/2000	7.78
8/23/2001	6.09
11/13/2001	6.01
2/14/2002	5.12
1/24/2005	4.35
Cumulative DTW Average:	5.87

**Exhibit: C**

Agricultural



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MW-3  
+ = Existing Monitoring Well Location  
B-2  
• = Existing Boring Location

EN. DIVISION OF RECORDS MANAGEMENT  
REVIEWER JRM  
JAN 19 2017  
RELEASABLE

**FIGURE 3**  
Highway Authority  
Agreement Area  
Warsaw ITCO  
Minier, IL

Date: 10/19/10	Drawn by: PLS
Job No.: 9890	Approved by: AMG

**M.E.C.R.S., Inc.**

HAA 1342

**Appendix F**  
**Budget Amendment**

# General Information for the Budget and Billing Forms

LPC#: 1790455007 County: Tazewell  
City: Minier Site Name: Warsaw, Howard (Warsaw ITCO)  
Site Address: Ill. Rte. 122  
IEMA Incident No: 981987  
IEMA Notification Date: August 11, 1998  
Date this form was prepared: October 18, 2016

**This form is being submitted as a (check one if applicable):**

- Budget Proposal
- Budget Amendment (Budget Amendments must include only the costs over the previous budget.)
- Billing Package

Please provide the name(s) and date(s) of report(s) documenting the costs as requested:

Name(s): \_\_\_\_\_

Date (s): \_\_\_\_\_

**This package is being submitted for the site activities indicated below:**

**35 III. Adm. Code 734:**

- Early Action
- Free Produce Removal After Early Action
- Site Investigation.....Stage 1:  Stage 2:  Stage 3:   
Actual Costs
- Corrective Action

**35 III. Adm. Code 732:**

- Early Action
- Free Produce Removal After Early Action
- Site Classification
- Low Priority Corrective Action
- High Priority Corrective Action

**35 III. Adm. Code 731**

- Site Investigation
- Corrective Action

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OCT 28 2016

**IEPA/BOL**

# General Information for the Budget and Billing Forms

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund.

Pay to the order of: John Warsaw

Send in care of: Midwest Environmental Consulting & Remediation Service, Inc.

Address: PO Box 614

City: Tremont State: IL Zip: 61568

The payee is the: Owner:  Operator:  (Check one or both)

*John Warsaw*  
 Signature of the owner of operator of the UST(s) (required)

W-9 must be submitted.  
 Click [here](#) to print off a W-9 Form.

Number of petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101  101 or more:

Number of USTs at the site: 2 (Number of USTs includes USTs presently at the site and USTs that have been removed).

Number of incidents reported to the IEMA for this site: 1

Incidents Numbers assigned to the site due to releases from USTs: 20021522

Please list all tanks that have ever been located at the site and tanks that are presently located at the site.

Product Stored in UST	Size (gallons)	Did UST have a release?	Incident No.	Type of Release Tank Leak / Overfill / Piping Leak
Diesel	3,000	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	20021522	overfill/piping leak
gasoline	6,000	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	20021522	overfill/piping leak
heating oil	500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A	
heating oil	500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A	
		Yes <input type="checkbox"/> No <input type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		

**RECEIVED**  
 OCT 28 2016  
 IEPA/BOL

# Budget Summary

Chose the applicable regulation:  734  732

<b>734</b>	Free Product	Stage 1 Site Investigation	Stage 2 Site Investigation	Stage 3 Site Investigation	Corrective Action
Drilling and Monitoring Well Costs Form					\$0.00
Analytical Costs Form					\$695.87
Remediation and Disposal Costs Form					\$19,274.00
UST Removal and Abandonment Costs Form					\$0.00
Paving, Demolition, and Well Abandonment Costs Form					\$10,000.00
Consulting Personnel Costs Form					\$15,510.71
Consultant's Materials Costs Form					\$558.00
Handling Charges Form	Handling charges will be determined at the time a billing package is submitted to the Illinois EPA. The amount of allowable charges will be determined in accordance with the Handling Charges Form.				
<b>Total</b>					<b>\$46,038.58</b>

## Analytical Costs Form

Laboratory Analysis	Number of Samples		Cost (\$) per Analysis		Total per Parameter
<b>Chemical Analysis</b>					
BTEX Soil with MTBE EPA 8260	5	x	\$106.38	=	\$531.90
BTEX Water with MTBE EPA 8260	1	x	\$101.37	=	\$101.37
COD (Chemical Oxygen Demand)		x	\$32.71	=	\$0.00
Corrosivity		x	\$16.36	=	\$0.00
Flash Point or Ignitability Analysis EPA 1010		x	\$35.99	=	\$0.00
Fraction Organic Carbon Content (f <sub>oc</sub> ) ASTM-D 2974-00		x	\$41.44	=	\$0.00
Fat, Oil, & Grease (FOG)		x	\$65.43	=	\$0.00
LUST Pollutants Soil - analysis must include volatile, base/neutral, polynuclear aromatics and metals list in Section 732, Appendix B, and 734, Appendix B.		x	\$755.72	=	\$0.00
Dissolved Oxygen (DO)		x	\$26.17	=	\$0.00
Paint Filter (Free Liquids)		x	\$15.27	=	\$0.00
PCB / Pesticides (combination)		x	\$37.08	=	\$0.00
PCBs		x	\$165.76	=	\$0.00
Pesticides		x	\$165.76	=	\$0.00
pH		x	\$15.27	=	\$0.00
Phenol		x	\$37.08	=	\$0.00
Polynuclear Aromatics PNAs or PAH SOIL EPA 8270		x	\$176.80	=	\$0.00
Polynuclear Aromatics PNA, PAH WATER EPA 8270		x	\$176.80	=	\$0.00
Reactivity		x	\$74.15	=	\$0.00
SVOC - Soil (Semi-Volatile Organic Compounds)		x	\$341.33	=	\$0.00
SVOC - Water (Semi-Volatile Organic Compounds)		x	\$341.33	=	\$0.00
TKN (Total Kjeldahl) "nitrogen"		x	\$47.98	=	\$0.00
TPH (Total Petroleum Hydrocarbons)		x	\$133.04	=	\$0.00
VOC (Volatile Organic Compound) - Soil (Non-Aqueous)		x	\$190.84	=	\$0.00
VOC (Volatile Organic Compound) - Water		x	\$184.29	=	\$0.00
BTEX in soil gas		x	\$300.00	=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
<b>Geo-Technical</b>					
Bulk Density (p <sub>b</sub> ) ASTM D4292 / D2937		x	\$26.20	=	\$0.00
Ex-Situ Hydraulic Conductivity / Permeability		x	\$278.08	=	\$0.00
Moisture Content (w) ASTM D2216-90 / D4643-87		x	\$14.29	=	\$0.00
Porosity		x	\$35.73	=	\$0.00
Rock Hydraulic Conductivity Ex-Situ		x	\$381.67	=	\$0.00
Sieve / Particle Size Analysis ASTM D422-63 / D1140-54		x	\$158.12	=	\$0.00
Soil Classification ASTM D2488-90 / D2487-90		x	\$80.99	=	\$0.00
Soil Particle Density (p <sub>s</sub> ) ASTM D854-92		x	\$120.00	=	\$0.00
		x		=	\$0.00
		x		=	\$0.00
		x		=	\$0.00

## Analytical Costs Form

Metals Analysis					
Soil preparation fee for Metals Soil TCLP (one fee per soil sample)		x	\$86.15	=	\$0.00
Soil preparation fee for Metals Total Soil (one fee per soil sample)		x	\$17.45	=	\$0.00
Water Preparation fee for Metals in Water (one fee per water sample)		x	\$12.00	=	\$0.00
Arsenic TCLP Soil		x	\$17.45	=	\$0.00
Arsenic Total Soil		x	\$17.45	=	\$0.00
Arsenic Water		x	\$19.63	=	\$0.00
Barium TCLP Soil		x	\$10.90	=	\$0.00
Barium Total Soil		x	\$10.90	=	\$0.00
Barium Water		x	\$13.09	=	\$0.00
Cadmium TCLP Soil		x	\$17.45	=	\$0.00
Cadmium Total Soil		x	\$17.45	=	\$0.00
Cadmium Water		x	\$19.63	=	\$0.00
Chromium TCLP Soil		x	\$10.90	=	\$0.00
Chromium Total Soil		x	\$10.90	=	\$0.00
Chromium Water		x	\$13.09	=	\$0.00
Cyanide TCLP Soil		x	\$30.53	=	\$0.00
Cyanide Total Soil		x	\$37.08	=	\$0.00
Cyanide Water		x	\$37.08	=	\$0.00
Iron TCLP Soil		x	\$10.90	=	\$0.00
Iron Total Soil		x	\$10.90	=	\$0.00
Iron Water		x	\$13.09	=	\$0.00
Lead TCLP Soil		x	\$17.45	=	\$0.00
Lead Total Soil		x	\$17.45	=	\$0.00
Lead Water		x	\$19.63	=	\$0.00
Mercury TCLP Soil		x	\$20.72	=	\$0.00
Mercury Total Soil		x	\$10.90	=	\$0.00
Mercury Water		x	\$28.35	=	\$0.00
Selenium TCLP Soil		x	\$17.45	=	\$0.00
Selenium Total Soil		x	\$17.45	=	\$0.00
Selenium Water		x	\$16.36	=	\$0.00
Silver TCLP Soil		x	\$10.90	=	\$0.00
Silver Total Soil		x	\$10.90	=	\$0.00
Silver Water		x	\$13.09	=	\$0.00
Metals TCLP Soil (a combination of all RCRA metals)		x	\$112.32	=	\$0.00
Metals Total Soil (a combination of all RCRA metals)		x	\$102.51	=	\$0.00
Metals Water (a combination of all RCRA metals)		x	\$129.77	=	\$0.00
Other					
EnCore Sampler, purge-and-trap sampler or equivalent sampling device	5	x	\$12.52	=	\$62.60
Sample Shipping per sampling event <sup>1</sup>		x	\$54.52	=	\$0.00

<sup>1</sup>A sampling event, at a minimum, is all samples (soil and groundwater) collected in a calendar day.

Total Analytical Costs:                     \$695.87

# Remediation and Disposal Costs Form

## A. Conventional Technology

Excavation, Transportation, and Disposal of contaminated soil and/or the 4-foot backfill material removal during early action activities:

Number of Cubic Yards	Cost per Cubic Yard (\$)	Total Cost
200	71.34	\$14,268.00

Backfilling the Excavation:

Number of Cubic Yards	Cost per Cubic Yard (\$)	Total Cost
200	25.03	\$5,006.00

Overburden Removal and Return:

Number of Cubic Yards	Cost per Cubic Yard (\$)	Total Cost
		\$0.00

## B. Alternative Technology

Alternative Technology Selected:	
Number of Cubic Yards of Soil to Be Remediated	
Total Non-Consulting Personnel Costs Summary Sheet (\$)	
Total Remediation Materials Costs Summary Sheet (\$)	
Total Cost of the System	

## Remediation and Disposal Costs Form

### C. Groundwater Remediation and/or Free Product Removal System

Total Non-Consulting Personnel Costs Summary Sheet (\$)	
Total Remediation Materials Costs Summary Sheet (\$)	
Total Cost of the System	

### D. Groundwater and/or Free Product Removal and Disposal

Subpart H minimum payment amount applies.

Number of Gallons	Cost per Gallon (\$)	Total Cost (\$)

### E. Drum Disposal

Subpart H minimum payment amount applies.

Number of Drums of Solid Waste	Cost Per Drum (\$)	Total Cost (\$)
Number of Drums of Liquid Waste	Cost Per Drum (\$)	Total Cost (\$)
Total Drum Disposal Costs		\$0.00

Total Remediation and Disposal Costs:	\$19,274.00
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**Paving, Demolition, and Well Abandonment Costs Form**

**A. Concrete and Asphalt Placement/Replacement**

Number of Square Feet	Asphalt or Concrete	Thickness (Inches)	Cost (\$) per Square Foot	Replacement or Placement for an Engineered Barrier	Total Cost
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00

<b>Total Concrete and Asphalt Placement/Replacement Costs:</b>	<b>\$0.00</b>
--	---------------

**B. Building Destruction or Dismantling and Canopy Removal**

Item to Be Destroyed, Dismantled, or Removed	Unit Cost (\$)	Total Cost (\$)
Demolish Car Wash and Groundwater Treatment system and shed		\$10,000.00
includes removing building, removing sumps and backfilling voids		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00

<b>Total Building Destruction or Dismantling and Canopy Removal Costs:</b>	<b>\$10,000.00</b>
--	--------------------

**Consulting Personnel Costs Form**

Employee Name	Personnel Title*	Hours	Rate *	Total \$
Remediation Category	Task			
Allan Green	Senior Project Manager	35	\$125.15	\$4,380.25
corrective action	reimbursements, site review, CAP & Budget or CACR & Budget			
Penny Silzer	Project Manager	50	\$112.64	\$5,632.00
corrective action	TACO Study, groundwater modeling, maps, tables, TACO forms, and reimbursements, CAP or CACR and budget			
Penny Silzer	Geologist IV	40	\$93.86	\$3,754.40
corrective action	On-site oversight of demolition of buildings, groundwater treatment unit, and excavation of contaminated soil, sampling and sample handling			
Penny Silzer	Sr. PG	6	\$137.67	\$826.02
corrective action	review and certify CAP ,budget and reimbursement			
Gaye Lynn Green	Sr. Acct. Technician	4	\$66.81	\$267.24
corrective action	forms and documents required for reimbursements			
Kevan Cooper	PE	4	\$162.70	\$650.80
corrective action	review CACR			
				\$0.00

\*Refer to the applicable Maximum Payment Amounts document.

<b>Total of Consulting Personnel Costs</b>	<b>\$15,510.71</b>
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**Consultant's Materials Costs Form**

Consulting Materials Costs:

Materials, Equipment, or Field Purchases	Time or Amount Use	Rate (\$)	Units	Total Cost
Remediation Category	Description/Justification			
Company Vehicle Mileage	350.00	\$0.58	/mile	\$203.00
corrective action	travel to site for a week			
Well Sampling Equipment	1.00	\$25.00	/day	\$25.00
corrective action	bailer, gloves, twine			
postage				\$30.00
corrective action	postage for reports and correspondence			
PID	3	\$100.00	/day	\$300.00
corrective action	for soil sampling			
		\$200.00	/day	\$0.00
				\$0.00
				\$0.00

**Total Consultant's Material's Costs: \$558.00**

**Owner/Operator and Licensed Professional Engineer/Geologist Budget Certification Form**

I hereby certify that I intend to seek payment from the UST Fund for costs incurred while performing corrective action activities for Leaking UST incident 981987. I further certify that the costs set forth in this budget are necessary activities and are reasonable and accurate to the best of my knowledge and belief. I also certify that the costs included in this budget are not for corrective action in excess of the minimum requirements of 415 ILCS 5/57 and no costs are included in this budget which are not described in the corrective action plan, and no costs exceed Subpart H: Maximum Payment Amounts, Appendix D Sample Handling and Analysis amounts, and Appendix E Personnel Titles and Rates of 35 Ill. Adm. Code 732 or 734. I further certify that costs ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code Section 732.606 or 734.630 are not included in the budget proposal or amendment. Such ineligible costs include but are not limited to:

- Costs associated with ineligible tanks.
- Costs associated with site restoration (e.g., pump islands, canopies).
- Costs associated with utility replacement (e.g., sewers, electrical, telephone, etc).
- Costs incurred prior to IEMA notification.
- Costs associated with planned tank pulls.
- Legal fees or costs.
- Costs incurred prior to July 28, 1989.
- Costs associated with installation of new USTs or the repair of existing USTs.

Owner/Operator: John Warsaw

Authorized Representative: John Warsaw Title: Owner

Signature: [Signature] Date: 10-24-16

Subscribed and sworn to before me the 24<sup>th</sup> day of October, 2016.  
*(Budget Proposals and Budget Amendments must be notarized when the certification is signed.)*

[Signature]  
(Notary Public)

Seal:



**RECEIVED**  
OCT 28 2016  
**EPA/BOL**

In addition, I certify under penalty of law that all activities that are the subject of this plan, budget or report were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan, budget, or report and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in the plan, budget, or report has been completed in accordance with the Environmental Protection Act [415 ILCS5], 35 Ill. Adm. Code 732-734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

L.P.E./L.P.G.: Penny Silzer

L.P.E./L.P.G. Seal:

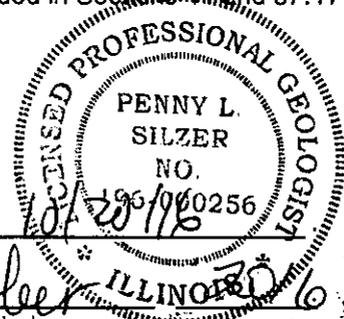
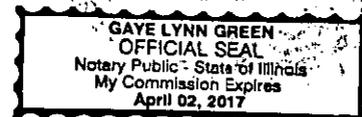
L.P.E./L.P.G. Signature: [Signature]

Date: 10/20/16

Subscribed and sworn to before me the 20<sup>th</sup> day of October, 2016.

[Signature]  
(Notary Public)

Seal:



The Illinois EPA is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder.

JAN 19 2017

REVIEWER JRM

**LEAKING UST TECHNICAL REVIEW NOTES**

Reviewed by: Brad Dilbaitis  
 Date Reviewed: 1/11/2017

Re: LPC #1790455007—Tazewell County  
 Minier/ Warsaw, Howard  
 Warsaw Itco/ Rt. 22  
 Leaking UST Incident No. 981987 & 991610  
 Leaking UST Technical File

**Document(s) Reviewed:**

10/24/2016 Corrective Action Plan and Budget—received 10/28/16

**General Site Information:**

Site subject to: 734

IEMA date(s): 8/11/1998 & 7/6/1999	Payment from the Fund: yes—yes
UST system removed: yes—7/6/1999	OSFM Fac. ID #: 3005023
Encountered groundwater: yes	SWAP mapping and evaluation completion date: 4/7/2015
Free product: no	Site placement correct in SWAP: yes
Current/past land use: gasoline service station	MTBE > 40 ppb in groundwater: N/A
Size & product of USTs: (1) 2,000g and (2) 500g gasoline USTs	
Is site located in EJ area? no	Is investigation of indoor inhalation exposure route required? no

**Corrective Action Plan/Budget Review Notes:**

- Previously proposed closure based on institutional controls—Highway Authority Agreement, ELUC, groundwater ordinance with MOU
- Collected (8) additional soil samples November 2014 to gauge current contaminant levels
- Soil borings GP-1 through GP-7 were approved to determine current concentrations of COCs in the soil in areas where soil contamination was previously found—B-2 (GP-6); B-3 (GP-3); MW-4 (GP-5); B-4 (GP-7); B-5 (GP-4); B-1 (GP-2); MW-5 (GP-1)
- Detected significant concentrations of xylenes (above  $C_{sat}$  limit) in one soil boring (GP-7) at 1,200 mg/kg
  - Benzene 37.4 mg/kg (exceeds Tier 1 SCGIER, inhalations, residential ingestion)
  - Ethylbenzene 272 mg/kg (exceeds Tier 1 SCGIER, construction worker inhalation,  $C_{sat}$ )
  - Toluene 629 mg/kg (exceeds Tier 1 SCGIER, construction worker inhalation,  $C_{sat}$ )
  - Xylenes 1,200 mg/kg (exceeds Tier 1 SCGIER, inhalations,  $C_{sat}$ )
- Had been approved to collect groundwater samples in MW-4 and MW-7 but neither could be located
- Completed (1) soil boring near MW-4 to collect a soil sample from a boring near GP-5 at a depth of 4-6' for  $f_{oc}$  analysis—the  $f_{oc}$  analysis was previously completed on B-4 (sample received by the lab on 8/24/01), which is located right in the middle of the contamination—the soil sample from which the  $f_{oc}$  is being used was one of the most contaminated soil samples on site—the  $f_{oc}$  from B-4 can't be used in the TACO calculations

- Consultant will calculate a Tier 2 soil saturation limit for toluene, ethylbenzene and total xylenes using the updated  $f_{oc}$  value
- The consultant states that, based on experience, it is probable that the xylenes concentration in soil will remain above the calculated Tier 2 site-specific  $C_{sat}$  value even with determination of the site-specific  $f_{oc}$ —I assume that this means that the consultant expects that the  $f_{oc}$  analysis will be less than .027 g/g (this  $f_{oc}$  calculates a site-specific  $C_{sat}$  of 1,201 mg/kg, using the parameters provided by the consultant)
- Proposed to advance (4) soil borings, one boring approximately 20 feet in each direction from GP-7, to better define the proposed excavation area (this could make for a much larger excavation than is needed)
- Soil data collected will be used to determine the volume of shallow soil where concentrations of xylenes exceeds the  $C_{sat}$  limit—excavation is anticipated
- Assuming that the four soil borings have total xylenes concentrations less than the Tier 2  $C_{sat}$ , the excavation will measure 40' x 40' x 5'—a 296 cubic yard excavation which extends under the entire car wash to the east and a garage to the west
- If I were to agree with the consultant and assume that the  $f_{oc}$  value from the proposed analysis produces a  $C_{sat}$  for xylenes less than 1,200 ppm, requiring some sort of excavation, does the approval of the (4) soil borings, each 20' from GP-7, constitute approval for a 40' x 40' x 5' excavation to remove the soil or can the excavation limits somehow be prorated from 20' from center based on the yet-to-be-determined  $C_{sat}$  calculation(s)?

**Site-specific parameters per 734.410:**

Hydraulic conductivity (K)	$3.14 \times 10^{-4}$ cm/sec
Soil bulk density ( $\rho_b$ )	1.77 g/cm <sup>3</sup> (B-4—4-6' bgs)
Soil particle density ( $\rho_s$ )	2.66 g/cm <sup>3</sup> (subsurface sample)
Moisture content (w)	0.171 g <sub>soil</sub> /g <sub>water</sub> (B-4—4-6' bgs)
Organic carbon content ( $f_{oc}$ )	0.0072 g/g (GP-10—4-6' bgs)

- The consultant stated in the 11/19/2010 Corrective Action Plan that a slug test would be done on MW-1 to determine the hydraulic conductivity—the next Corrective Action Plan presents the hydraulic conductivity as  $3.14 \times 10^{-4}$  with no supporting documentation for the slug test—this is needed—they also previously mentioned an ex situ hydraulic conductivity analysis—not sure where this K value comes from

**Current Corrective Action Plan notes:**

- Completed soil borings GP-11, GP-12, GP-13 and GP-14 in August 2016—each approximately 20 feet from GP-7 to define the total xylenes concentration in the soil exceeding the soil saturation limit
- There appears to be a sand layer beginning at approximately 7-8' bgs that contains groundwater and appears to be contaminated (judging by PID results)
- Calculated a soil saturation limit for total xylenes of 356 mg/kg—verified at 336 mg/kg
- Proposing to excavate 200 cubic yards of soil from around GP-7 (20' x 20' x 8' deep)—note that an excavation of this size should remove approximately 125 cubic yards, including the

- 5% allowed pursuant to 734.825(b)(1)—the consultant stated that they did not provide the best measurements in the plan—the dimensions are actually closer to 23' x 29' x 8'—will approve
- Proposing to use a backhoe to locate MW-4 for groundwater analysis—if possible, necessary repairs will be made to the to allow for sampling of the groundwater—if it can't be repaired, it will be properly abandoned, and a temporary well will be installed with a Geoprobe to collect a groundwater sample approximately 3 months after the excavation—MW-4 was, by far, the most contaminated well and the groundwater contamination concentrations in this well (last sampled in 2002) will determine the necessary notification size for the ordinance
- The groundwater treatment system will be removed during the excavation

**Corrective Action Budget:**

Drilling & Monitoring Well Costs	\$0.00	
Analytical Costs	\$695.87	
Remediation & Disposal Costs	\$19,274.00	
UST Removal & Abandonment Costs	\$0.00	
Paving, Demo & Well Aband. Costs	\$10,000.00	
Consulting Personnel Costs	\$15,510.71	
Consultant's Materials Costs	\$558.00	(approving \$388.00)

- The Demolition Costs requests \$10,000 to demo the car wash and groundwater treatment system and shed—the removal of the groundwater treatment system does not appear to have been previously approved in a budget—will approve the cost
- The Consultant's Materials Costs requests a total of 350 miles at \$0.58 per mile for a total of \$203.00 for travel to the site for a week—the site is located less than 20 miles from the consultant's location—will approve a total of 5 trips (1 week) at 40 miles per round trip, or a total of 200 miles—deducting \$87.00—lack of supporting documentation and unreasonable
- The Consultant's Materials Costs requests \$0.58 per mile for mileage—the current approved mileage rate is \$0.54 per mile—will approve 200 miles at \$0.54 per mile for a total cost of \$108.00—a deduction of \$8.00—lack of supporting documentation and unreasonable
- The Consultant's Materials Costs requests \$25.00 for well sampling equipment for the sampling of MW-4, including a bailer, gloves and twine—need documentation to support the requested cost—recent experience indicates this should cost approximately \$8 to \$10—consultant indicated that they are using a stainless steel bailer—will approve the cost
- The Consultant's Materials Costs requests 3 days use of a PID at a rate of \$100 per day for a total cost of \$300—the consultant indicated that the PID could be rented for \$75 per day—will deduct \$75.00 (3 days x \$25.00)—lack of supporting documentation and unreasonable

**Illinois EPA Decision:**

- The plan is approved—the budget will be modified as listed above

## Dilbaitis, Bradley

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**From:** mecrcs <mdwstenv@frontier.com>  
**Sent:** Friday, January 06, 2017 11:50 AM  
**To:** Dilbaitis, Bradley  
**Subject:** Re: [External] Re: Incident #981987 - Warsaw, Howard  
**Attachments:** Warsaw ITCO info.pdf

Hi Brad, I've responded to your comments. Let me know what you think, I'm reviewing the Corrective Action Plan and Budget for the Warsaw site in Minier and there are a couple of things that we need to clear up before the letter can be issued.

First, the excavation that is proposed is 200 cubic yards and is 20' x 20' x 8' deep. This adds up to 125 cubic yards, including the 5% allowed under 734.825(b)(1).

Our CAD program lets you outline a shape and it gives you the square footage of that shape – very handy when the shape is not a convenient geometric form. In this case the square footage of the proposed excavation is 670 ft<sup>2</sup>.  $(670*8)/27 = 198$  which I rounded to 200. Now, I did not provide the best measurements in the report. I said 20' x 20' x 8' deep but it is actually closer to 23' x 29' x 8' deep.  $(23*28*8)/274 = 198$  which I round to 200. I have attached a map with the measurements on it.

The only other issues are in the Consultant's Materials Costs. We approve the federal mileage rate, which is currently \$0.54 per mile (the budget requests \$0.58 per mile). The mileage also requests a total of 350 miles for travel to the site for a week. Google maps indicates that the site is less than 20 miles from your office in Tremont. I can approve 40 miles per round trip (x5 trips for a total of 200 miles).

Okay on the 5 days and the round trip mileage. My question is this: is there a per day rate to use company vehicles or does the fund reimburse for mileage only? What if we said the vehicle costs \$25 per day for 5 days = \$125? That's less than renting a car from Enterprise for a day.

<https://www.enterprise.com/en/reserve.html#cars>

Next, we need to determine the cost of the bailer, the pair (or pairs) of gloves and the twine used in the sampling equipment request. We need to know how much you paid for these items and we will approve that amount for the budget.

Here's what's included in well sampling equipment

stainless steel bailer \$373.33

[https://www.amazon.com/Solinst-039-100405-Source-Capacity-Stainless/dp/B01J7YNVVE/ref=sr\\_1\\_3?ie=UTF8&qid=1483724062&sr=8-3&keywords=stainless+steel+bailers](https://www.amazon.com/Solinst-039-100405-Source-Capacity-Stainless/dp/B01J7YNVVE/ref=sr_1_3?ie=UTF8&qid=1483724062&sr=8-3&keywords=stainless+steel+bailers)

vinyl gloves \$8.69/ box of 100

[https://www.amazon.com/Ammex-GlovePlus-Disposable-Thickness-IVPF44100-BX/dp/B0014R6STS/ref=sr\\_1\\_4?ie=UTF8&qid=1483724152&sr=8-4&keywords=vinyl+disposable+gloves](https://www.amazon.com/Ammex-GlovePlus-Disposable-Thickness-IVPF44100-BX/dp/B0014R6STS/ref=sr_1_4?ie=UTF8&qid=1483724152&sr=8-4&keywords=vinyl+disposable+gloves)

nylon string \$6.59 for 250 feet

[https://www.amazon.com/Ammex-GlovePlus-Disposable-Thickness-IVPF44100-BX/dp/B0014R6STS/ref=sr\\_1\\_4?ie=UTF8&qid=1483724152&sr=8-4&keywords=vinyl+disposable+gloves](https://www.amazon.com/Ammex-GlovePlus-Disposable-Thickness-IVPF44100-BX/dp/B0014R6STS/ref=sr_1_4?ie=UTF8&qid=1483724152&sr=8-4&keywords=vinyl+disposable+gloves)

alconox detergent \$32 for 4 pound carton

[https://www.amazon.com/Alconox-Detergent-Cleaning-Concentrate-Container/dp/B0000WU828/ref=sr\\_1\\_1?ie=UTF8&qid=1483724324&sr=8-1&keywords=alconox+detergent](https://www.amazon.com/Alconox-Detergent-Cleaning-Concentrate-Container/dp/B0000WU828/ref=sr_1_1?ie=UTF8&qid=1483724324&sr=8-1&keywords=alconox+detergent)

DTW Metter \$496

[https://www.amazon.com/SOLINST-101-WATER-LEVEL-METER/dp/B00XNMCQ68/ref=sr\\_1\\_1?ie=UTF8&qid=1483724440&sr=8-1&keywords=water+level+meter+100+ft](https://www.amazon.com/SOLINST-101-WATER-LEVEL-METER/dp/B00XNMCQ68/ref=sr_1_1?ie=UTF8&qid=1483724440&sr=8-1&keywords=water+level+meter+100+ft)

The PID is also an issue. We need documentation to support the PID request. We need either an indication that it costs \$100/day to rent a PID in the area or a breakdown of the daily rate (including the initial cost of the PID, when it was purchased, any indirect costs expected and the number of expected uses before it needs to be replaced). Thanks for your help with this.

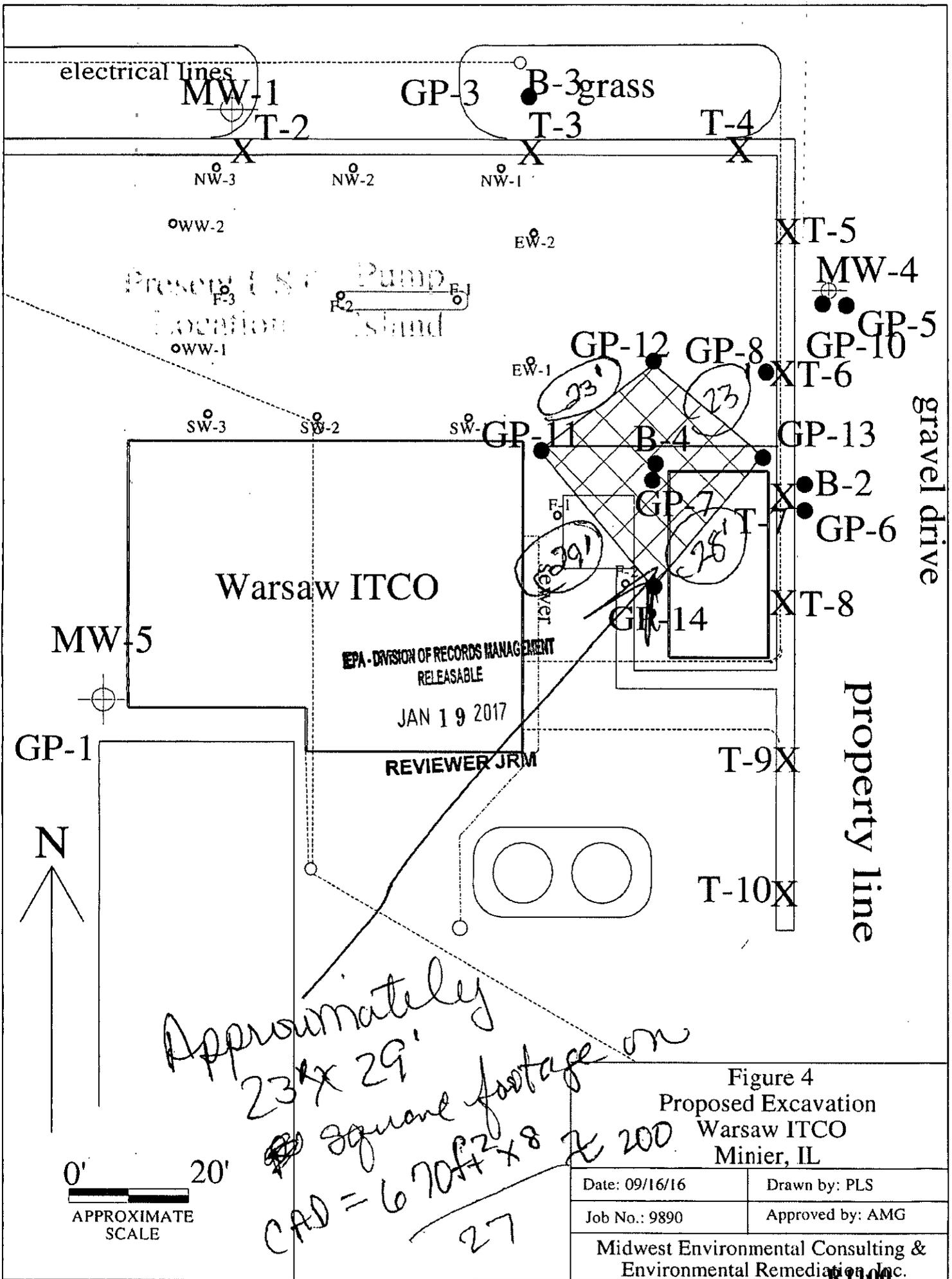
Daily rental from Field Environmental Instruments for a PID is \$75.

I hope this helps. Please let me know about the company vehicle.

Penny Silzer  
Midwest Environmental  
309-369-7486

Brad Dilbaitis  
Project Manager  
Illinois Environmental Protection Agency  
Leaking Underground Storage Tanks  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, IL 62794-9276  
phone: (217) 785-8378  
fax: (217) 524-4193

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**mecrs**

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**From:** "Adam McMullin - IL" <amcmullin.il@fieldenvironmental.com>  
**Date:** Thursday, December 15, 2016 10:17 AM  
**To:** <mdwstenv@frontier.com>  
**Subject:** FEI Order Quote



December 15, 2016

Dear Andrew:

Thank you for your recent inquiry with Field Environmental Instruments, Inc.

Quote date: 12/15/2016  
Your quote number is: 329549  
Your PO reference number is: QUOTE

The following items are included in your quote:

- \* (1) (ID# 112) RAE - MiniRAE 2000 PID 10.6eV Lamp - Rental  
Daily: \$75.00 Weekly: \$225.00 Monthly: \$675.00 Sale: N/A
- \* (1) (ID# 6206) RAE - MiniRAE 3000 PID 10.6eV Lamp - Rental LBATT  
Daily: \$85.00 Weekly: \$255.00 Monthly: \$765.00 Sale: N/A
- \* (1) (ID# 6456) RAE - MiniRAE 3000 PID 11.7eV Lamp - Rental LBATT  
Daily: \$125.00 Weekly: \$375.00 Monthly: \$1,125.00 Sale: N/A
- \* (1) (ID# 620) Shipping & Handling Charge  
approximate  
Daily: N/A Weekly: N/A Monthly: N/A Sale: \$25.00
- \* (1) (ID# 10678) FEI Return Shipping Labels - Billed to FEI Account, If Used, Add to Customer Invoice  
approximate  
Daily: N/A Weekly: N/A Monthly: N/A Sale: \$25.00

Sales Tax = \$0.00  
Order Total = \$0.00

Delivery Method:

Shipping address:  
Midwest Environmental Consulting  
22200 Illinois Route 9

161201

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All water level meter 100 ft

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Try Prime

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Click to open expanded view

# SOLINST 101 P7 WATER LEVEL METER - 100 ft.

by Solinst

1 customer review

Price: \$486.00 + \$9.99 shipping

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Get it as soon as Thursday, Jan. 12 when you choose Two-Day Shipping at checkout.

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Qty: 1

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Ship to:  
CHICAGO, IL 60290

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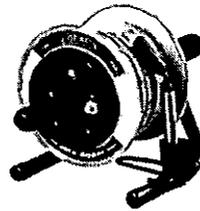
Sell on Amazon



SOLINST 101 P7 WATER LEVEL METER - 300 ft. \$786.00



Heron 1148 LdX75ft Little Dipper-Water Level Meter, 75' \$452.00



Water Level Meter, 75 feet (Little Dipper) \$455.00

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- Water Level Dip Meters - Borehole and Well Measurement
- Solinst 101 - Best Price
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www.bvsystems.com/m2m/tools

Drawdown & Static Mode - IP68 Probe - Stainless Steel fittings - Buy or Rent  
www.in-situ.com/Dip-Meters

Solinst 101 Water Level Meter with the Latest Probe and Laser Markings  
www.equipcervices.com/Solinst\_101

Water Level Sensors suitable for most applications - Buy Online Now!  
www.deeterelectronicsinc.com/

Ad feedback

## Product Description

The Solinst 101 Water Level Meter with P7 Probe has a laser marked PVDF flat tape. The design is intended to reduce adherence to the side of well casing. The PVDF flat tape is laser marked every 1/100 ft or each mm and the tap has a length of up to 6000 ft (1800 m). The newly designed flat tape has increased tensile strength and electrical efficiency by using 6 strands of copper coated stainless steel and 13 strands of stainless steel in each conductor. The P7 Water Level Meter Probe has been developed to submerge up to 1000 ft. (300 m), making it surpass the 101 P6 Submersible Probe. By having the sensor at the very tip of the probe, you will get the most accurate measurements in wells, boreholes, and cascading water, with almost zero displacement. - 101 P7 Submersible Probe measures water levels

R1102

and total well depth - More consistent measurements with sensor located at the tip of probe - Solinst PVDF flat tape has increased tensile strength and electrical efficiency

**Product Information**

Shipping Weight	1 pounds (View shipping rates and policies)
Manufacturer	Solinst
ASIN	B00XNMCQ68
Customer Reviews	1 customer review 5.0 out of 5 stars
Best Sellers Rank	#80,400 in Beauty (See Top 100 in Beauty)
Date first available at Amazon.com	May 14, 2015

**Warranty & Support**

**Product Warranty:** For warranty information about this product, please click here

**Feedback**

If you are a seller for this product, would you like to suggest updates through seller support?  
Would you like to tell us about a lower price?

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Typical questions asked about products:

- Is the item durable?
- Is this item easy to use?
- What are the dimensions of this item?

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5.0 out of 5 stars

5 star	100%	Share your thoughts with other customers
4 star	0%	
3 star	0%	<input type="button" value="Write a customer review"/>
2 star	0%	
1 star	0%	

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All vinyl disposable gloves

Departments

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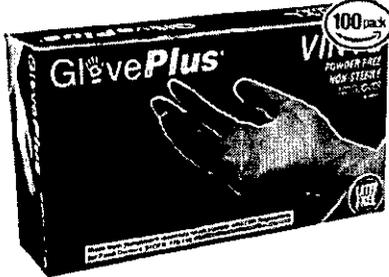
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Industrial & Scientific Lab Test & Measurement Safety Janitorial & Facilities Food Service Education Material Handling Materials Metalworking

Tools & Home Improvement Safety & Security Personal Protective Equipment Hand & Arm Protection Lab, Safety & Work Gloves Disposable Gloves



**Ammex IVPF GlovePlus Vinyl Glove, Latex Free, Disposable, 4 mil Thickness, Powder Free, Small, IVPF42100-BX (Box of 100)**

by Ammex

133 customer reviews

| 7 answered questions

Price: **\$8.91** (\$0.09 / Gloves) | **Fast, FREE Shipping with Amazon Prime**

In Stock.

Want it tomorrow, Jan. 11? Order within 9 hrs 26 mins and choose One-Day Shipping at checkout. Details Ships from and sold by Amazon.com.

Size: Small

- Small
- Medium
- Large
- X-Large

Unit Count: 100

- 100
- 1000

- Vinyl gloves are optimal for tasks that have a short duration and require frequent glove changes
  - Superb tensile strength - Non-medical use. Beaded cuff and ambidextrous (can fit right or left hand)
  - Sizes range from small to extra large - The glove is 9.5 inches long measured from the tip of the finger to the cuff of the glove
  - Made from clear vinyl PVC - 4 mil thick
  - Provides high levels of dexterity and sensitivity. Non-medical use only
- › See more product details

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Unlock extra savings with **Subscribe & Save**. Unlock up to 15% on this item when you subscribe to 5 or more items that arrive in the same month. No commitments, no obligations, and shipping is FREE. Learn more

New (3) from \$8.91 & FREE shipping on orders over \$49.00. Details

Share

One-time purchase: **\$8.91** (\$0.09 / Gloves)

Qty:

Yes, I want **FREE Two-Day Shipping with Amazon Prime**

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Ship to:

CHICAGO, IL 60290

**Subscribe & Save:**  
5% 15%  
**\$8.46** (\$0.08 / Gloves)

**Add to List**

**Other Sellers on Amazon**

**\$12.99** (\$0.13 / Gloves) **Add to Cart**

+ Free Shipping  
Sold by: Salon CA

New (3) from \$8.91 & FREE shipping on orders over \$49.00. Details

Have one to sell? **Sell on Amazon**

**Save Now on Shampoo**

Head and Shoulders Dry Scalp Care with Almond Oil Dandruff Shampoo, ... **\$15.99**

Ad feedback

**Frequently Bought Together**



Total price: **\$18.86**

**Add both to Cart**

**Add both to List**

**This item:** Ammex IVPF GlovePlus Vinyl Glove, Latex Free, Disposable, 4 mil Thickness, Powder Free, Small... \$8.91 (\$0.09 / Gloves)

Nitrile Exam Gloves - Medical Grade, Powder Free, Latex Rubber Free, Disposable, Non Sterile, Food... \$9.95 (\$0.10 / Glove)

**R1104**



Ammex VPF Vinyl Glove, Medical Exam, Latex Free, Disposable, 5 mil Thickness, Powder Free,...

737

\$6.53



Ammex GPX3 Vinyl Glove, Latex Free, Disposable, Powder Free, Medium (Box of 100)

117

\$8.64



Ammex VPF Vinyl Glove, Medical Exam, Latex Free, Disposable, 5 mil Thickness, Powder Free,...

737

#1 Best Seller in Vinyl Gloves

\$6.21



Disposable Vinyl Gloves - Powder Free. Clear, Latex Free and Allergy Free, Plastic, Work, Food...

559

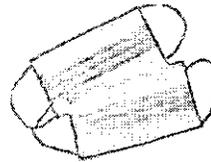
\$11.98



Ammex AAMV Anti-Microbial Vinyl Glove, Latex Free, Disposable, 3 mil Thickness, Powder...

361

\$8.08



Disposable BLUE Earloop Face Mask, Filters Bacteria 3 PLY 50/bx

905

\$3.60

**Sponsored Products Related To This Item** (What's this?)



Disposable Poly PE Gloves Food Service Safety Glove 1.25 Mil Thickness Powder &...

3

\$11.99



Precision Disposable Products Disposable Latex/Powder Free Nitrile Medical Exam Gloves,...

66

\$9.99



Emergency Blue Rain Ponchos - Lightweight & Disposable 10 Pack...

34

\$15.00



VINYL DISPOSABLE GLOVES ( HIGHEST GRADE VINYL) MEDICAL EXAM...

1

\$3.50



KingSeal Vinyl Disposable Gloves, Powdered, 4 mil. Clear, X-Large, 4 bx/100 per...

5

\$13.99

Ad feedback

**Customers Viewing This Page May Be Interested In These Sponsored Links** (What's this?)

• [Ammex gloveplus](#)

Latex, Vinyl & Nitrile. Free Ship! Wholesale Prices with 40 Cases. [www.palmflex.com/Ammex-Gloves](http://www.palmflex.com/Ammex-Gloves)

• [They Laughed When I Said \\$2.29 - For a Box of Vinyl Gloves](#)

But Oh How the Employees Love Them! \$22.95/Case, For Food Server & Clean Up. [www.saraglove.com/Vinyl\\_Gloves/Wholesale](http://www.saraglove.com/Vinyl_Gloves/Wholesale)

• [Disposable Vinyl Gloves](#)

Smooth, Durable Latex-Free Gloves. Bulk Savings w/ Wholesale Pricing [www.gloveamerica.com/Vinyl](http://www.gloveamerica.com/Vinyl)

Ad feedback

**Special Offers and Product Promotions**

Size: Small | Unit Count: 100

• Your cost could be **\$0.00 instead of \$8.91!** Get the **Amazon.com Rewards Visa** card and you'll **automatically get \$50.00** off instantly as a gift card. Apply now.

R1105

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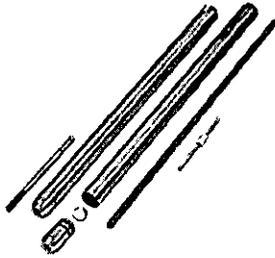
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Industrial & Scientific Lab Test & Measurement Safety Janitorial & Facilities Food Service Education Material Handling Materials Metalworking

Industrial & Scientific > Hydraulics, Pneumatics & Plumbing > Pumps



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by Solinst

**Solinst 039-100405 Point Source Bailer, 1.5" x 2' Bailer, 13 oz. Capacity, 316 Stainless Steel**

Be the first to review this item

Price: \$373.33 | Fast, FREE Shipping with Amazon Prime

Usually ships within 7 to 10 weeks.  
Ships from and sold by Amazon.com. Gift-wrap available.

New (1) from \$373.33 & FREE shipping. Details

**Specifications for this item**

Brand Name	Solinst
Part Number	039-100405
Number of Items	1
Material Type	Stainless Steel
System of Measurement	US
Body Material Type	Stainless Steel
For Use With Product Type	Groundwater Sampling
Maximum Flow Rate	103.74 CIPM
Overall Height	1.5 inches
Overall Length	2 feet
Overall Width	1.5 inches
UNSPSC Code	40150000

[See more product details](#)



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Qty: 1 ▾

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Ship to:  
CHICAGO, IL 60290

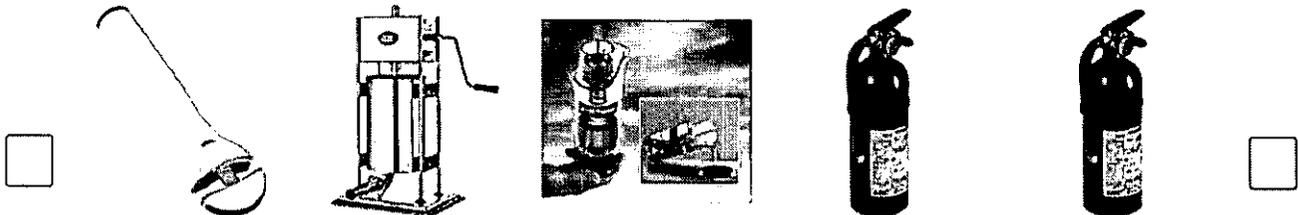
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Have one to sell? [Sell on Amazon](#)

*D.I.S.  
proper operation*

**Customers Also Shopped For**

Page 1 of 5

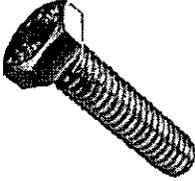
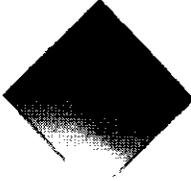
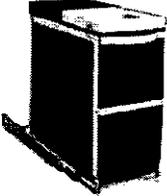


**R1106**

Leifheit All Size Jar and Bottle Opener 25 \$10.99	LEM Products 25-Pound Dual Gear SS Vertical Sausage Stuffer, Silver/White 3	MultiSump Aviation Fuel Tester 4 \$29.95	3 Pack Of Kidde 21005779 Pro 210 Fire Extinguisher, ABC, 160C! \$159.97	Kidde 21005779 Pro 210 Fire Extinguisher, ABC, 160C!, 4 Pack 3 \$210.26
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**Sponsored Products Related To This Item** (What's this?)

Page 1 of 31

				
Dental Hygiene Kit - Calculus & Plaque Remover Set - Stainless Steel Tarter Scraper,.... 141 \$10.00	1/2-20 x 1-1/4" Hex Head Cap Screw Bolts, External Hex Drive, Stainless Steel 18-8.... \$13.86	RMP .040 3003 H14 Aluminum Sheet 12" x 12" \$10.25	Quality Ear Care Stainless Steel Ear Pick 115 \$5.99	simplehuman Under-Counter Pull-Out Recycler Trash Can, Commercial Grade, 35... 233 \$79.98

Ad feedback

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- Stainless Steel Level** 

Display, Optical, Industrial Glass Applications For Manufacturing. [www.stemmerich.com/IndustrialGlass](http://www.stemmerich.com/IndustrialGlass)
- Stainless Steel Bailer - AMS Samplers** 

Sample A Large Number Of Locations Quickly & Accurately. View Catalog: [www.ams-samplers.com/water-sampling](http://www.ams-samplers.com/water-sampling)
- 316 Grade Stainless Steel - Custom Cut to Size Options** 

T-316 and 316L Grade Stainless. No Minimum Orders! Fast Shipping. [www.onlinemetals.com/Marine/Stainless](http://www.onlinemetals.com/Marine/Stainless)
- 316L SS Sheet Full or Cut** 

2B, #4, #8 In Stock, Quick Shipping Online Ordering, Quantity Discounts [www.stainlesssupply.com/](http://www.stainlesssupply.com/)

Ad feedback

**Product Features**

- Point Source Bailer has dual ball valves, top and bottom
- Needs no costly or hard to transport ancillary equipment
- Constructed of 316 stainless steel with PTFE ball valves, and o-rings
- Stainless steel sample release device to minimize loss of volatiles during transfer

**Product Description**

Point source sampling is ideal for obtaining high quality, representative samples of groundwater from specific depths. It allows the collection of water that has just flowed into a well at the desired sampling point. This can avoid purging and disposal of purged water. The Point Source Bailer can be used to profile an open borehole or screened well, collecting samples from distinct levels or points of inflow. Sample biases due to mixing of the sample with water from different levels in the well is minimized.

**Product Details**

**Shipping Weight:** 12 pounds (View shipping rates and policies)

**Domestic Shipping:** Currently, item can be shipped only within the U.S. and to APO/FPO addresses. For APO/FPO shipments, please check with the manufacturer regarding warranty and support issues.

**International Shipping:** This item is not eligible for international shipping. Learn More

**ASIN:** B01J7YNVVE

**California residents:** Click here for Proposition 65 warning.

**Item model number:** 039-100405

**Average Customer Review:** Be the first to review this item

Manufacturer's warranty can be requested from customer service. Click here to make a request to customer service.

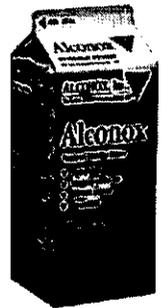
**R1107**

Try Prime All - alconox detergent

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Industrial & Scientific > Lab & Scientific Products



Click to open expanded view

by Alconox  
**Alconox Detergent Cleaning Concentrate**  
**4 lb. Container**

44 customer reviews | 3 answered questions

List Price: ~~\$36.00~~  
 Price: **\$32.00** | Fast, FREE Shipping with Amazon Prime  
 You Save: \$4.00 (11%)

In Stock.  
 Want it tomorrow, Jan. 11? Order within 9 hrs 26 mins and choose One-Day Shipping at checkout. Details  
 Sold by Scientific Systems and Fulfilled by Amazon. Gift-wrap available.

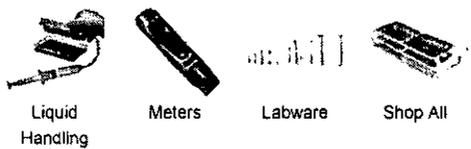
New (12) from \$32.00 & FREE shipping on orders over \$49.00. Details

**Specifications for this item**

Brand Name	Alconox
Part Number	1104-1
Number of Items	1
EAN	0787468416788 , 0660483110414
Import Designation	Made in USA
Is Recalled?	N
Item Weight	4.2 pounds
National Stock Number	6640-01-107-9169 , 7930-01-107-9169
Overall Height	10 inches
Overall Length	4 inches
Overall Width	4 inches
UNSPSC Code	32000000
UPC	660483110414 , 787468416788

[See more product details](#)

Shop a Full Selection of Lab & Scientific Supplies



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Qty: 1

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Ship to:  
 CHICAGO, IL 60290

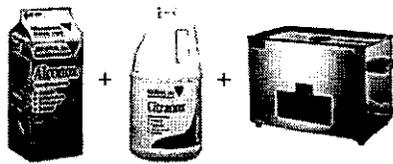
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**Other Sellers on Amazon**

\$32.00 + Free Shipping Sold by: BP MEDICAL SUPPLIES	Add to Cart
\$32.07 & FREE Shipping on eligible orders. Details Sold by: Amazon.com	Add to Cart
\$35.00 & FREE Shipping on eligible orders. Details Sold by: Prime Healthcare	Add to Cart
New (12) from \$32.00 & FREE shipping on orders over \$49.00. Details	
Have one to sell?	Sell on Amazon

Frequently Bought Together

R1108



Total price: \$576.50

Add all three to Cart

Add all three to List

These items are shipped from and sold by different sellers. Show details

- This item: Alconox Detergent Cleaning Concentrate 4 lb. Container \$32.00
- Alconox Detergent Acidic Cleaner Citranox 1 Gallon \$45.50
- Kendal Commercial grade 780 watts 5.55 gallon heated ultrasonic cleaner HB821 \$499.00

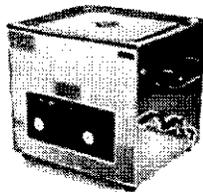
Customers Who Bought This Item Also Bought



Alconox Powder Labware Detergent, 4 lbs Box  
13  
\$32.15



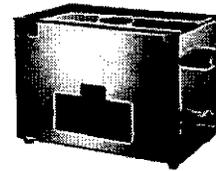
Alconox Detergent Acidic Cleaner Citranox 1 Gallon  
16  
\$45.50



Kendal Commercial Grade 9 Liters 540 Watts HEATED ULTRASONIC CLEANER HB-49MHT  
22



Alconox 1304 Tergazyme Anionic Detergent with Protease Enzymes, 4lbs Box  
12  
\$37.88

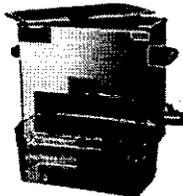


Kendal Commercial grade 780 watts 5.55 gallon heated ultrasonic cleaner HB821  
18  
\$499.00



Alconox 1404 Alcojet Nonionic Low-Foaming Powdered Detergent, 4lbs Box  
14  
\$42.96

Sponsored Products Related To This Item (What's this?)



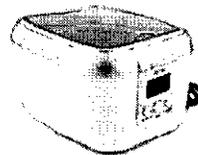
Kendal Commercial Grade Kendal 6 Liters 380 Watts HEATED ULTRASONIC...  
38  
\$288.00



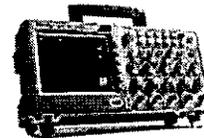
Kendal Commercial Grade 6 Liters 380 Watts HEATED ULTRASONIC CLEANER HB-36MHT  
18  
\$269.00



Tektronix 1052B 50 MHz, 2 Channel, Digital Oscilloscope, 1 GS/s Sampling, 5-year...  
29  
\$550.00



Famili FM8000WW Ultrasonic Polishing Jewelry Cleaner with Digital Timer for...  
127  
\$34.99



Tektronix TBS1064, 60 MHz, 4 Channel, Digital Oscilloscope, 1 GS/s Sampling, 5-year...  
6  
\$1,019.70

Ad feedback

Product Features

- Ideal for cleaning contaminants from glassware, metals, plastics, ceramic, porcelain, rubber and fiberglass
- Biodegradable
- Concentrated, anionic detergent for manual and ultrasonic cleaning

R1109



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397  
BRUCE RAUNER, GOVERNOR ALEC MESSINA, ACTING DIRECTOR

217/524-3300

JAN 12 2017

CERTIFIED MAIL

7014 2120 0002 3290 7657

Warsaw ITCO  
John Warsaw  
P.O Box 886  
Minier, IL 61759

IEPA - DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 122  
Leaking UST Incident No. 981987 and 991610  
Leaking UST Technical File

FEB 06 2017

REVIEWER: JMR

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Corrective Action Plan (plan) submitted for the above-referenced incident. This plan, dated October 18, 2016, was received by the Illinois EPA on October 28, 2016. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

Pursuant to Sections 57.7(b)(2) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(a), the plan is approved. The activities proposed in the plan are appropriate to demonstrate compliance with Title XVI of the Act. Please note that all activities associated with the remediation of this release proposed in the plan must be executed in accordance with all applicable regulatory and statutory requirements, including compliance with the proper permits.

In addition, the budget is modified pursuant to Sections 57.7(b)(3) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(b). Based on the modifications listed in Section 2 of Attachment A, the amounts listed in Section 1 of Attachment A have been approved. Please note that the costs must be incurred in accordance with the approved plan. Be aware that the amount of payment from the Fund may be limited by Sections 57.7(c), 57.8(d), 57.8(e), and 57.8(g) of the Act, as well as 35 Ill. Adm. Code 734.630 and 734.655.

If the owner or operator agrees with the Illinois EPA's modifications, submittal of an amended plan and/or budget, if applicable, is not required (Section 57.7(c) of the Act).

NOTE: Pursuant to Section 57.8(a)(5) of the Act, if payment from the Fund will be sought for any additional costs that may be incurred as a result of the Illinois EPA's modifications, an amended budget must be submitted. Amended plans and/or budgets must be submitted and approved prior to the issuance of a No Further Remediation (NFR) Letter. Costs associated with a plan or budget that have not been approved prior to the issuance of an NFR Letter will not be paid from the Fund.

**Further, pursuant to 35 Ill. Adm. Code 734.145, it is required that the Illinois EPA be notified of field activities prior to the date the field activities take place. This notice must include a description**

**of the field activities to be conducted; the name of the person conducting the activities; and the date, time, and place the activities will be conducted. This notification of field activities may be done by telephone, facsimile, or electronic mail—and must be provided at least two weeks prior to the scheduled field activities.**

Pursuant to Sections 57.7(b)(5) and 57.12(c) and (d) of the Act and 35 Ill. Adm. Code 734.100 and 734.125, the Illinois EPA requires that a Corrective Action Completion Report that achieves compliance with applicable remediation objectives be submitted within 30 days after completion of the plan to:

Illinois Environmental Protection Agency  
Bureau of Land - #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

If within four years after the approval of this plan, compliance with the applicable remediation objectives has not been achieved and a Corrective Action Completion Report has not been submitted, the Illinois EPA requires the submission of a status report pursuant to Section 57.7(b)(6) of the Act.

An underground storage tank system owner or operator may appeal this decision to the Illinois Pollution Control Board. Appeal rights are attached.

If you have any questions or need further assistance, please contact Brad Dilbaitis at (217) 785-8378 or [Bradley.Dilbaitis@illinois.gov](mailto:Bradley.Dilbaitis@illinois.gov).

Sincerely,



Stephen A. Colantino  
Acting Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

SAC:BD\CAP3appBUDmod.docx

Attachment: Attachment A  
Appeal Rights

c: Al Green, Midwest Environmental (electronic copy), [mdwestenv@frontier.com](mailto:mdwestenv@frontier.com)  
BOL File

Attachment A

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 122  
Leaking UST Incident No. 981987 and 991610  
Leaking UST Technical File

**SECTION 1**

As a result of Illinois EPA's modification(s) in Section 2 of this Attachment A, the following amounts are approved:

\$0.00	Drilling and Monitoring Well Costs
\$695.87	Analytical Costs
\$19,274.00	Remediation and Disposal Costs
\$0.00	UST Removal and Abandonment Costs
\$10,000.00	Paving, Demolition, and Well Abandonment Costs
\$15,510.71	Consulting Personnel Costs
\$388.00	Consultant's Materials Costs

Handling charges will be determined at the time a billing package is reviewed by the Illinois EPA. The amount of allowable handling charges will be determined in accordance with Section 57.1(a) of the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code) 734.635.

**SECTION 2**

1. \$87.00 for Consultant's Materials Costs associated with requested mileage, which lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. In addition, the request is not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd).

The Consultant's Materials Costs requests a total of 350 miles at \$0.58 per mile for a total of \$203.00 for travel to the site for one week. The site is located less than 20 miles from the consultant's location. A total of 5 trips (1 week) at 40 miles per round trip, or a total of 200 miles, is approved for payment.

2. \$8.00 for Consultant's Materials Costs associated with the requested mileage rate which lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title

XVI of the Act. In addition, the request is not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd).

The Consultant's Materials Costs requests \$0.58 per mile for mileage. The applicable approved mileage rate is \$0.54 per mile, which is the federal mileage rate in effect when the Corrective Action Plan was received. A total of 200 miles at \$0.54 per mile is approved for the use of the consultant's field vehicle.

3. \$75.00 for costs for PID, which lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act.

Pursuant to 35 Ill. Adm. Code 734.850(b) costs associated with activities that do not have a maximum payment amount set forth pursuant to 35 Ill. Adm. Code 734 Subpart H must be determined on a site specific basis and the owner/operator must demonstrate to the Agency the amounts sought for reimbursement are reasonable. The Agency has requested additional documentation to support the rate requested for a PID pursuant to 35 Ill. Adm. Code 734.505(a). The documentation was either not provided or fails to provide sufficient information for the Agency to make a site specific reasonableness determination.

In addition, without supporting documentation for the rate requested the PID costs are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd).

The Consultant's Materials Costs requests 3 days use of a PID at a rate of \$100 per day for a total cost of \$300. The consultant indicated that the PID could be rented for \$75 per day. The PID costs are approved at the daily rental rate provided by the consultant.

BD\CAP3appBUDmodA.docx

## Appeal Rights

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board pursuant to Sections 40 and 57.7(c)(4) of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the filing of an appeal, please contact:

John Therriault, Assistant Clerk  
Illinois Pollution Control Board  
James R. Thompson Center  
100 West Randolph, Suite 11-500  
Chicago, IL 60601  
312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency  
Division of Legal Counsel  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276  
217/782-5544



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397  
BRUCE RAUNER, GOVERNOR ALEC MESSINA, ACTING DIRECTOR

217/524-3300

JAN 12 2017

Warsaw ITCO  
John Warsaw  
P.O Box 886  
Minier, IL 61759

CERTIFIED MAIL

7014 2120 0002 3290 7657

IEPA - DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 122  
Leaking UST Incident No. 981987 and 991610  
Leaking UST Technical File

FEB 06 2017

REVIEWER: JMR

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Corrective Action Plan (plan) submitted for the above-referenced incident. This plan, dated October 18, 2016, was received by the Illinois EPA on October 28, 2016. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

Pursuant to Sections 57.7(b)(2) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(a), the plan is approved. The activities proposed in the plan are appropriate to demonstrate compliance with

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also, complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature: <i>John Warsaw</i> <input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name): <i>John D. Warsaw</i> C. Date of Delivery: <i>1-23-17</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If YES, enter delivery address below:</p>
<p>1. Article Addressed to:</p> <p>Warsaw ITCO Attn: John Warsaw Post Office Box 886 Minier, IL 61759</p>	<p><i>32130981987</i></p> <p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail® <input type="checkbox"/> Priority Mail Express™  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> Collect on Delivery</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label)</p>	<p><i>7014 2120 0002 3290 7657R</i></p>

LEAKING UST

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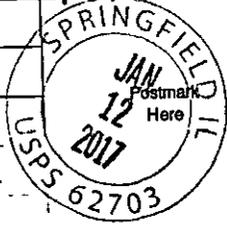
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 Warsaw ITCO

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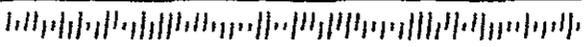


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# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, ACTING DIRECTOR

217/524-3300

MAR 16 2017

7014 2120 0002 3292 3947

Warsaw ITCO  
John Warsaw  
P.O Box 886  
Minier, IL 61759

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 122  
Leaking UST Incident No. 981987 and 991610  
Leaking UST Technical File

EPA - DIVISION OF RECORDS MANAGEMENT  
RELEASABLE  
MAR 28 2017  
REVIEWER JRM

Dear Mr. Warsaw:

On March 14, 2017, the Illinois Environmental Protection Agency (Illinois EPA) received notification for the corrective action field activities at the above referenced site and sufficient notification was not provided to the Illinois EPA for these field activities taking place. A Corrective Action Plan was received by the Illinois EPA on October 28, 2016 and was approved on January 12, 2017. The approval of this plan required that Illinois EPA be notified of field activities at least two weeks prior to the scheduled field activities.

Pursuant to 35 Illinois Administrative Code, Section 734.145, the Illinois EPA may require owners and operators to notify the Illinois EPA of field activities prior to the date the field activities take place. The notice must include information prescribed by the Illinois EPA, and may include, but is not limited to, a description of the field activities to be conducted, the person conducting the activities, and the date, time, and place the activities will be conducted. The Illinois EPA may, but is not required to, allow notification by telephone, facsimile, or electronic mail. This Section does not apply to activities conducted within 45 days plus 14 days after initial notification to Illinois Emergency Management Agency (IEMA) of a release, or to free product removal activities conducted within 45 days plus 14 days after the confirmation of the presence of free product.

**Take notice that noncompliance with the requirements of the Act and the rules and regulations adopted thereunder may be the subject of enforcement action pursuant to the Act, 415 ILCS 5 et seq. or the Federal Resource Conservation and Recovery Act, 42 U.S.C. Sec. 6991 et seq.**

Page 2

If you have any questions or need further assistance, please contact Brad Dilbaitis at (217) 785-8378 or [Bradley.Dilbaitis@illinois.gov](mailto:Bradley.Dilbaitis@illinois.gov).

Sincerely,



Stephen A. Colantino  
Acting Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

SAC:BD\CAP field notification.docx

c: Allan Green, Midwest Environmental (electronic copy), [mdwstenv@frontier.com](mailto:mdwstenv@frontier.com)  
BOL File

**R1118**

1790455007 – Tazewell County  
Warsaw, Howard  
Incident # 981987  
Leaking UST Technical File

**Midwest Environmental Consulting & Re**  
**22200 Illinois Route 9 • P.O. Box 614**  
**Tremont, IL 61568-0614**  
**Phone : (309) 925-5551 • Fax : (309) 925-5606**  
**E-mail : mdwstenv@frontier.com**

June 22, 2017

Mr. Brad Dilbaitis  
Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Re: LPC #1790455007 – Tazewell County  
Minier/Warsaw, Howard  
Route 122  
LUST Incident No. 981987  
LUST Technical File

IEPA-DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

SEP 15 2017

REVIEWER: JKS

Dear Brad:

Attached please find the Corrective Action Completion Report for the subject site.

If you have any questions or comments, please contact our office at the number above.

Sincerely,

Midwest Environmental Consulting and Remediation Services, Inc.

  
Allan M. Green  
President

PLS/alg  
cc: Mr. Howard Warsaw  
Attachments  
Job No. 9890

**RECEIVED**

JUN 27 2017

**IEPA/BOL**

Leaking Underground Storage Tank Program

**Corrective Action Completion Report**

**Incident Location:** Warsaw - ITCO  
Route 122  
Minier, Illinois – Tazewell Co.

**Prepared for:** John Warsaw  
PO Box 886  
Minier, Illinois 61759

**Prepared by:** Midwest Environmental Consulting  
and Remediation Services, Inc.  
22200 Illinois Route 9  
Post Office Box 614  
Tremont, Illinois 61568-0614  
Contact: Allan Green – President

**For Review by:** Illinois Environmental Protection Agency  
Bureau of Land - #24  
LUST Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
Contact: Mr. Jim Ransdell

# Corrective Action Completion Report

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# **IEPA Corrective Action Completion Report Form**



# Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 – 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation, orally or in writing, in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/44 and 57.17). This form has been approved by the Forms Management Center.

## Leaking Underground Storage Tank Program Corrective Action Completion Report

### A. Site Identification

IEMA Incident # (6- or 8-digit): 981987 IEPALPC# (10-digit): 1790455007  
Site Name: Warsaw, Howard  
Site Address (Not a P.O. Box): Route 122  
City: Minier County: Tazewell ZIP Code: 61759

### B. Site Information

1. Has a Corrective Action Plan been approved?  Yes  No  
Date of approval letter: Jan 12, 2017
2. This completion report is being submitted pursuant to:
  - a. 35 Ill. Adm. Code 731.166
  - b. 35 Ill. Adm. Code 732.300(b)
  - c. 35 Ill. Adm. Code 732.404
  - d. 35 Ill. Adm. Code 734.345
3. Method of remediation chosen:
  - a. Soil Excavation, TACO, institutional controls
  - b. Groundwater Excavation, TACO, institutional controls
4. Quantity of contaminated media remediated and/or recovered
  - a. Soil 125 yds.<sup>3</sup>
  - b. Groundwater \_\_\_\_\_ gals.
  - c. Free Product \_\_\_\_\_ gals.

### C. Remedial (Corrective) Action

1. An executive summary that identifies the overall objectives of the corrective action and the technical approach utilized to meet those objectives. The summary shall contain the following information:
  - a. A brief description of the site, including but not limited to a description of the release, the applicable indicator contaminants, the contaminated media, and the extents of soil and groundwater contamination that exceeded the most stringent Tier 1 remediation objectives;

- b. The major components (e.g., treatment, containment, removal) of the corrective action;
  - c. The scope of the problems corrected or mitigated by the corrective action; and
  - d. The anticipated post-corrective action uses of the site and areas immediately adjacent to the site;
2. A description of the corrective action activities conducted including:
    - a. A narrative description of the field activities conducted as part of corrective action;
    - b. A narrative description of the remedial actions implemented at the site and the performance of each remedial technology utilized;
    - c. Documentation of sampling activities:
      - i. Sample collection information;
      - ii. Sample preservation and shipment information;
      - iii. Analytical procedure information;
      - iv. Analytical results, chain of custody and control, and laboratory certification;
      - v. Field and lab blanks; and
      - vi. Table(s) comparing analytical results to remediation objectives approved for the site (include sample depths, date collected, and detection limits);
    - d. Soil boring logs and monitoring well construction diagrams.
  3. A narrative description of any special conditions relied upon as part of corrective action including:
    - a. Engineered barriers utilized:
      - i. Type of barrier(s); and
      - ii. Map showing location(s) and dimension(s) of barrier(s);
    - b. Institutional controls utilized:
      - i. Copy of fully executed institutional control(s); and
      - ii. Map showing location(s) of controls;
    - c. Other conditions, if any, necessary for protection of human health and safety and the environment that are related to the issuance of a No Further Remediation Letter; and
    - d. Any information required regarding off-site access;
  4. An analysis of the effectiveness of the corrective action that compares the confirmation sampling results to the remediation objectives approved for the site;
  5. A conclusion that identifies the success in meeting the remediation objectives approved for the site;
  6. Appendices containing references and data sources;
  7. The water supply well survey:
    - a. Map(s) showing locations of community water supply wells and other potable wells and the setback zone for each well;
    - b. Map(s) showing regulated recharge areas and wellhead protection areas;
    - c. Map(s) showing the current extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
    - d. Map(s) showing the modeled extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
    - e. Table(s) listing the setback zones for each community water supply well and other potable water supply wells;
    - f. A narrative identifying each entity contacted to identify potable water supply wells, the name and title of each person contacted, and any field observations associated with any wells identified; and
    - g. A certification from a Licensed Professional Engineer or Licensed Professional Geologist that the survey was conducted in accordance with the requirements and that the documentation submitted includes the information obtained as a result of the survey (certification of this report satisfies this requirement);

**PROPERTY OWNER SUMMARY FORM**



# Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 – 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation, orally or in writing, in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/44 and 57.17). This form has been approved by the Forms Management Center.

## Leaking Underground Storage Tank Program Property Owner Summary

### A. Site Identification

IEMA Incident # (6- or 8-digit): 987987 IEPA LPC# (10-digit): 1790455007  
Site Name: Warsaw, Howard  
Site Address (not a P.O. Box): Route 122  
City: Minier County: Tazewell Zip Code: 61759

#### Leaking UST Technical File

Engineered barriers, institutional controls, and other use restrictions, if any, proposed for this site may not be implemented without approval by the title holder(s) of record for the above-named property or the agent(s) of such person(s). These controls and restrictions will be identified in the No Further Remediation (NFR) Letter, which must be recorded in the chain of title for the property. Failure to maintain these controls is grounds for voidance of the NFR Letter.

### B. Preventive, Engineering, and Institutional Controls and Land Use Limitations

The following controls and restrictions are proposed for the above-named site:

- Industrial/commercial land use limitation;
- On-site groundwater restriction prohibiting the use of groundwater beneath the site as a potable water supply;
- An engineered barrier:  Building,  asphalt/concrete, or  Other  
(description) \_\_\_\_\_
- Groundwater ordinance:  With a MOU,  Without a MOU;
- Construction worker caution notification;
- Other: Highway Authority Agreement
- None (There are no proposed institutional controls other than the NFR Letter.)

**C. Property Ownership Declaration**

I hereby affirm that I have reviewed the attached report entitled Corrective Action Completion Report and dated Jun 17, 2017, and that I accept the terms and conditions set forth therein, including any land use limitations, that apply to property I own. I further affirm that I have no objection to the recording of a No Further Remediation Letter containing the terms and conditions identified in the report upon the property I own.

Name of Property Owner: Warsaw Family Trust

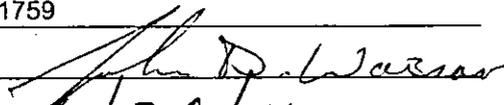
Name of Officer or Agent: John Warsaw

Mailing Address: PO Box 886

City Minier

State IL

Zip Code 61759

Signature 

Date 6/26/17

**D. Site Description**

Real Estate Tax/Parcel Index Number: 191922201020

Legal Description of Site (must be provided on a separate sheet)

**PIN: 19-19-22-201-020**

**Parcel Information**

PIN 191922201020  
Site Address E RTE 122  
MINIER IL 61759  
Mailing Address % WARSAW JOHN TRUSTEE P O BOX 886  
MINIER IL 617590000  
Township 19 - LITTLE MACKINAW

**Property Information**

Acres 0.88  
Homesite Acres 0.40999999999999998  
Farm Acres 0  
Legal Description SEC 22 T23N R2W TRACT B NE 1/4 .88 AC III 81,82,83  
Last Sale Date

**Assessment Information**

Current Year  
Class Code  
Last Assessment 1/9/2017  
Non-Farm Land \$16,630  
Non-Farm Building \$34,360  
Farm Land \$0  
Farm Building \$0

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2017 Tazewell County, Illinois / Bruce Harris & Associates-

# Corrective Completion Report

## Section 1. Remedial (Corrective) Action

1. **An executive summary that identifies the overall objectives of the corrective action and the technical approach utilized to meet those objectives. The summary shall contain the following information:**
  - a. **A brief description of the site, including but not limited to a description of the release, the applicable indicator contaminants, the contaminated media, and the extents of soil and groundwater contamination that exceeded the most stringent Tier 1 remedial objectives;**
  - b. **The major components (e.g., treatment, containment, removal) of the corrective action;**
  - c. **The scope of the problems corrected or mitigated by the corrective action; and**
  - d. **The anticipated post-corrective action uses of the site and areas immediately adjacent to the site;**

The site is a closed gas station. The building is used for a non-fuel related commercial business. The release at the site was discovered in during tank removal activities in 1999. The indicator compounds are benzene, toluene, ethylbenzene and xylenes.

Soil with concentrations of xylenes above the calculated  $C_{sat}$  was removed from the site in March 2017. Removal of the significantly contaminated soil allowed for calculation of Tier 2 CUOs and use of institutional controls to meet the criteria for a No Further Remediation letter.

It does not appear that land use will change significantly in the future.

### 2. **A description of the corrective action activities conducted including:**

- a. **A narrative description of the field activities conducted as part of corrective action;**
- b. **A narrative description of the remedial actions implemented at the site and the performance of each remedial technology utilized;**
- c. **Documentation of sampling activities:**
  - i. **Sample collection information**
  - ii. **Sample preservation and shipment information**
  - iii. **Analytical procedure information;**
  - iv. **Analytical results, chain of custody and control, and laboratory certification;**
  - v. **Field and lab blanks; and**
  - vi. **Table(s) comparing analytical results to remediation objectives approved for the site (include sample depths, date collected, and detection limits);**
- d. **Soil boring logs and monitoring well construction diagrams.**

As reported in the CAP dated October 28, 2016, the concentrations of xylenes in soil were detected above the calculated  $C_{sat}$  for xylenes. In order to reduce the xylenes concentrations in soil to below the  $C_{sat}$ , approximately 125  $yd^3$  of contaminated soil were excavation from the vicinity of boring GP-7. Soil samples were collected for every 400  $ft^2$  of pit floor, and along the side-walls at the interval of one sample for every 20 linear feet of wall from a depth of two thirds

of the total depth of the excavation. The total perimeter of the excavation was approximately 80 feet. The surface area was approximately 400 ft<sup>2</sup> and the depth approximately 8 feet.

Soil sampling protocol is provided in Appendix E. Laboratory reports are provided in Appendix B. Soil sampling results are shown in Table 1. The extent of the excavation and soil sample locations are shown in Figure 4.

The table below shows the maximum concentration of BTEX detected in comparison to the calculated soil saturation limit for each COC:

COC	Maximum Concentration Detected	*Calculated C <sub>sat</sub>
Benzene	21 ppm	580 ppm
Toluene	41 ppm	290 ppm
Ethylbenzene	47 ppm	150 ppm
Xylenes	200 ppm	*334 ppm

The concentrations of xylenes in soil above the calculated C<sub>sat</sub> for xylenes have been removed.

The TACO study is presented in Appendix A.

**3. A narrative description of any special conditions relied upon as part of corrective action including:**

- a. **Engineered barriers utilized:**
    - i. **type of barrier(s); and**
    - ii. **map showing location(s) and dimension(s) of barrier(s);**
  - b. **Institutional controls utilized:**
    - i. **copy of fully executed institutional control(s); and**
    - ii. **map showing location(s) of controls;**
  - c. **Other conditions, if any, necessary for protection of human health and safety and the environment that are related to the issuance of a No Further Remediation Letter; and**
  - d. **Any information required regarding off-site access;**
- Benzene is present in excess of the calculated Tier 2 CUOs for the soil component of the groundwater ingestion route in soil samples W-1, W-2 and F-1. The groundwater use restriction on-site and the groundwater use restriction ordinance will address this issue.
  - Benzene is present in excess of Tier 1 CUOs for the soil component of the groundwater ingestion route in soil sample W-1, W-2 and F-1. The groundwater use restriction on-site, the groundwater use restriction ordinance, and the HAA will address this issue.
  - A groundwater use restriction and industrial/commercial land use restriction will be placed on the site.
  - Based on the most recent soil sampling, it appears that CUOs above Tier 1 concentrations are not present off-site.

**4. An analysis of the effectiveness of the corrective action that compares the confirmation sampling results to the remediation objectives approved for the site;**

No additional confirmation sampling is necessary.

**5. A conclusion that identifies the success in meeting the remediation objectives approved for the site;**

Based on IEPA Tier 1 CUOs, the calculated Tier 2 CUOs and groundwater model, and the implementation of institutional controls and engineered barriers, remediation objectives have been met.

**6. Appendices containing references and data sources;**

Attached for review.

**7. Water Supply Well Survey**

The population of Minier, Illinois is estimated to be 1,155. The area surrounding the subject site has been developed for light industrial, commercial and residential use. Water for the area is supplied by the municipal supply. Water quality is reported as good. No reports of petroleum contamination of the area water supply have been recorded.

Research completed by MECRS indicates that the former UST system is not located within 2,500 feet of any community water supply wells. Communication between MECRS, the Illinois State Water Survey (ISWS), the Illinois Environmental Protection Agency-Division of Public Water Supply (IEPA), the Village of Minier, and the Illinois State Geological Survey (ISGS) confirms that the former UST system located at the subject site does not pose a threat to community or potable water supply wells (see attached documents in Appendix C).

Research by the ISWS of the Public-Industrial-Commercial (PICS) Database indicates that there are no industrial/commercial water supply wells located within 2,500 feet of the site. Information from the IEPA-Division of Public Water Supply (DPWS) confirms that the site is located outside 2,500 feet radius of any community water supply well. Information from the IEPA-DPWS also confirms that there have not been any regulated recharge areas established pursuant to Section 17.3 of the Illinois Environmental Protection Act. The IEPA-DPWS also confirms that no Class III Groundwater has been designated in the vicinity of the site.

Mr. Robert Cremeens of the Village of Minier was contacted. Mr. Creemens indicated the water supply for the city comes from two wells located greater than 2,500 feet from the subject site. The setback zones for these wells are 200 feet. Minier has a local ordinance against the use of private wells within the village limits. All water for city residents must be purchased from the municipal supply.

A detailed well survey including well chart and map can be found in Appendix C.

**8. Site map(s) meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440.**

Attached. Please see Figures 1 through 5.

**9. Development of Tier 2 or 3 remediation objectives, if applicable:**

- a. Equations used;
- b. Discussion of how input variables were determined;
- c. Map(s) depicting distances used in equation; and
- d. Calculations; and

Equations S5, S29, S17 & S18, and R26 were used. Input parameters are included in the calculation pages of the TACO Study. The groundwater model is shown in Figure 7. See the TACO Study in Appendix A.

**10. Property Owner Summary Form**

The property owner summary form is provided at the beginning of this report.

**Conclusions and Recommendations**

The concentrations of COCs above the  $C_{sat}$  concentrations have been removed. All exposure pathways of concern at the site have been or can be addressed with the following institutional controls:

- Benzene is present in excess of the calculated Tier 2 CUOs for the soil component of the groundwater ingestion route in soil samples W-1, W-2 and F-1. The groundwater use restriction on-site and the groundwater use restriction ordinance will address this issue.
- Benzene is present in excess of Tier 1 CUOs for the soil component of the groundwater ingestion route in soil sample W-1, W-2 and F-1. The groundwater use restriction on-site, the groundwater use restriction ordinance, and the HAA will address this issue.
- A construction worker precautionary statement will be included in the “No Further Remediation Letter”.
- A groundwater use restriction and industrial/commercial land use restriction will be placed on the site.

Based on the most recent soil sampling, it appears that CUOs above Tier 1 concentrations are not present off-site. The concentrations of COCs above Tier 1 CUOs will be addressed with the institutional controls listed above. Copies of the HAA and the groundwater ordinance with MOU are attached. It is the technical opinion of Midwest that with the above institutional controls in place, the site meets the criteria for a “No Further Remediation”.

## **Budget Amendment**

The attached budget amend includes personnel costs incurred between October 2007 and September 2014. These costs were incurred in personnel time while exploring alternatives to the groundwater treatment system. Also during this time, costs were incurred in personnel time for TACO calculations and trying to obtain a groundwater use restriction ordinance from the Village of Minier that would be accepted by the IEPA as an institutional control. Ultimately the Village of Minier passed three different ordinances before creating documentation that meets the IEPA requirements for use as an institutional control. Costs were incurred in personnel time for attempts to obtain an ELUC from the owner of the property located to the east of the site. Since the property owner would not sign the ELUC, alternatives had to be considered.

In addition to past costs incurred that have not been included in a budget, the future anticipated costs for final documentation of closure activities are included. Abandonment of the groundwater monitoring wells is included in the budget.

**TABLE 1**  
**SOIL ANALYTICAL DATA**

TABLE 1.  
Soil Analytical Results  
Warsaw-ITCO  
Minier, IL

Sample ID:	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
B-2, 4-6'	5/3/2000	810	1,300	1,700	6,500	10,310
B-2, 6-8'	5/3/2000	600	220	420	1,900	3,140
B-2, 8-10'	5/3/2000	21,000	41,000	47,000	190,000	299,000
B-3, 6-8' (GP-3)	5/3/2000	400	120	210	460	1,190
B-3, 8-10' (GP-3)	5/3/2000	2,300	2,100	31,000	110,000	145,400
MW-1, 6-8'	5/4/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-2, 8-10'	5/3/2000	<2.0	<2.0	<2.0	<5.0	<11.0
MW-3, 8-10'	5/3/2000	<2.0	<2.0	6	<5.0	<14.7
MW-4, 4-6' (GP-5)	5/4/2000	230	220	870	2,500	3,820
MW-4, 6-8' (GP-5)	5/4/2000	300	1,200	5,400	20,000	26,900
B-4, 0.5-2.5' (GP-7)	8/23/2001	8.1 M	19.0 M	44.7 M	77.2 M	149 M
B-4, 4-6' (GP-7)	8/23/2001	11,600 ME	42,700 ME	9,720 ME	38,000 ME	102,020 ME
B-5, 6-8' (GP-4)	8/23/2001	49	186 E	38	130	403
B-6, 4-6'	8/23/2001	19.5	53.4	31.3	89.8	194.0
B-6, 8-10'	8/23/2001	7.1	12.3	<2.4	10.9	<32.3
B-7, 8-10' (GP-2)	8/23/2001	16.7 M	61.5 M	13.9 M	39.5 M	131.6 M
B-7, 12-14' (GP-2)	8/23/2001	754.0	<61.3	<61.3	<153	<1,029.6
MW-5, 8-10' (GP-1)	8/23/2001	494 M	4,750 M	5,890 M	7,570 M	18,704 M
MW-6, 6-8'	8/23/2001	6.5	12.4	6.3	11.3	36.5
MW-7, 4-6'	8/23/2001	11.7	25.1	10.8	20.0	67.6
MW-7, 8-10'	8/23/2001	15.5 M	20.2 M	6.8	11.8	54.3
T-1	10/20/2003	<2.6	3.2	<2.6	<6.5	<14.9
T-2	10/20/2003	<2.6	<2.6	<2.6	<6.5	<14.3
T-3	10/20/2003	<2.4	5.1	5.1	14.2	<26.8
T-4	10/20/2003	<2.4	<2.4	<2.4	<5.9	<13.1
T-5	10/20/2003	3.4	40.8	360.0	947.0	1,351.2
T-6 (GP-8)	10/20/2003	85.3	635.0	1,840.0	7,140.0	9,700.3
T-7 (GP-6)	10/20/2003	85.5	43.8	1,120.0	2,460.0	3,709.3
T-8	10/20/2003	<2.5	6.6	18.9	56.8	<84.8
T-9	10/20/2003	<2.4	<2.4	<2.4	<6.1	<13.3
T-10	10/20/2003	<2.5	<2.5	<2.5	<6.2	<13.7
GP-1, 2-3'	11/13/2014	<4.99	<4.99	<4.99	<15.0	<30
GP-1, 6-7'	11/13/2014	<5.28	<5.28	<5.28	<15.8	<32
GP-2, 2-3'	11/13/2014	<5.28	<5.28	<5.28	<15.8	<32
GP-2, 6-7'	11/13/2014	<16.0	<16.0	<16.0	<48.0	<96
GP-3, 2-3'	11/13/2014	<5.12	<5.12	<5.12	<15.4	<31
GP-3, 7-8'	11/13/2014	<5.11	5.29	<5.11	<15.3	<31
GP-4, 2-3'	11/13/2014	<5.20	<5.20	<5.20	<15.6	<32
GP-4, 6-7'	11/13/2014	<4.35	5.00	<4.35	<13.1	<27
GP-5, 2-3'	11/13/2014	<4.83	<4.83	<4.83	<14.5	<29
GP-5, 6-7'	11/13/2014	<4.64	<4.64	<4.64	<13.9	<28
GP-6, 2-3'	11/13/2014	<4.66	<4.66	<4.66	<14.0	<28
GP-6, 7-8'	11/13/2014	<5.06	6.50	<5.06	<15.2	<32
GP-7, 4-5'	11/13/2014	37,400	629,000	272,000	1,200,000	2,138,400
GP-7, 6-7'	11/13/2014	3,180	9,720	143	6,210	19,253
GP-8, 2-3'	11/13/2014	<7.14	<7.14	<7.14	<21.4	<43
GP-8, 6-7'	11/13/2014	<4.96	5.52	<4.96	<14.9	<30
GP-11, 4-5'	8/18/2016	<220	380	6,700	56,000	<63,280
GP-12, 4-5'	8/18/2016	570	440	25,000	66,000	92,010
GP-12, 7-8'	8/18/2016	1,400	1,100	28,000	96,000	126,500
GP-13, 2-3'	8/18/2016	28	56	1,700	5,400	7,184
GP-13, 7-8'	8/18/2016	8.1	12	370	1,300	1,690
GP-14, 2-3'	8/18/2016	<5.6	<5.6	<5.6	<17	<34
GP-14, 7-8'	8/18/2016	<4.7	<4.7	8.2	64	<82
W-1	3/17/2017	770	28,000	35,000	200,000	263,770
W-2	3/17/2017	700	1,300	31,000	150,000	183,000
W-3	3/17/2017	<24	<24	100	680	<828
W-4	3/17/2017	<24	<24	720	18,000	<18,768
F-1	3/17/2017	270	3,100	4,500	23,000	30,870
LF-1	3/17/2017	37	160	7,300	36,000	43,497

Notes:

1. All results in parts per billion (ppb).
2. IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
30	12,000	13,000	5,600

3. All bolded values are above Tier 1 Residential Cleanup Objectives
4. M = Matrix interferences identified
5. E = Estimated
6. Soil borings were resampled. In 2014.
7. Area of soil borings was excavated in 2017.

Sample #	foc	pH	Moisture	Soil Bulk Density	Soil Particle Density
GP-10, 4-6 ft	0.72%	7.3	17.1%	1.77 gm/cm <sup>3</sup>	2.66

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**TABLE 2**  
**GROUNDWATER ANALYTICAL DATA**

**Table 2: Groundwater Analytical Data  
Warsaw - ITCO  
Minier, Illinois**

Sample #	Date	DTW	GWE	Benzene	Toluene	E-benzene	Xylenes	Total BTEX	
<b>MW-1</b>		Elevation Top of Casing = 99.62							
SC	5/12/2000	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3	
1	10/24/2000	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4	
2	8/23/2001	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E	
3	11/13/2001	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.41	94.21	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.65	94.97	NS	NS	NS	NS	NS	
<b>MW-2</b>		Elevation Top of Casing = 99.28							
SC	5/9/2000	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/2000	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/2001	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7	
3	11/13/2001	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.12	94.16	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.38	94.90	NS	NS	NS	NS	NS	
<b>MW-3</b>		Elevation Top of Casing = 100							
SC	5/9/2000	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0	
1	10/24/2000	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0	
2	8/23/2001	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
3	11/13/2001	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	5.37	94.63	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	4.34	95.66	NS	NS	NS	NS	NS	
<b>MW-4</b>		Elevation Top of Casing = 99.84							
SC	5/9/2000	5.90	93.94	2,600	12,000	4,500	18,000	37,100	
1	10/24/2000	7.80	92.04	2,300	5,200	4,000	13,000	24,500	
2	8/23/2001	6.67	93.17	2,290 M	2,380 M	8,150	23,600 E	36,420 E	
3	11/13/2001	6.11	93.73	1,910	3,960	3,360	10,000	19,230	
4	2/14/2002	5.00	94.84	1,100	1,200	2,900	5,500	10,700	
5	1/24/2005	4.47	95.37	NS	NS	NS	NS	NS	
<b>MW-5</b>		Elevation Top of Casing = 99.57							
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9	
3	11/13/2001	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	4.71	94.86	1.4	2.2	1.5	4.5	9.6	
5	1/24/2005	3.89	95.68	NS	NS	NS	NS	NS	
<b>MW-6</b>		Elevation Top of Casing = 99.37							
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5	
3	11/13/2001	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0	
4	2/14/2002	4.71	94.66	<1.0	<1.0	<1.0	<3.0	<6.0	
5	1/24/2005	WELL ICED OVER		NS	NS	NS	NS	NS	
<b>MW-7</b>		Elevation Top of Casing = 100.07			WELL DESTROYED AT TIME OF 1/25/05 DTW MEASUREMENT				
SC	5/9/2000	--	--	--	--	--	--	--	
1	10/24/2000	--	--	--	--	--	--	--	
2	8/23/2001	7.28	92.79	<2.0	<2.0	<2.0	5.9	<11.9	
3	11/13/2001	6.23	93.84	117 E	<2.0	<2.0	<5.0	<126 E	
4	2/14/2002	5.52	94.55	7	<1.0	<1.0	<3.0	<12.0	
5	1/24/2005	--	--	NS	NS	NS	NS	NS	
<b>GP-9</b>		Resample of MW-7 which could not be located							
--	8/18/2016	--	--	<1.0	<1.0	6.7	4.5	<14	
<b>GP-10</b>		Resample of MW-4 which could not be located							
--	8/18/2016	--	--	<1	<10	1500	1000	<2520	

1. All results reported in ug/kg (i.e. parts per billion, ppb)

2. IEPA Tier 1 Cleanup Objectives (ug/kg):

Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

3. -- = No data available

4. MDL = Method Detection Limit

5. DTW = Depth to Water

6. GWE = Groundwater Elevation referenced to datum point

7. NA/NS = Not analyzed/not sampled this event

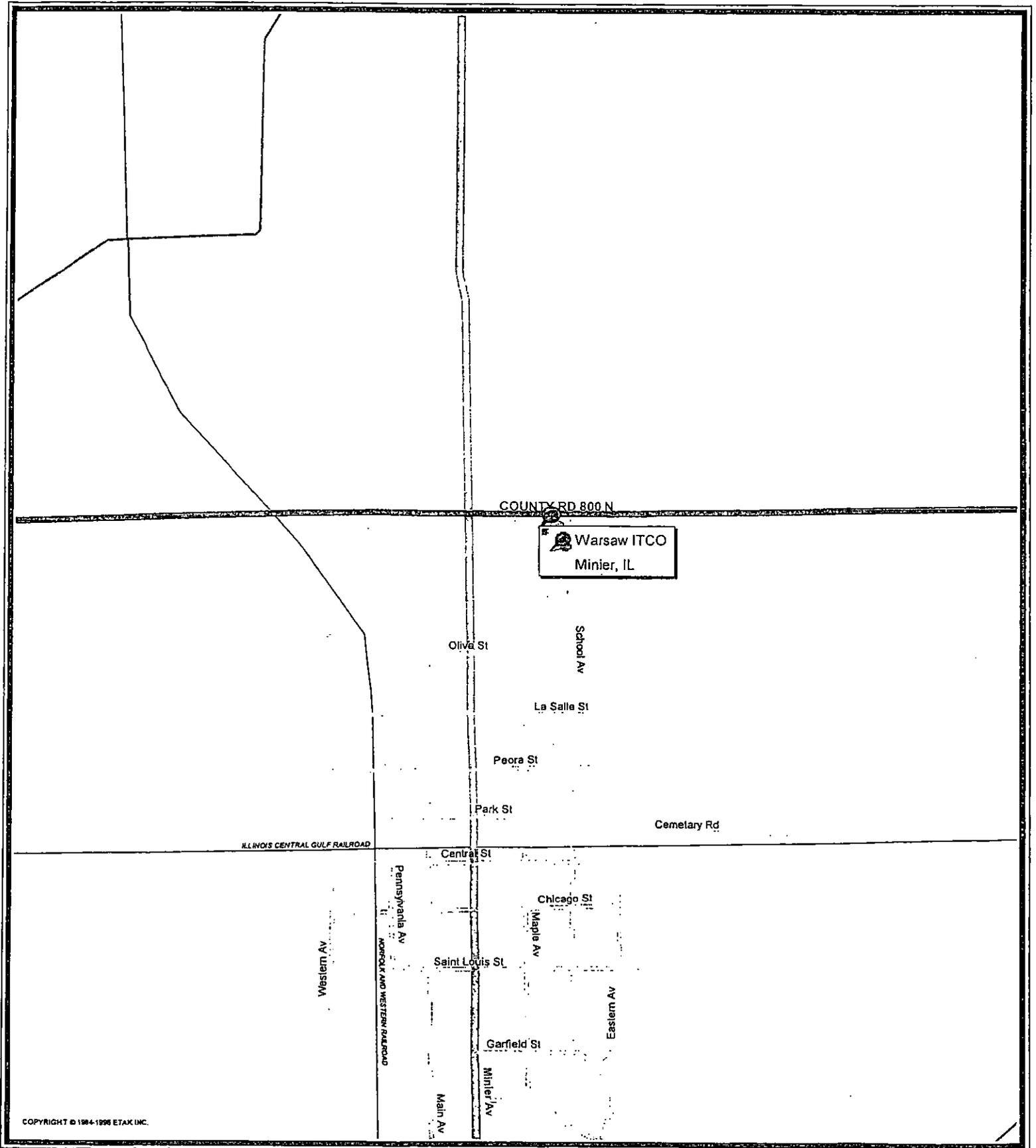
8. E = Estimated - value outside linear range

9. M = Matrix interferences identified.

**R1140**

**FIGURE 1**  
**AREA MAP**

Figure 1. Warsaw ITCO Location Map, Minier, IL



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**FIGURE 2**  
**BORING LOCATIONS**

⊗ = Proposed Soil Boring Location

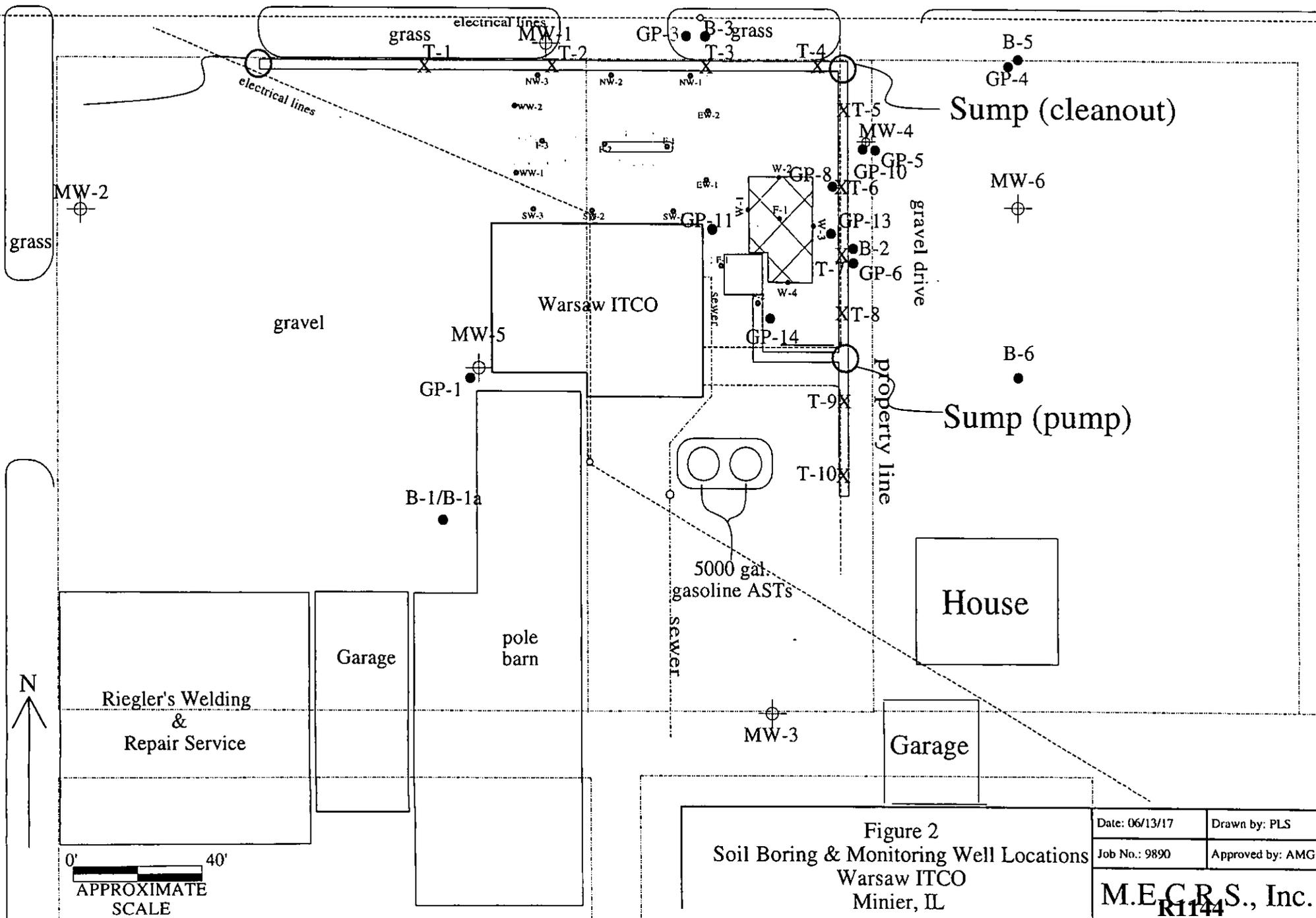
⊕ = Existing Monitoring Well Location

● = Existing Boring Location

• = Excavation Sample Location

X = Trench Sample Locations

# Route 122



**FIGURE 3**

**EXTENT OF BTEX IN SOIL AND GROUNDWATER**

- ⊗ = Proposed Soil Boring Location
- ⊕ = Existing Monitoring Well Location
- = Existing Boring Location
- = Excavation Sample Location
- X = Trench Sample Locations

# Route 122

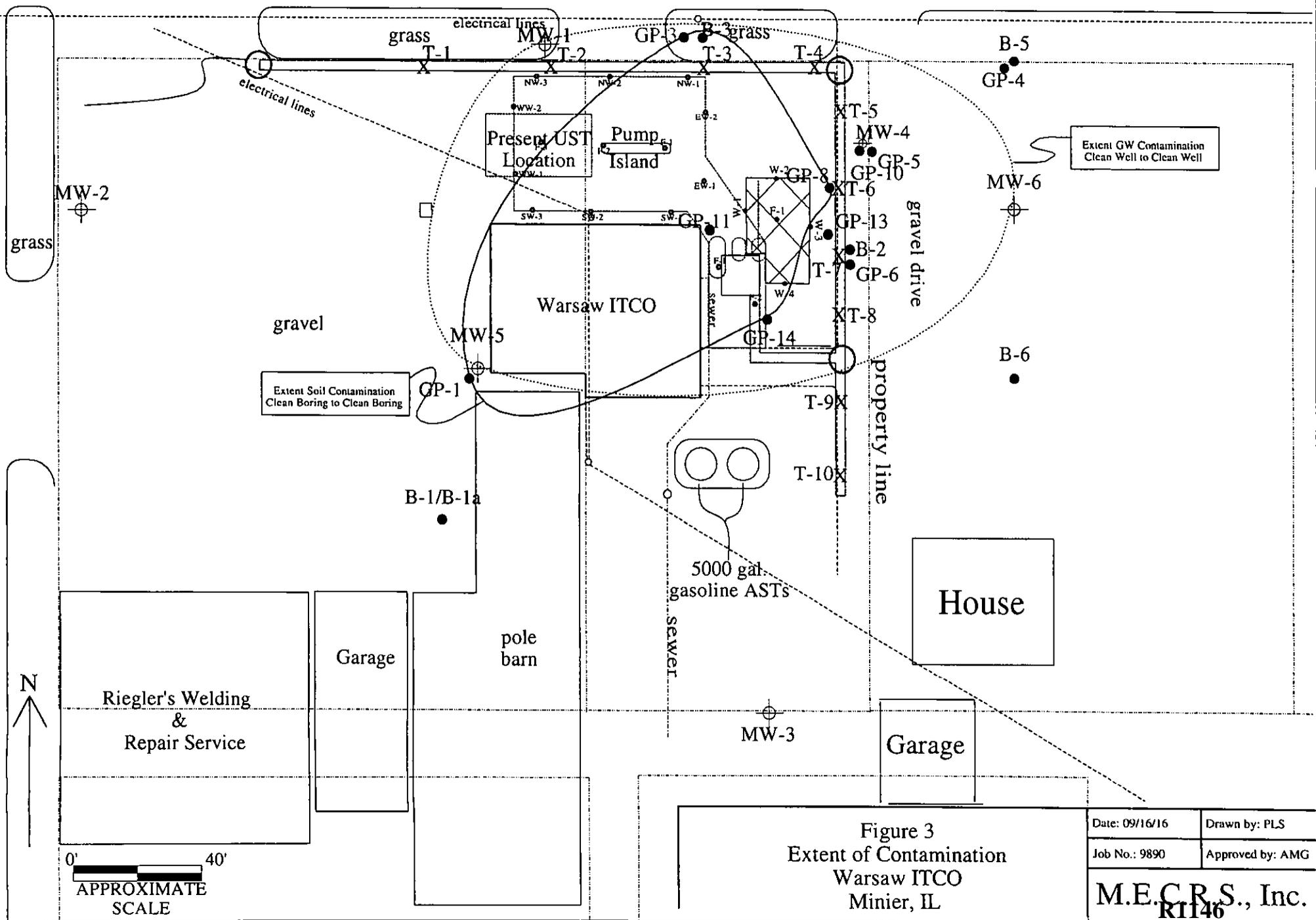


Figure 3  
Extent of Contamination  
Warsaw ITCO  
Minier, IL

Date: 09/16/16	Drawn by: PLS
Job No.: 9890	Approved by: AMG

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R1146

**FIGURE 4**  
**EXTENT OF EXCAVATION**

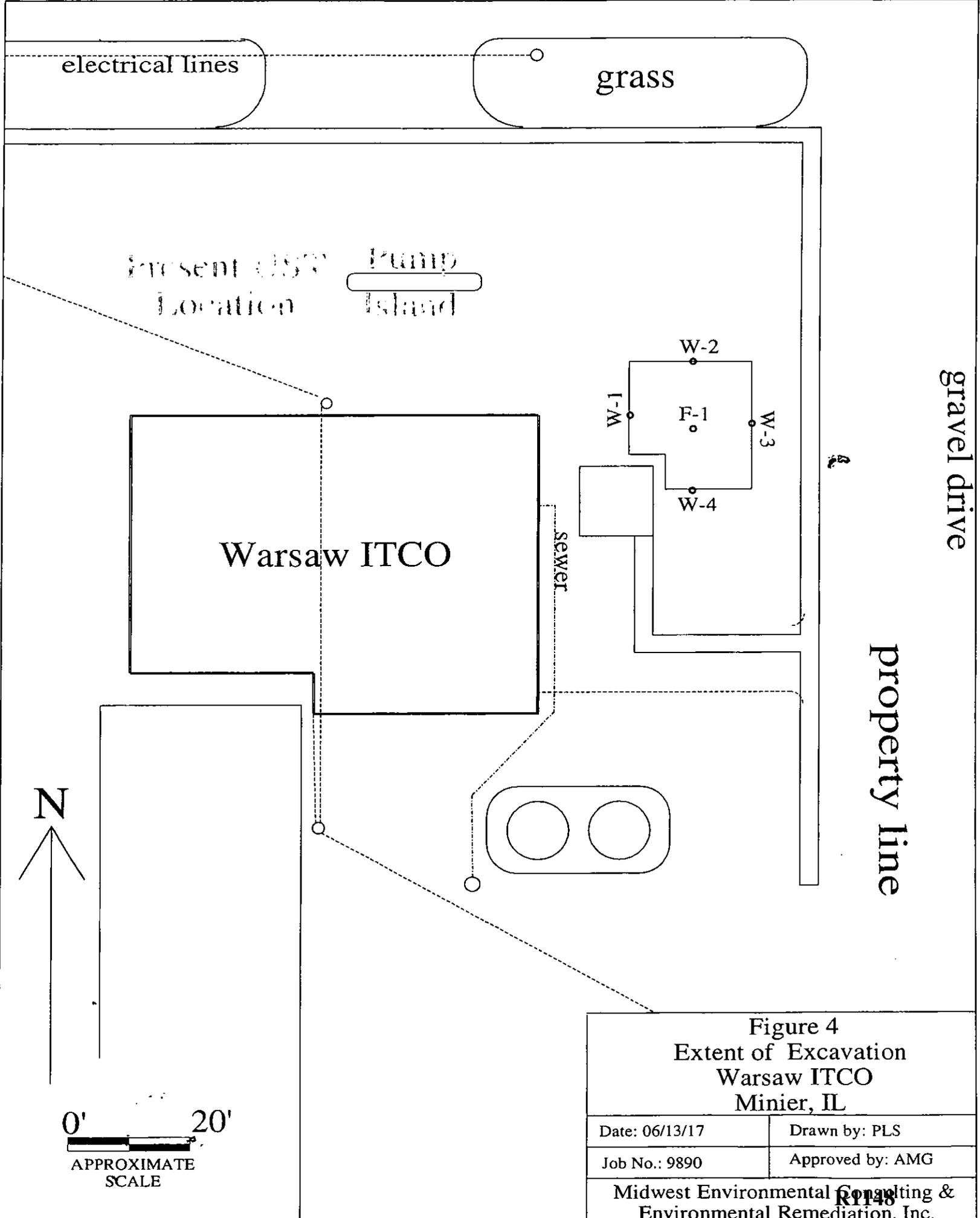


Figure 4  
Extent of Excavation  
Warsaw ITCO  
Minier, IL

Date: 06/13/17

Drawn by: PLS

Job No.: 9890

Approved by: AMG

Midwest Environmental Consulting &  
Environmental Remediation, Inc.

0118

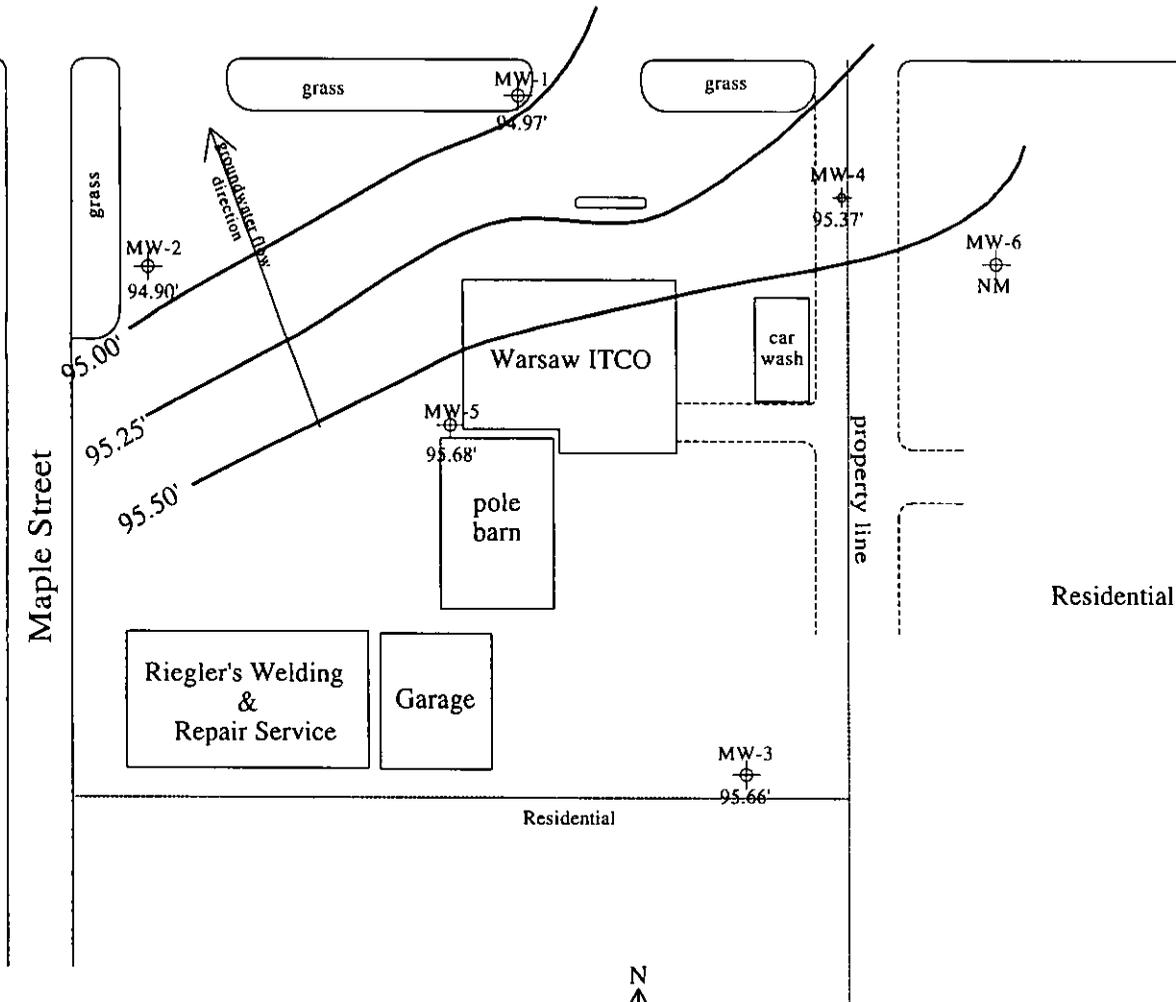
**FIGURE 5**

**POTENTIOMETRIC SURFACE MAP**

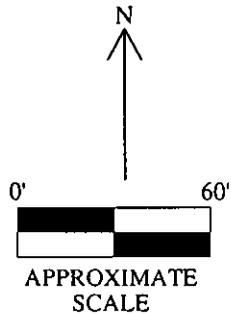
# Agricultural

MW-7  
  
 DESTROYED

Route 122



MW-3  
 = Existing Monitoring Well Location  
 B-2  
 = Existing Boring Location



**FIGURE 5**  
 Piezometric Surface  
 Map - 1/24/05  
 Warsaw - ITCO  
 Minier, IL

Date: 1/24/05

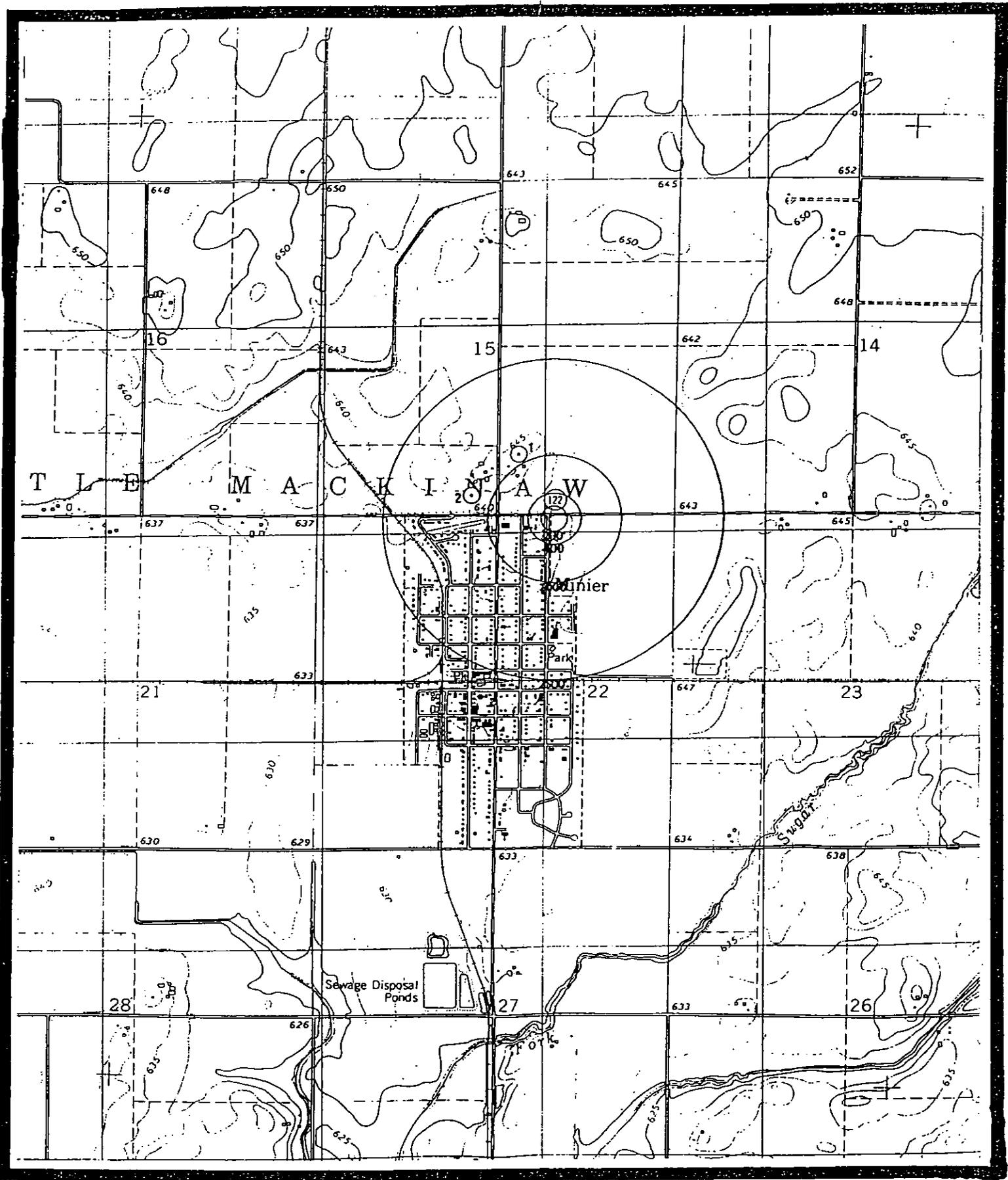
Drawn by: TKB

Job No.: 9890

Approved by: AMG

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 R1150

**FIGURE 6**  
**WELL SURVEY MAP**



Water Well Survey



Agency ID: 170000783472

Media File Type: LAND

Bureau ID: 1790455007

Site Name: Warsaw, Howard

Site Address1: Rte 122

Site Address2:

Site City: Minier

State: IL

Zip: 61759-

**This record has been determined to  
be partially or wholly exempt from  
public disclosure**

**Exemption Type:**

**Redaction**

**Exempt Doc #: 7**

**Document Date: 6/27/2017**

**Staff: JKS**

**Document Description: CORRECTIVE ACTION COMPLETION REPORT: FIGURE 6, APPENDIX C**

**Category ID: 21A**

**Category Description: LEAKING UST TECHNICAL**

**Exempt Type: Redaction**

**Permit ID:**

**Date of Determination:**

**9/15/2017**

Well Data Chart  
Warsaw ITCO  
Minier, Illinois

Well # on map	Type	Owner	Well Name	Distance from site (ft)	Minimum Setback (ft)	Maximum Setback (ft)
1	Domestic		-----	1100	-----	-----
1	Domestic		-----	1100	-----	-----
2	Domestic		-----	1200	-----	-----

\* No wells reported by IEPA within 2500 feet of the subject site.

**FIGURE 7**  
**GROUNDWATER MODEL**

- ⊕ = Existing Monitoring Well Location
- = Existing Boring Location
- = Excavation Sample Location
- X = Trench Sample Locations

# Route 122

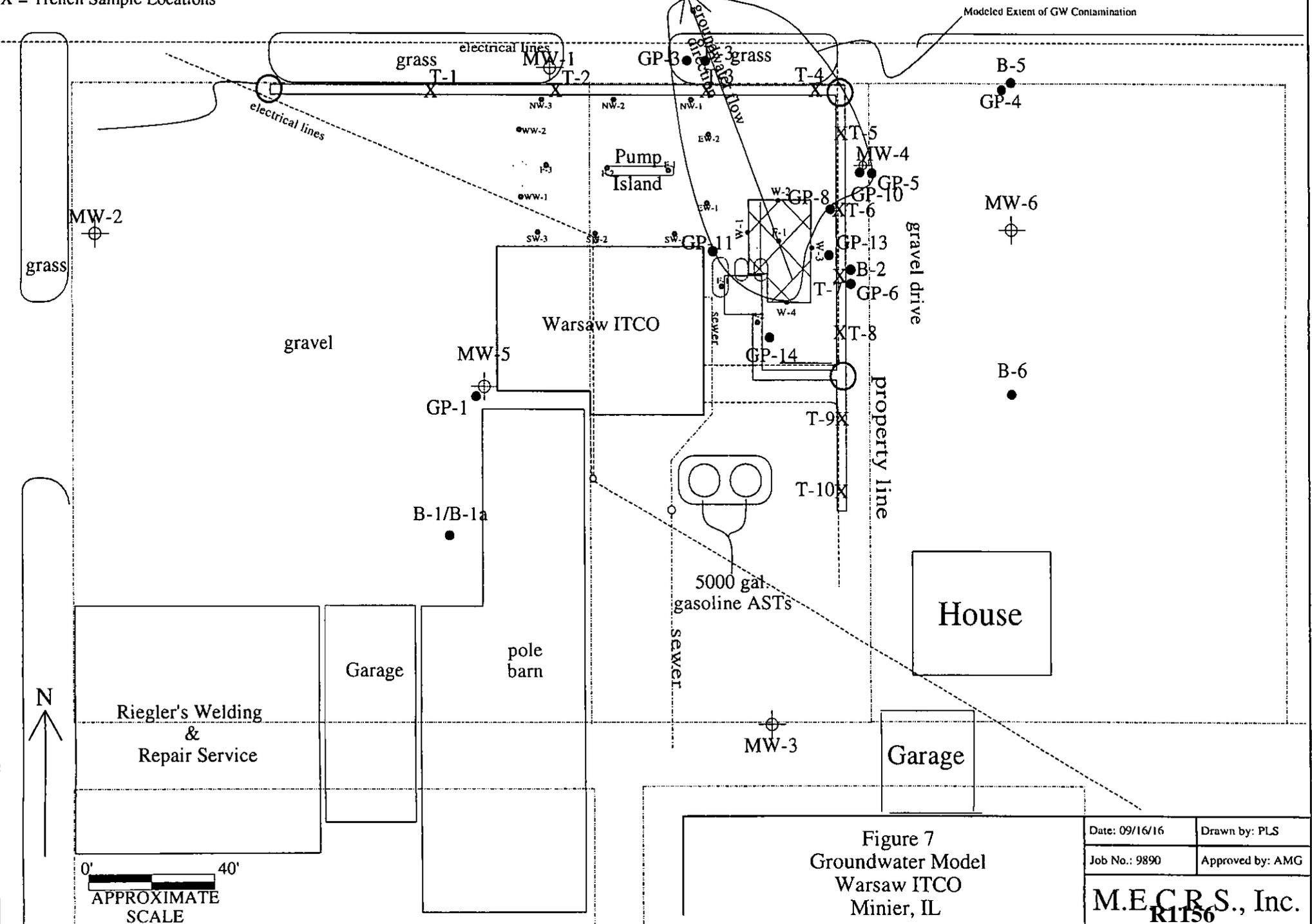


Figure 7  
Groundwater Model  
Warsaw ITCO  
Minier, IL

Date: 09/16/16	Drawn by: PLS
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R1156

**FIGURE 8**  
**TACO PLUME MEASUREMENTS**

- ⊗ = Proposed Soil Boring Location
- ⊕ = Existing Monitoring Well Location
- = Existing Boring Location
- = Excavation Sample Location
- X = Trench Sample Locations

# Route 122

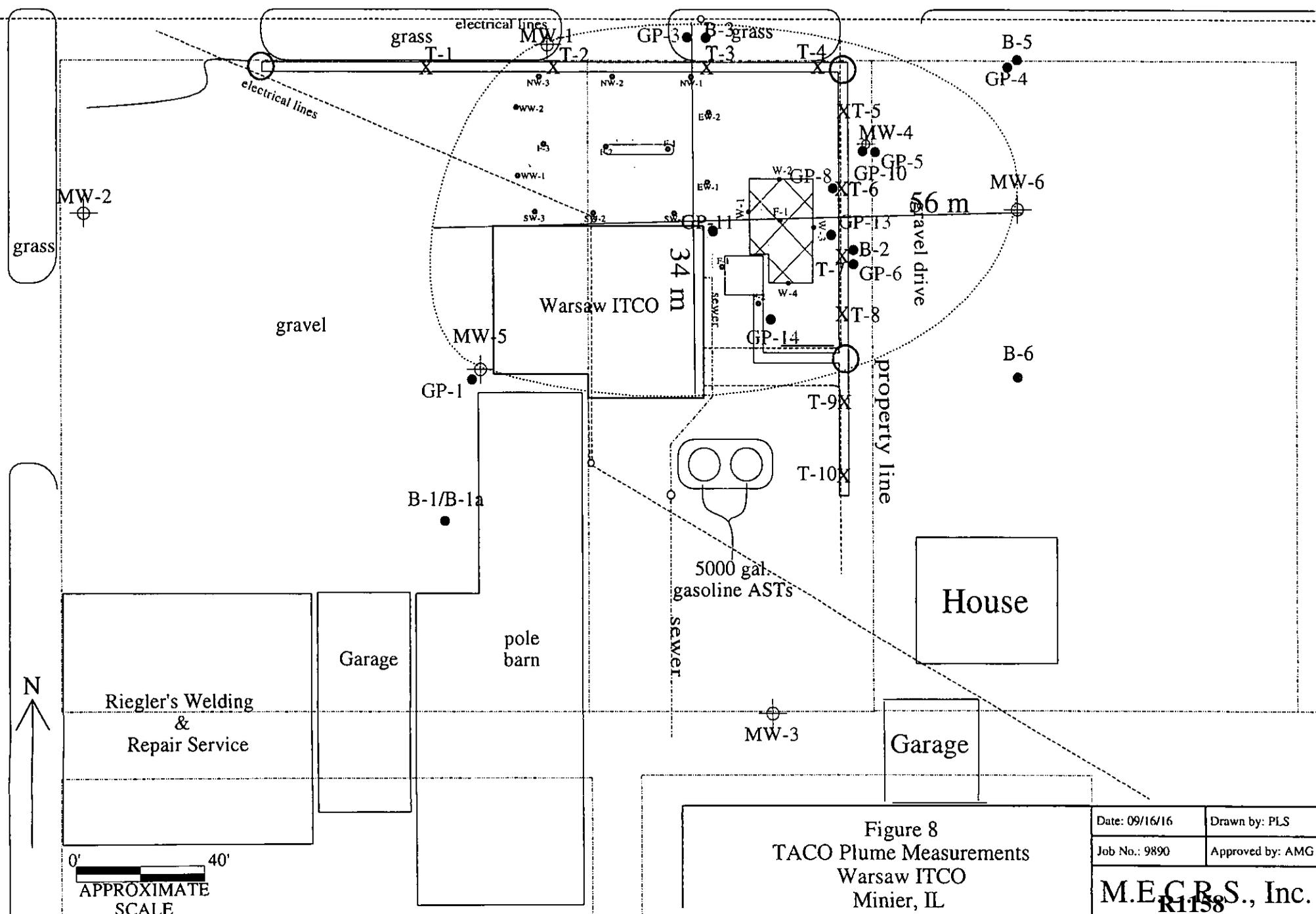


Figure 8  
TACO Plume Measurements  
Warsaw ITCO  
Minier, IL

Date: 09/16/16	Drawn by: PLS
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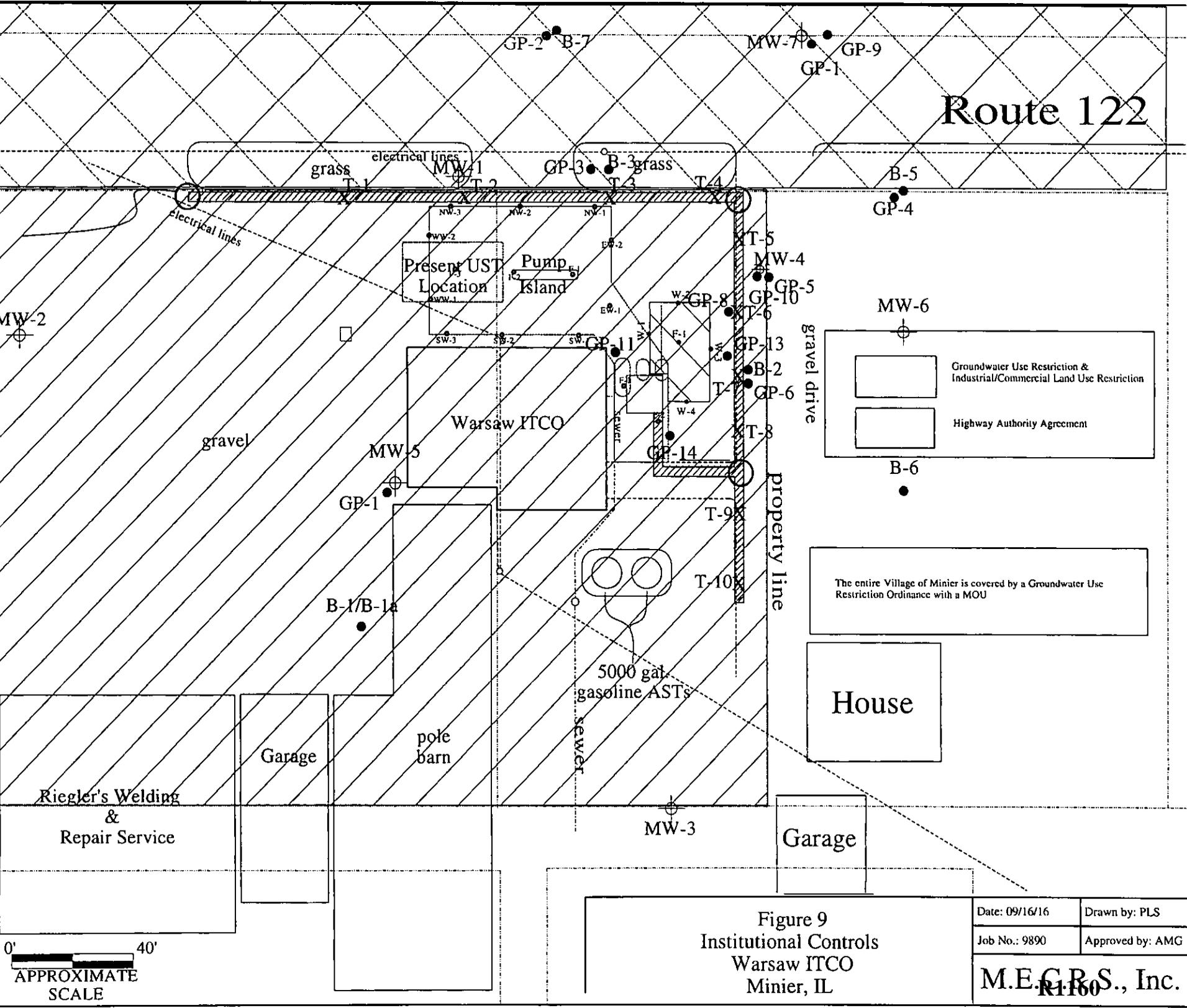
**FIGURE 9**

**INSTITUTIONAL CONTROLS AND ENGINEERED BARRIERS**

Route 122

grass

N



0' 40'

APPROXIMATE SCALE

 Groundwater Use Restriction & Industrial/Commercial Land Use Restriction  
 Highway Authority Agreement

The entire Village of Minier is covered by a Groundwater Use Restriction Ordinance with a MOU

House

Figure 9  
Institutional Controls  
Warsaw ITCO  
Minier, IL

Date: 09/16/16	Drawn by: PLS
Job No.: 9890	Approved by: AMG

M.E.C.R.S., Inc.

**APPENDIX A**  
**TACO STUDY**

## PART A. Tier 1 TACO Evaluation

### 1. Attenuation Capacity

The highest concentration of organic contaminants was detected in soil sample W-1 at a concentration of 264 ppm. The natural organic carbon in the subsurface was determined as 7,200 ppm. The attenuation capacity has not been exceeded.

### 2. Soil Saturation Limit

Benzene, toluene, ethylbenzene and xylenes (BTEX) constituents are the COCs. The table below shows the maximum concentrations of BTEX detected in comparison to the soil saturation limit for each COC:

COC	Maximum Concentration Detected	Soil Saturation Limit
Benzene	0.77 ppm	580 ppm
Toluene	28 ppm	290 ppm
Ethylbenzene	35 ppm	150 ppm
Xylenes	200 ppm	110 ppm

Concentrations of xylenes exceed the soil saturation limit as listed in Appendix A, Table. A.

The soil saturation limit for xylenes was calculated using equation S29. Input parameters are provided at the end of this report. The table below shows the maximum concentrations of xylenes detected in comparison to the calculated soil saturation limit for each COC:

COC	Maximum Concentration Detected	Calculated Soil Saturation Limit S29
Xylenes	200 ppm	334 ppm

Xylenes concentrations do not exceed the calculated soil saturation limit.

### 3. Extent of Contamination

The extents of soil and groundwater contamination have been defined.

### 4. Groundwater Classification

Average depth to groundwater across the site 5.79 feet below ground surface (bgs). Groundwater is predominantly encountered in the sandy clay zone located between approximately 7 to 10 feet bgs. For the purpose of this TACO evaluation, groundwater classification will be assumed to meet the Class II groundwater criteria.

## 5. Land Use Determination

The site is located in a commercial area on Illinois Rt. 122 in Minier, Illinois. The site is currently commercial use. Agricultural land is located north and east of the site. Commercial properties are located west of the site. Residential properties are located south of the site. For the TACO, land use should be commercial.

### TIER 1 ANALYSIS

The most recent soil and groundwater data collected were compared to the Tier 1 Cleanup Objectives for industrial/commercial property. Two sets of cleanup objectives were considered. Tier 1 CUOs for commercial/industrial exposure scenarios and Class II groundwater were applied to the on-site data. Tier 1 CUOs for residential exposure scenarios and Class I groundwater were applied to the off-site data. The following tables indicate locations where exceedances were noted:

#### ON-SITE SOIL - BENZENE

Sample #	Date	Depth	Benzene (ppm)	Industrial /Commercial		Construction Worker		Soil Component to Groundwater Class II
				Ingestion	Inhalation	Ingestion	Inhalation	
W-1	3/17/17	5'	0.77	100 ppm	1.6 ppm	2,300 ppm	2.2 ppm	0.17 ppm
W-2	3/17/17	5'	0.70	100 ppm	1.6 ppm	2,300 ppm	2.2 ppm	0.17 ppm
F-1	3/17/17	8'	0.27	100 ppm	1.6 ppm	2,300 ppm	2.2 ppm	0.17 ppm

Based on the Tier 1 evaluation, benzene is present on-site in soil above Tier 1 CUOs for the soil component of the groundwater ingestion route for soil samples W-1, W-2 and F-1.

#### OFF-SITE SOIL - BENZENE

Based on the Tier 1 evaluation, benzene is not present off-site in soil above Tier 1 CUOs.

#### ON-SITE SOIL - TOLUENE

Based on the Tier 1 evaluation, toluene is not present on-site in soil above Tier 1 CUOs .

#### OFF-SITE SOIL - TOLUENE

Based on the Tier 1 evaluation, toluene is not present off-site in soil above Tier 1 CUOs for any exposure scenario.

#### On-Site Soil - Ethylbenzene

Sample #	Date	Depth	Ethylbenzene (ppm)	Industrial /Commercial		Construction Worker		Soil Component to Groundwater Class II
				Ingestion	Inhalation	Ingestion	Inhalation	
W-1	3/17/17	5'	35	200,000 ppm	400 ppm	20,000 ppm	58 ppm	19 ppm
W-2	3/17/17	5'	31	200,000 ppm	400 ppm	20,000 ppm	58 ppm	19 ppm

Based on the Tier 1 evaluation, ethylbenzene is present on-site in soil above Tier 1 CUOs for the soil component of the groundwater ingestion route in soil samples W-1 and W-2.

**OFF-SITE SOIL - ETHYLBENZENE**

Based on the Tier 1 evaluation, ethylbenzene is not present off-site in soil above Tier 1 CUOs for any exposure scenario.

**ON-SITE SOIL – XYLENES**

Sample #	Date	Depth	Xylenes (ppm)	Industrial /Commercial		Construction Worker		Soil Component to Groundwater Class II
				Ingestion	Inhalation	Ingestion	Inhalation	
W-1	3/17/17	5'	200	410,000 ppm	320 ppm	41,000 ppm	5.6 ppm	150 ppm
W-2	3/17/17	5'	150	410,000 ppm	320 ppm	41,000 ppm	5.6 ppm	150 ppm
W-4	3/17/17	5'	18	410,000 ppm	320 ppm	41,000 ppm	5.6 ppm	150 ppm
F-1	3/17/17	8'	23	410,000 ppm	320 ppm	41,000 ppm	5.6 ppm	150 ppm

Based on the Tier 1 evaluation, xylenes are present on-site in soil above Tier 1 CUOs for the construction worker inhalation route and the soil component of the groundwater ingestion route in soil sample W-1. Xylenes are present on-site in soil above Tier 1 CUOs for the construction worker inhalation route in soil samples W-2, W-4 and F-1.

**OFF-SITE SOIL – XYLENES**

Based on the Tier 1 evaluation, xylenes are not present off-site in soil above Tier 1 CUOs for any of the exposure scenarios.

**GROUNDWATER**

**ON-SITE GROUNDWATER – Benzene**

Concentrations of benzene in groundwater on-site do not exceed the Tier CUOs.

**OFF-SITE GROUNDWATER – BENZENE**

Concentrations of benzene in groundwater off-site do not exceed the Tier CUOs.

**ON-SITE GROUNDWATER – Toluene**

Concentrations of toluene in groundwater from on-site wells do not exceed Tier 1 CUOs.

**OFF-SITE GROUNDWATER – TOLUENE**

Concentrations of toluene in groundwater from off-site wells do not exceed Tier 1 CUOs.

**ON-SITE GROUNDWATER – ETHYLBENZENE**

Sample #	Date	Ethylbenzene	Tier 1 CUO Class II Groundwater
GP-10	8/18/16	1.5 ppm	1.0 ppm

Concentrations of ethylbenzene in groundwater from on-site at GP-10 (at former MW-4) exceed the Tier CUOs for Class I and Class II groundwater.

**OFF-SITE GROUNDWATER – ETHYLBENZENE**

Concentrations of ethylbenzene in groundwater from off-site wells do not exceed Tier 1 CUOs.

**ON-SITE GROUNDWATER – Xylenes – No exceedances noted.**

**OFF-SITE GROUNDWATER – Xylenes – No exceedances noted.**

**Tier 1 Summary**

**ON-SITE SOIL**

Concentrations of benzene, ethylbenzene and xylenes are present on-site above the Tier 1 CUOs for the soil component of the groundwater ingestion route.

Concentrations of xylenes exceed the Tier 1 CUOs for the construction worker inhalation exposure scenario.

**OFF-SITE SOIL**

Based on the most recent data collected, contaminated soil is not present off-site.

**ON-SITE GROUNDWATER**

Based on the most recent data collected, only ethylbenzene is present above Tier 1 CUOs in groundwater on-site.

**OFF-SITE GROUNDWATER**

Based on the most recent data collected, contaminated groundwater is not present off-site.

The groundwater monitoring wells where benzene was present have not been sampled since February 2, 2002. MECRS proposed to resample monitoring wells MW-4 and MW-7 to gather current groundwater chemical data. Wells MW-4 and MW-7 could not be located in November 2014. In August 2016, Midwest collected groundwater samples from temporary wells installed in GeoProbe borings GP-9, near MW-7, and GP-10, near MW-4. Concentrations of benzene were not detected in either of the groundwater samples collected. Ethylbenzene was detected above Tier 1 CUOs in the groundwater sample from GP-10.

**PART B. TIER 2 TACO EVALUATION**

A Tier 2 TACO evaluation of the site was conducted to determine acceptable cleanup objectives for soil based on site-specific characteristics of the soil. The following site specific input data was used to calculate the site specific CUOs for benzene, toluene, ethylbenzene and xylenes.

**SITE SPECIFIC INPUT DATA**

**Plume Characteristics**

Length of the plume parallel to the assumed groundwater flow direction = 34 m

Length of the plume perpendicular to the assumed groundwater flow direction = 56 m

Justification: Plume lengths are based on the estimated extent of the contaminant plume above IEPA Tier 1 CUOs for soil shown on Figure 3. The estimated extent of the contaminant plume was chosen based on the BTEX concentrations reported from all soil samples collected to date. The groundwater flow direction is estimated as towards the north based on dispersion of the contaminant plume. Plume measurements are shown on Figure 8.

**Site Specific Soil Data**

Subsurface soil consists predominantly of clay. The following site-specific surface soil parameters were used.

Parameter	Value	Justification
Subsurface soil classification	Silty Clay	Laboratory determined
Fraction of Organic Carbon	0.72%	Laboratory determined
pH	7.3	Laboratory determined
Soil bulk density	1.77 gm/cm <sup>3</sup>	Laboratory determined
Moisture Content	17.1%	Laboratory determined
Soil particle density	2.66 gm/gm	Laboratory determined

**Aquifer Information**

Parameter	Value	Justification
Aquifer thickness	2 m	Default
Hydraulic Gradient	0.010	Based on depth to groundwater measurements and flow direction
Aquifer Hydraulic Conductivity (K)	3.13 x 10 <sup>-4</sup> cm/sec	Aquifer tests
Groundwater Mixing Zone	2 m	Default
Dilution Factor	20	Default

**Tier 2 Cleanup Objectives**

The parameters listed above were used to determine soil cleanup objectives for the inhalation exposure pathway for the soil component of the groundwater ingestion route for benzene,

toluene, and xylenes; and the construction worker inhalation exposure route for xylenes. The following Tier 2 CUOs were calculated:

Tier 2 CUOs

COC	Soil Component of Groundwater Ingestion Route	Construction Worker Inhalation
Benzene	0.11 ppm	--
Toluene	--	--
Ethylbenzene	35 ppm	--
Xylenes	9106 ppm	93 ppm

ON-SITE SOIL - BENZENE

Sample #	Date	Depth	Benzene (ppm)	Soil Component of Groundwater Class II (Tier 1 > Tier 2)	Objectives Met
W-1	3/17/17	5'	0.77	0.17 ppm	No
W-2	3/17/17	5'	0.70	0.17 ppm	No
F-1	3/17/17	8'	0.27	0.17 ppm	No

ON-SITE SOIL - ETHYLBENZENE

Sample #	Date	Depth	Ethylbenzene (ppm)	Soil Component of Groundwater Class II (Tier 1 > Tier 2)	Objectives Met
W-1	3/17/17	5'	35	35 ppm	Yes
W-2	3/17/17	5'	31	35 ppm	Yes

ON-SITE SOIL - XYLENES

Sample #	Date	Depth	Xylenes (ppm)	Construction Worker	Objective Met	Soil Component to Groundwater Class II	Objective Met
				Inhalation			
W-1	3/17/17	5'	200	93 ppm	No	9106 ppm	Yes
W-2	3/17/17	5'	150	93 ppm	No	--	--
W-4	3/17/17	5'	18	93 ppm	Yes	--	--
F-1	3/17/17	8'	23	93 ppm	Yes	--	--

The concentrations of benzene in soil exceed the Tier 2 CUOs for the soil component of the groundwater ingestion route. A groundwater use restriction will be placed on the site to eliminate this exposure pathway.

The concentrations of ethylbenzene in soil do not exceed the Tier 2 CUOs for the soil component of the groundwater ingestion route.

The concentrations of xylenes in soil do not exceed the Tier 2 CUOs for the soil component of the groundwater ingestion route.

The concentrations of xylenes in soil exceed the Tier 2 CUOs for the construction worker inhalation route. A construction worker precautionary statement will be included in the "No Further Remediation" letter to address this potential exposure pathway.

## Part C. Groundwater Modeling

### Groundwater Models Based on Soil Data

SSL equations S17 & S18 and RBCA equation R26 were used for each soil sample point in excess of the Tier 1 CUO for the Soil Component of the Groundwater Ingestion Route for Class I groundwater. The distance required to meet Tier 1 CUOs for Class I groundwater was calculated for each point. Equations S17 & S18 were used to determine the COC concentration in groundwater based on the concentration of the COC in soil. The resulting COC concentration was then used in equation R26.

Based on the results of the modeling, the following distances from each sample location are required to meet Tier 1 CUOs for Class I groundwater:

Sample #	Benzene concentration in soil (ppm)	Benzene Leached to Groundwater (ppm)	Distance to Meet Tier 1 CUOs for Groundwater Class I	Tier 1 CUO for GW Class I
W-1	0.77	0.073	69 ft	0.005 ppm
W-2	0.70	0.066	66 ft	0.005 ppm
F-1	0.27	0.026	43 ft	0.005 ppm
Sample #	Toluene concentration in soil	Toluene Leached to Groundwater (ppm)	Distance to Meet Tier 1 CUOs for Groundwater Class I	Tier 1 CUO for Soil Component to Groundwater Class I
W-1	28	1.1	<1 ft	1.0 ppm
Sample #	Ethylbenzene concentration in soil	Ethylbenzene Leached to Groundwater (ppm)	Distance to Meet Tier 1 CUOs for Groundwater Class I	Tier 1 CUO for Soil Component to Groundwater Class I
W-1	35	0.7	Met	0.7 ppm
W-2	31	0.6	Met	0.7 ppm
Sample #	Xylenes concentration in soil	Xylenes Leached to Groundwater (ppm)	Distance to Meet Tier 1 CUOs for Groundwater Class I	Tier 1 CUO for Soil Component to Groundwater Class I
W-1	200	3	Met	150 ppm
Sample #	Ethylbenzene in GW ppm			Tier 1 CUO
GP-10 (MW-4)	1.5	--	46 ft	0.7 ppm

The modeled extent of the groundwater contamination is shown in Figure 7. Based on the results of the groundwater modeling, COC concentrations will meet the Tier 1 CUOs for Class I groundwater at a distance of 69 feet down-gradient of sample point W-1. Based on the groundwater flow direction, it appears that the model indicates the potential for migration on to the IDOT right-of-way. Contamination in the IDOT right-of-way has been addressed with a Highway Authority Agreement.

#### **Part D. Institutional Controls**

1. Benzene is present in excess of the calculated Tier 2 CUOs for the soil component of the groundwater ingestion route in soil samples W-1, W-2 and F-1. The groundwater use restriction on-site and the groundwater use restriction ordinance will address this issue.
2. Benzene is present in excess of Tier 1 CUOs for the soil component of the groundwater ingestion route in soil sample W-1, W-2 and F-1. The groundwater use restriction on-site, the groundwater use restriction ordinance, and the HAA will address this issue.
3. A groundwater use restriction and industrial/commercial land use restriction will be placed on the site.
4. Based on the most recent soil sampling, it appears that CUOs above Tier 1 concentrations are not present off-site.

S-29 For Xylenes

$$C_{\text{sat}} = S/\rho_b * [(K_d * \rho_b) + \Theta_w + (H' + \Theta_a)]$$

$$C_{\text{sat}} = \mathbf{334 \text{ ppm}}$$

$$S = 1.10\text{E}+02 \text{ Table E}$$

$$\rho_b = 1.77 \text{ Lab Determined}$$

$$K_d = 2.8656 \text{ S19}$$

$$\Theta_w = 0.29 \text{ S20}$$

$$\Theta_a = 0.05 \text{ S21}$$

$$H' = 0.271 \text{ Table E}$$

S19

$$K_d = K_{oc} * f_{oc} = 2.8656$$

$$K_{oc} = 3.98\text{E}+02 \text{ Table E}$$

$$f_{oc} = 0.0072 \text{ lab determined}$$

S24

$$\eta = 1 - \rho_b / \rho_s = \mathbf{0.33}$$

$$\rho_b = 1.77 \text{ lab determined}$$

$$\rho_s = 2.66 \text{ lab determined}$$

$$S20 = \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$$

$$l = 0.3$$

$$K_s = 8 \text{ Table K Silty Clay}$$

$$1/(2b+3) = 0.042 \text{ Table K Silty Clay}$$

$$\Theta_w = 0.33 * (.3/8)^{0.042}$$

$$\Theta_w = \mathbf{0.29}$$

$$S21 = \Theta_a = \eta - \Theta_w = \mathbf{0.05}$$

Benzene RO= 0.11 Remediation Objective for the Soil Component of the Groundwater Ingestion Route

**S19**  
 $k_d = k_{oc} * f_{oc} = 0.36$   
 $k_{oc} = 50$  table  
 $f_{oc} = 0.0072$  lab

**S20** =  $\Theta_w = \eta * (1/K_s)^{1/(2b+3)}$   
 $K_s = 8$  Table K  
 $1/(2b+3) = 0.042$  Table K  
 $\Theta_w = 0.33 * (.3/8)^{0.042}$   
 $\Theta_w = 0.29$

**S21** =  $\Theta_a = \eta - \Theta_w = 0.05$

**S17** RO = 0.10571  
 $RO = Cw * (K_d + ((\Theta_w + \Theta_a * H') / \rho))$   
 $Cw = GW_{obj} * DF$   
 $DF = 20$   
 $GW_{obj} = 0.01$   
 $Cw = 0.2$   
 $K_d = 0.36$   
 $\Theta_w = 0.29$   
 $\Theta_a = 0.05$   
 $H' = 0.23$   
 $\rho_b = 1.77$

**S22**  
 $DF = 1.193544$  or **20** default  
 $K = 9.87E+01$  m/yr  $3.13E-04$  cm/sec  $9.87E+01$  m/y  
 $i = 0.010$  m/m  
 $d = 2$  m  
 $l = 0.3$  m/yr  
 $L = 34$  m

**S23**  
 $GW_{obj} = (TR * BW * AT_c * 365) / (SF_o * IR_w * EF * ED)$   
 $TR = 1.00E-06$   
 $BW = 70$   
 $AT_c = 70$   
 $SF_o = 0.029$   
 $IR_w = 1$   
 $EF = 250$   
 $ED = 25$   
 $GW_{obj} = 0.010$  or **0.005**

**S24**  
 $\eta = 1 - \rho_b / \rho_s = 0.33$   
 $\rho_b = 1.77$   $\rho_b / \rho_s = 0.67$   
 $\rho_s = 2.66$

**S18**  
 $Cw = GW_{obj} * DF$   
 $DF = 20$   
 $GW_{obj} = 0.01$   
 $Cw = 0.2$

Ethylbenzene RO= 35 Remediation Objective for the Soil Component of the Groundwater Ingestion Route

**S19**  
 $k_d = k_{oc} * f_{oc} = 2.304$   
 $k_{oc} = 320$  table  
 $f_{oc} = 0.0072$  lab

**S20**  $= \Theta_w = \eta * (1/K_s)^{1/(2b+3)}$   
 $K_s = 8$  Table K  
 $1/(2b+3) = 0.042$  Table K  
 $\Theta_w = 0.33 * (.3/8)^{0.042}$   
 $\Theta_w = 0.29$

**S21**  $= \Theta_a = \eta - \Theta_w = 0.05$

**S17** RO = 34.6506  
 $RO = C_w * (K_d + ((\Theta_w + \Theta_a * H') / \rho))$   
 $C_w = GW_{obj} * DF$   
 $DF = 20$   
 $GW_{obj} = 0.7$   
 $C_w = 14$   
 $K_d = 2.304$   
 $\Theta_w = 0.29$   
 $\Theta_a = 0.05$   
 $H' = 0.324$   
 $\rho_b = 1.77$

**S22**  
 $DF = 1.193544$  or **20** default  
 $K = 9.87E+01$  m/yr  $3.13E-04$  cm/sec  $9.87E+01$  m/y  
 $i = 0.010$  m/m  
 $d = 2$  m  
 $l = 0.3$  m/yr  
 $L = 34$  m

**S23**  
 $GW_{obj} = (TR * BW * AT_c * 365) / (SF_o * IR_w * EF * ED)$   
 $TR = 1.00E-06$   
 $BW = 70$   
 $AT_c = 70$   
 $SF_o = 0.035$   
 $IR_w = 1$   
 $EF = 250$   
 $ED = 25$   
 $GW_{obj} = 0.008176$  or **0.7**

**S18**  
 $C_w = GW_{obj} * DF$   
 $DF = 20$   
 $GW_{obj} = 0.7$   
 $C_w = 14$

**S24**  
 $\eta = 1 - \rho_b / \rho_s = 0.33$   
 $\rho_b = 1.77$   $\rho_b / \rho_s = 0.67$   
 $\rho_s = 2.66$

*Xylenes*  
Ethylbenzene

RO= 9106 Remediation Objective for the Soil Component of the Groundwater Ingestion Route

**S19**  
 $K_d = k_{oc} * f_{oc} = 2.8656$   
 $k_{oc} = 398$  table  
 $f_{oc} = 0.0072$  lab

**S20** =  $\Theta_w = \eta * (1/K_s)^{1/(2b+3)}$   
 $K_s = 8$  Table K  
 $1/(2b+3) = 0.042$  Table K  
 $\Theta_w = 0.33 * (.3/8)^{0.042}$   
 $\Theta_w = 0.29$

**S21** =  $\Theta_a = \eta - \Theta_w = 0.05$

**S17** RO = 9105.7  
 $RO = C_w * (K_d + ((\Theta_w + \Theta_a * H') / \rho))$   
 $C_w = GW_{obj} * DF$   
 $DF = 20$   
 $GW_{obj} = 150$   
 $C_w = 3000$   
 $K_d = 2.8656$   
 $\Theta_w = 0.29$   
 $\Theta_a = 0.05$   
 $H' = 0.271$   
 $\rho_b = 1.77$

**S22**  
 $DF = 1.193544$  or **20** default  
 $K = 9.87E+01$  m/yr       $3.13E-04$  cm/sec       $9.87E+01$  m/y  
 $i = 0.010$  m/m  
 $d = 2$  m  
 $l = 0.3$  m/yr  
 $L = 34$  m

**S23**  
 $GW_{obj} = (TR * BW * AT_c * 365) / (SF_o * IR_w * EF * ED)$   
 $TR = 1.00E-06$   
 $BW = 70$   
 $AT_c = 70$   
 $SF_o = 0.035$   
 $IR_w = 1$   
 $EF = 250$   
 $ED = 25$   
 $GW_{obj} = 0.008176$  or **150.0**

**S24**  
 $\eta = 1 - \rho_b / \rho_s = 0.33$   
 $\rho_b = 1.77$   $\rho_b / \rho_s = 0.67$   
 $\rho_s = 2.66$

**S18**  
 $C_w = GW_{obj} * DF$   
 $DF = 20$   
 $GW_{obj} = 150$   
 $C_w = 3000$

Xylenes RO= **9.30E+01** Remediation Objective for the Construction Worker  
 Inhalation Exposure Pathway  
 Non-Carcinogenic

$\Theta_w = 0.29$   
 $\Theta_a = 0.05$   
 $H' = 0.271$   
 $\rho = 1.77$

**S5** 9.30E+01  
 RO = (THQ\*AT\*365)/(EF\*ED\*(1/Rfc\*1/VF'))  
 THQ = 1.000  
 AT = 0.115  
 EF = 30.00  
 ED = 1  
 Rfc = 0.1  
 VF' = S9 = 6.65E+02 1.50E-03 = 1/VF'

**S8** 6.65E+03  
 VF = Q/C \* (3.14 \* D<sub>A</sub> \* T)<sup>1/2</sup> / (2 \*  $\rho_b$  \* D<sub>A</sub>) \* 10<sup>-4</sup>  
 Q/C = 85.81  
 D<sub>A</sub> = S10 1.50384E-06 cm<sup>2</sup>/sec  
 T = 3.60E+06 s  
 $\rho_b = 1.77$  gm/cm<sup>3</sup>

**S9**  
 VF' = VF/10 6.65E+02  
 VF = 6.65E+03

**S10** 8.07917E-06 0.186137749 1.5038E-06  
 DA = ((( $\Theta_a^{3.33} * D_i * H'$ ) + ( $\Theta_w^{3.33} * D_w$ )) /  $\eta^2$ ) \* (1 / (( $\rho_b * K_d$ ) +  $\Theta_w$  + ( $\Theta_a * H'$ )))  
 $\Theta_a = 0.05$   $\Theta_a^{3.33} = 3.81E-05$   
 $D_i = 0.0735$   
 $H' = 0.271$   
 $\Theta_w = 0.29$   $\Theta_w^{3.33} = 1.57E-02$   
 $D_w = 9.23E-06$   
 $\rho_b = 1.77$   
 $K_d = 2.8656$   
 $\eta = 0.33$   $\eta^2 = 0.1119481$

**S20** =  $\Theta_w = \eta * (1 / K_s)^{1/(2b+3)}$   
 $K_s = 8$  Table K  
 $1/(2b+3) = 0.042$  Table K  
 $\Theta_w = 0.33 * (.3/8)^{0.042}$   
 $\Theta_w = 0.29$

**S21** =  $\Theta_a \eta - \Theta_w = 0.05$

**S24**  
 $\eta = 1 - \rho_b / \rho_s = 0.33$   
 $\rho_b = 1.77$   $\rho_b / \rho_s = 0.67$   
 $\rho_s = 2.66$

**S19**  
 $K_d = k_{oc} * f_{oc} = 2.8656$   
 $k_{oc} = 398$  table  
 $f_{oc} = 0.0072$  lab

Benzene R17 & 18, Back Calculation

Sample ID:	Sample Date	Benzene	GWobj (0.005 oom)
W-1	3/17/2017	770	0.073
W-2	3/17/2017	700	0.066
F-1	3/17/2017	270	0.026

$$GW_{obj} = (R.O.) / (DF * (k_d + (\Theta_w + (\Theta_a * H')) / \rho_b))$$

$$GW_{obj} = 0.073$$

$$GW_{obj} = 0.073 \text{ (to be used as } C_{source} \text{ in R26)}$$

$$R.O. = 0.77$$

$$DF = 20$$

$$K_d = 0.36$$

$$\Theta_w = 0.29$$

$$\Theta_a = 0.05$$

$$H' = 0.23$$

$$\rho_b = 1.77$$

$$(\Theta_w + (\Theta_a * H')) / \rho_b = 0.168544$$

<b>S22</b>			
DF =	1.193544 or Default Vaule =	<b>20</b>	
K	9.87E+01 m/yr	3.13E-04 cm/sec	9.87E+01 m/y
i	0.010 m/m		
d	2 m		
l	0.3 m/yr		
L	<b>34 m</b>		

<b>S19</b>		
$k_d =$	$k_{oc} * f_{oc} =$	<b>0.36</b>
	$k_{oc} =$	<b>50 table</b>
	$f_{oc} =$	<b>0.0072 lab</b>

<b>S20 = <math>\Theta_w = \eta * (l / K_s)^{1/(2b+3)}</math></b>		
$K_s =$	8	Table K
$1/(2b+3) =$	0.042	Table K
$\Theta_w =$	$0.33 * (.3/8)^{0.042}$	
$\Theta_w =$	<b>0.29</b>	

<b>S21 = <math>\Theta_a = \eta - \Theta_w =</math></b>	<b>0.05</b>
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<b>S24</b>		
$\eta =$	$1 - \rho_b / \rho_s =$	<b>0.33</b>
$\rho_b =$	1.77	$\rho_b / \rho_s =$ <b>0.67</b>
$\rho_s =$	<b>2.66</b>	

**BENZENE R26**

$C_{source} =$  0.026 Meters Feet  
 $X =$  1300 13 43  
 $a_x =$  130  
 $a_y =$  43  
 $a_z =$  6.50  
  
 $U =$  0.676  
 $K = \text{cm/d}$  27.04 cm/s= 3.13E-04 cm/d= 2.70E+01  
 $i =$  0.010  
 $O_1 =$  0.4  
 $\lambda =$  0.0009  
  
 $S_w =$  5600 cm  
 $S_d =$  200 cm  
  
**Part 1 = Csource** 0.026000  
**Part 2 = exp** 0.222177  
 $X/2a_x =$  5.000  
 $1 - \text{srt}(1 + (4\lambda * a_x/U)):$  -0.301  
**Part 3 erf** 1.000000  
 $S_w/4 * \text{sqrt}(a_y * X)$  5.90  
**Part 4 erf** 0.875651  
 $sd/2 * \text{sqrt}(a_z * X)$  1.09  
  
 $C(x) =$  0.005  
**Target =** 0.005

$\beta$	$\text{erf}(\beta)$	$\beta$	$\text{erf}(\beta)$
0	0	2	0.995322
0.05	0.056372	2.1	0.997021
0.1	0.112463	2.2	0.998137
0.15	0.167996	2.3	0.998857
0.2	0.222703	2.4	0.999311
0.25	0.276326	2.5	0.999593
0.3	0.328627	2.6	0.999764
0.35	0.379382	2.7	0.999866
0.4	0.428392	2.8	0.999925
0.45	0.475482	2.9	0.999959
0.5	0.5205	3	0.999978
0.55	0.563323		
0.6	0.603856	a	0.4 0.428392 x
0.65	0.642029	b	5.898551 5.606927 y
0.7	0.677801	c	0.45 0.475482 z
0.75	0.711156		
0.8	0.742101		0.05 5.498551
0.85	0.770668		0.04709 5.178535
0.9	0.796908		
0.95	0.820891	a	1 0.842701 x
1	0.842701	b	1.087857 0.875651 y
1.1	0.880205	c	1.1 0.880205 z
1.2	0.910314		
1.3	0.934008		0.1 0.087857
1.4	0.952285		0.037504 0.03295
1.5	0.966105		
1.6	0.976348		
1.7	0.98379		
1.8	0.989091		
1.9	0.99279		

Sample ID:	Sample Date	Benzene	GWobj	Distance to Tier 1
W-1	3/17/2017	770	0.073	69 ft
W-2	3/17/2017	700	0.066	66 ft
F-1	3/17/2017	270	0.026	43 ft

Toluene R17 & 18, Back Calculation

Sample ID:	Sample Date	Toluene	GWobj (1.0 ppm)
W-1	3/17/2017	28 ppm	1.1 ppm

$$GW_{obj} = (R.O.) / (DF * (k_d + (\Theta_w + (\Theta_a * H')) / \rho_b))$$

GW<sub>obj</sub> = 1.071

GW<sub>obj</sub> = 1.071 (to be used as C<sub>source</sub> in R26)

R.O. = 28

DF = 20

K<sub>d</sub> = 1.1376

Θ<sub>w</sub> = 0.29

Θ<sub>a</sub> = 0.05

H' = 0.271

ρ<sub>b</sub> = 1.77

(Θ<sub>w</sub> + (Θ<sub>a</sub> + H')) / ρ<sub>b</sub> = 0.169635

<b>S22</b>			
DF =	1.193544 or Default Vaule =	20	
K	9.87E+01 m/yr	3.13E-04 cm/sec	9.87E+01 m/y
i	0.010 m/m		
d	2 m		
l	0.3 m/yr		
L	34 m		

<b>S19</b>	
k <sub>d</sub> =	k <sub>oc</sub> * f <sub>oc</sub> = 1.1376
	k <sub>oc</sub> = 158 table
	f <sub>oc</sub> = 0.0072 lab

<b>S20 = Θ<sub>w</sub> = η * (l / K<sub>s</sub>)<sup>1/(2b+3)</sup></b>	
K <sub>s</sub> =	8 Table K
1/(2b+3) =	0.042 Table K
Θ <sub>w</sub> =	0.33 * (.3/8) <sup>0.042</sup>
Θ <sub>w</sub> =	0.29

<b>S21 = Θ<sub>a</sub> = η - Θ<sub>w</sub> =</b>	0.05
--	------

<b>S24</b>	
η =	1 - ρ <sub>b</sub> / ρ <sub>s</sub> = 0.33
ρ <sub>b</sub> =	1.77 ρ <sub>b</sub> / ρ <sub>s</sub> = 0.67
ρ <sub>s</sub> =	2.66

Toluene R26

$C_{source} =$  1.071 Meters Feet  
 $X =$  5 0.05 0  
 $a_x =$  1  
 $a_y =$  0  
 $a_z =$  0.03  
  
 $U =$  0.676  
 $K = \text{cm/d}$  27.04 cm/s= 3.13E-04 cm/d= 2.70E+01  
 $i =$  0.010  
 $O_t =$  0.4  
 $\lambda =$  0.011  
  
 $S_w =$  5600 cm  
 $S_d =$  200 cm  
  
**Part 1 = Csource** 1.071000  
**Part 2 = exp** 0.922470  
 $X/2a_x =$  5.000  
 $1 - \text{srt}(1 + (4\lambda * a_x/U)):$  -0.016  
**Part 3 erf** 1.000000  
 $S_w/4 * \text{sqrt}(a_y * X)$  1533.62  
**Part 4 erf** 1.000000  
 $s_d/2 * \text{sqrt}(a_z * X)$  282.84  
  
 $C(x) =$  0.988  
**Target =** 1.0

$\beta$	$\text{erf}(\beta)$	$\beta$	$\text{erf}(\beta)$
0	0	2	0.995322
0.05	0.056372	2.1	0.997021
0.1	0.112463	2.2	0.998137
0.15	0.167996	2.3	0.998857
0.2	0.222703	2.4	0.999311
0.25	0.276326	2.5	0.999593
0.3	0.328627	2.6	0.999764
0.35	0.379382	2.7	0.999866
0.4	0.428392	2.8	0.999925
0.45	0.475482	2.9	0.999959
0.5	0.5205	3	0.999978
0.55	0.563323		
0.6	0.603856		
0.65	0.642029		
0.7	0.677801		
0.75	0.711156		
0.8	0.742101		
0.85	0.770668		
0.9	0.796908		
0.95	0.820891		
1	0.842701		
1.1	0.880205		
1.2	0.910314		
1.3	0.934008		
1.4	0.952285		
1.5	0.966105		
1.6	0.976348		
1.7	0.98379		
1.8	0.989091		
1.9	0.99279		

a	0.4	0.428392	x
b	1533.6232	1444.418	y
c	0.45	0.475482	z
	0.05	1533.223	
	0.04709	1443.99	

a	1	0.842701	x
b	282.8427	106.545	y
c	1.1	0.880205	z
	0.1	281.8427	
	0.037504	105.7023	

Sample ID:	Sample Date	Benzene	GWobj	Distance to Tier 1
W-1	3/17/2017	28 ppm	1.071 ppm	< 1 ft

Ethylbenzene R17 & 18, Back Calculation

Sample ID:	Sample Date	Ethylbenzene	GWobj (0.7 ppm)	
W-1	3/17/2017	35	0.7	MET
W-2	3/17/2017	31	0.6	MET

$$GW_{obj} = (R.O.) / (DF * (K_d + (\Theta_w + (\Theta_a * H')) / \rho_b))$$

$$GW_{obj} = 0.621$$

$$GW_{obj} = 0.621 \text{ (to be used as } C_{source} \text{ in R26)}$$

$$R.O. = 31$$

$$DF = 20$$

$$K_d = 2.304$$

$$\Theta_w = 0.29$$

$$\Theta_a = 0.05$$

$$H' = 0.324$$

$$\rho_b = 1.58$$

$$(\Theta_w + (\Theta_a * H')) / \rho_b = 0.191614$$

S22			
DF =	1.193544 or Default Vaule =	20	
K	9.87E+01 m/yr	3.13E-04 cm/sec	9.87E+01 m/y
i	0.010 m/m		
d	2 m		
l	0.3 m/yr		
L	34 m		

S19	
$k_d =$	$k_{oc} * f_{oc} = 2.304$
	$k_{oc} = 320 \text{ table}$
	$f_{oc} = 0.0072 \text{ lab}$

S20 = $\Theta_w = \eta * (l / K_s)^{1/(2b+3)}$	
$K_s =$	8 Table K
$1/(2b+3) =$	0.042 Table K
$\Theta_w =$	$0.33 * (.3/8)^{0.042}$
$\Theta_w =$	0.29

S21 = $\Theta_a = \eta - \Theta_w =$	
	0.05

S24	
$\eta =$	$1 - \rho_b / \rho_s = 0.33$
$\rho_b =$	1.77 $\rho_b / \rho_s = 0.67$
$\rho_s =$	2.66

Xylenes R17 & 18, Back Calculation

Sample ID:	Sample Date	Xylenes	GWobj (150 ppm)	
W-1	3/17/2017	200	3.2	MET

$$GW_{obj} = (R.O.) / (DF * (k_d + (\Theta_w + (\Theta_a * H')) / \rho_b))$$

GW<sub>obj</sub> = 3.273

GW<sub>obj</sub> = 3.273 (to be used as C<sub>source</sub> in R26)

R.O. = 200

DF = 20

K<sub>d</sub> = 2.8656

Θ<sub>w</sub> = 0.29

Θ<sub>a</sub> = 0.05

H' = 0.271

ρ<sub>b</sub> = 1.58

(Θ<sub>w</sub> + (Θ<sub>a</sub> + H')) / ρ<sub>b</sub> = 0.190034

<b>S22</b>			
DF =	1.193544	or Default Vaule =	20
K	9.87E+01 m/yr	3.13E-04 cm/sec	9.87E+01 m/y
i	0.010 m/m		
d	2 m		
l	0.3 m/yr		
L	34 m		

<b>S19</b>	
k <sub>d</sub> =	k <sub>oc</sub> * f <sub>oc</sub> = 2.8656
	k <sub>oc</sub> = 398 table
	f <sub>oc</sub> = 0.0072 lab

<b>S20 = Θ<sub>w</sub> = η * (1 / K<sub>s</sub>)<sup>1/(2b+3)</sup></b>	
K <sub>s</sub> =	8 Table K
1/(2b+3) =	0.042 Table K
Θ <sub>w</sub> =	0.33 * (.3/8) <sup>0.042</sup>
Θ <sub>w</sub> =	0.29

<b>S21 = Θ<sub>a</sub> = η - Θ<sub>w</sub> =</b>	0.05
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<b>S24</b>	
η =	1 - ρ <sub>b</sub> / ρ <sub>s</sub> = 0.33
ρ <sub>b</sub> =	1.77 ρ <sub>b</sub> / ρ <sub>s</sub> = 0.67
ρ <sub>s</sub> =	2.66

**APPENDIX B**  
**LABORATORY DATA**



# PDC Laboratories, Inc.

PROFESSIONAL • DEPENDABLE • COMMITTED

April 03, 2017

Allan Green  
Midwest Environmental Tremont  
Box 614  
Tremont, IL 61568

Dear Allan Green:

Please find enclosed the analytical results for the sample(s) the laboratory received on **3/21/17 12:51 pm** and logged in under work order **7032830**. All testing is performed according to our current TNI certifications unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of PDC Laboratories, Inc.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

PDC Laboratories, Inc. appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the Vice President, John LaPayne with any feedback you have about your experience with our laboratory.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kurt Stepping'.

Kurt Stepping  
Senior Project Manager  
(309) 692-9688 x1719  
kstepping@pdclab.com





**ANALYTICAL RESULTS**

<b>Sample:</b> 7032830-01 <b>Name:</b> W-1 <b>Matrix:</b> Soil - Grab	<b>Sampled:</b> 03/17/17 15:00 <b>Received:</b> 03/21/17 12:51 <b>PO #:</b> 9890 WARSAW ITCO
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Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
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General Chemistry - PIA

Solids - total solids (TS)	80	%		03/22/17 13:32	03/22/17 14:07	KNS	SM 2540G*
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Volatile Organics - PIA

Benzene	770	ug/kg dry		03/23/17 13:05	03/23/17 19:50	JJI	SW 8260B
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<b>Sample:</b> 7032830-01RE1 <b>Name:</b> W-1 <b>Matrix:</b> Soil - Grab	<b>Sampled:</b> 03/17/17 15:00 <b>Received:</b> 03/21/17 12:51 <b>PO #:</b> 9890 WARSAW ITCO
--	--

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
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Volatile Organics - PIA

Ethylbenzene	35000	ug/kg dry		03/31/17 08:43	03/31/17 13:57	JJI	SW 8260B
Toluene	28000	ug/kg dry		03/31/17 08:43	03/31/17 13:57	JJI	SW 8260B
Xylenes- Total	200000	ug/kg dry		03/31/17 08:43	03/31/17 13:57	JJI	SW 8260B

<b>Sample:</b> 7032830-02 <b>Name:</b> W-2 <b>Matrix:</b> Soil - Grab	<b>Sampled:</b> 03/17/17 15:15 <b>Received:</b> 03/21/17 12:51 <b>PO #:</b> 9890 WARSAW ITCO
---	--

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
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General Chemistry - PIA

Solids - total solids (TS)	79	%		03/22/17 13:32	03/22/17 14:07	KNS	SM 2540G*
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Volatile Organics - PIA

Benzene	700	ug/kg dry		03/23/17 13:05	03/23/17 20:17	JJI	SW 8260B
Toluene	1300	ug/kg dry		03/23/17 13:05	03/23/17 20:17	JJI	SW 8260B

<b>Sample:</b> 7032830-02RE1 <b>Name:</b> W-2 <b>Matrix:</b> Soil - Grab	<b>Sampled:</b> 03/17/17 15:15 <b>Received:</b> 03/21/17 12:51 <b>PO #:</b> 9890 WARSAW ITCO
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Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
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Volatile Organics - PIA

Ethylbenzene	31000	ug/kg dry		03/31/17 08:43	03/31/17 14:24	JJI	SW 8260B
Xylenes- Total	150000	ug/kg dry		03/31/17 08:43	03/31/17 14:24	JJI	SW 8260B



**ANALYTICAL RESULTS**

Sample: 7032830-03  
 Name: W-3  
 Matrix: Soil - Grab

Sampled: 03/17/17 15:30  
 Received: 03/21/17 12:51  
 PO #: 9890 WARSAW ITCO

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
<b>General Chemistry - PIA</b>							
Solids - total solids (TS)	80	%		03/22/17 13:32	03/22/17 14:07	KNS	SM 2540G*
<b>Volatile Organics - PIA</b>							
Benzene	< 24	ug/kg dry		03/23/17 13:05	03/23/17 20:44	JJI	SW 8260B
Ethylbenzene	100	ug/kg dry		03/23/17 13:05	03/23/17 20:44	JJI	SW 8260B
Toluene	< 24	ug/kg dry		03/23/17 13:05	03/23/17 20:44	JJI	SW 8260B
Xylenes- Total	680	ug/kg dry		03/23/17 13:05	03/23/17 20:44	JJI	SW 8260B

Sample: 7032830-04  
 Name: W-4  
 Matrix: Soil - Grab

Sampled: 03/17/17 15:45  
 Received: 03/21/17 12:51  
 PO #: 9890 WARSAW ITCO

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
<b>General Chemistry - PIA</b>							
Solids - total solids (TS)	80	%		03/22/17 13:32	03/22/17 14:07	KNS	SM 2540G*
<b>Volatile Organics - PIA</b>							
Benzene	< 24	ug/kg dry		03/23/17 13:05	03/23/17 21:11	JJI	SW 8260B
Ethylbenzene	720	ug/kg dry		03/23/17 13:05	03/23/17 21:11	JJI	SW 8260B
Toluene	< 24	ug/kg dry		03/23/17 13:05	03/23/17 21:11	JJI	SW 8260B

Sample: 7032830-04RE1  
 Name: W-4  
 Matrix: Soil - Grab

Sampled: 03/17/17 15:45  
 Received: 03/21/17 12:51  
 PO #: 9890 WARSAW ITCO

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
<b>Volatile Organics - PIA</b>							
Xylenes- Total	18000	ug/kg dry		03/31/17 08:43	03/31/17 14:51	JJI	SW 8260B



**ANALYTICAL RESULTS**

<b>Sample:</b> 7032830-05 <b>Name:</b> F-1 <b>Matrix:</b> Soil - Grab	<b>Sampled:</b> 03/17/17 16:00 <b>Received:</b> 03/21/17 12:51 <b>PO #:</b> 9890 WARSAW ITCO
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Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
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**General Chemistry - PIA**

Solids - total solids (TS)	82	%		03/22/17 13:32	03/22/17 14:07	KNS	SM 2540G*
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**Volatile Organics - PIA**

Benzene	270	ug/kg dry		03/23/17 13:05	03/23/17 21:39	JJI	SW 8260B
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<b>Sample:</b> 7032830-05RE1 <b>Name:</b> F-1 <b>Matrix:</b> Soil - Grab	<b>Sampled:</b> 03/17/17 16:00 <b>Received:</b> 03/21/17 12:51 <b>PO #:</b> 9890 WARSAW ITCO
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Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
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**Volatile Organics - PIA**

Ethylbenzene	4500	ug/kg dry		03/31/17 08:43	03/31/17 15:18	JJI	SW 8260B
Toluene	3100	ug/kg dry		03/31/17 08:43	03/31/17 15:18	JJI	SW 8260B
Xylenes- Total	23000	ug/kg dry		03/31/17 08:43	03/31/17 15:18	JJI	SW 8260B

<b>Sample:</b> 7032830-06 <b>Name:</b> LF-1 <b>Matrix:</b> Soil - Grab	<b>Sampled:</b> 03/17/17 16:15 <b>Received:</b> 03/21/17 12:51 <b>PO #:</b> 9890 WARSAW ITCO
--	--

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
-----------	--------	------	-----------	----------	----------	---------	--------

**General Chemistry - PIA**

Solids - total solids (TS)	79	%		03/22/17 13:32	03/22/17 14:07	KNS	SM 2540G*
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**Volatile Organics - PIA**

Benzene	37	ug/kg dry		03/23/17 13:05	03/23/17 22:06	JJI	SW 8260B
Toluene	160	ug/kg dry		03/23/17 13:05	03/23/17 22:06	JJI	SW 8260B

<b>Sample:</b> 7032830-06RE1 <b>Name:</b> LF-1 <b>Matrix:</b> Soil - Grab	<b>Sampled:</b> 03/17/17 16:15 <b>Received:</b> 03/21/17 12:51 <b>PO #:</b> 9890 WARSAW ITCO
---	--

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
-----------	--------	------	-----------	----------	----------	---------	--------

**Volatile Organics - PIA**

Ethylbenzene	7300	ug/kg dry		03/31/17 08:43	03/31/17 15:46	JJI	SW 8260B
Xylenes- Total	36000	ug/kg dry		03/31/17 08:43	03/31/17 15:46	JJI	SW 8260B



PDC Laboratories, Inc.  
2231 West Altorfer Drive  
Peoria, IL 61615  
(800) 752-6651

## NOTES

Specific method revisions used for analysis are available upon request.

### Certifications

#### PIA - Peoria, IL

TNI Accreditation for Drinking Water, Wastewater, Hazardous and Solid Wastes Fields of Testing through IL EPA Lab No. 100230  
Illinois Department of Public Health Bacteriological Analysis in Drinking Water Approved Laboratory Registry No. 17553  
Missouri Department of Natural Resources Certificate of Approval for Microbiological Laboratory Service No. 870  
Drinking Water Certifications: Iowa (240); Kansas (E-10338); Missouri (870)  
Wastewater Certifications: Arkansas (88-0677); Iowa (240); Kansas (E-10338)  
Hazardous/Solid Waste Certifications: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

#### SPMO - Springfield, MO

USEPA DMR-QA Program

#### STL - St. Louis, MO

TNI Accreditation for Wastewater, Hazardous and Solid Wastes Fields of Testing through KS Lab No. E-10389  
Illinois Department of Public Health Bacteriological Analysis in Drinking Water Approved Laboratory Registry No. 171050  
Drinking Water Certifications: Missouri (1050)  
Missouri Department of Natural Resources

\* Not a TNI accredited analyte

Certified by: Kurt Stepping, Senior Project Manager



The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Laboratory Certification for Chemical Analysis**

**A. Site Identification**

IEMA Incident # (6- or 8-digit): 981987 IEPA LPC# (10-digit): 1790455007  
Site Name: Warsaw ITCO  
Site Address (Not a P.O. Box): Illinois Route 122  
City: Minier County: Tazewell ZIP Code: 61759  
Leaking UST Technical File

**B. Sample Collector**

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
2. Chain-of-custody procedures were followed in the field.
3. Sample integrity was maintained by proper preservation.
4. All samples were properly labeled.

AF  
(initial)

AF  
(initial)

AF  
(initial)

AF  
(initial)

**C. Laboratory Representative**

I certify that: FOR LPC# 7032830

1. Proper chain-of-custody procedures were followed as documented on the chain-of-custody forms
2. Sample integrity was maintained by proper preservation.
3. All samples were properly labeled.
4. Quality assurance/quality control procedures were established and carried out.

AF  
(initial)

AF  
(initial)

AF  
(initial)

AF  
(initial)

5. Sample holding times were not exceeded.
6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses.
7. An accredited lab performed quantitative analysis using test methods identified in 35 IAC 186.180 (for samples collected on or after January 1, 2003).

*AS*  
(initial)

*AS*  
(initial)

*AS*  
(initial)

#### D. Signatures

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

#### Sample Collector

Name: Andrew Fetterolf  
 Title: Project Manager  
 Company: M.E.C.R.S, Inc.  
 Address: 22200 IL Rte. 9, P.O. Box 614  
 City: Tremont  
 State: Illinois  
 ZIP Code: 61568  
 Phone: (309) 925-5551  
 Signature: *Andrew Fetterolf*  
 Date: 3/17/17

#### Laboratory Representative

Name: Kurt Stepping  
 Title: Senior Project Manager  
 Company: PDC Laboratories  
 Address: 2231 W. Altorfer  
 City: Peoria  
 State: Illinois  
 ZIP Code: 61615  
 Phone: (309) 692-9688  
 Signature: *Kurt Stepping*  
 Date: 4-3-17

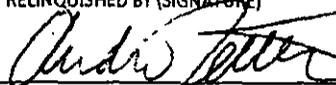
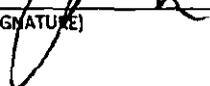
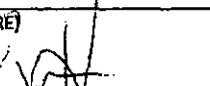
PDC Laboratories, Inc.  
 2231 W. Altorfer Dr  
 Peoria, IL 61615

## CHAIN OF CUSTODY RECORD

State where samples were collected IL

Phone: (800) 752-6651  
 Fax: (309) 692-9689  
 www.pdclab.com

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT <b>M.E.C.R.S.</b>		P.O. NUMBER <b>9890</b>		PROJECT NAME <b>Warsaw ITCO</b>		DATE SHIPPED		3 ANALYSIS REQUESTED			4 WORK ORDER (FOR LAB USE ONLY)				
ADDRESS <b>22200 IL Rt. 9, PO Box 614</b>		PHONE <b>(309) 925-5551</b>		EMAIL <b>industev@frontier.com</b>		MEANS SHIPPED		LOGIN #: <b>7032830-9</b>			LOGGED BY: <b>[Signature]</b>				
CITY <b>Tremont</b>		STATE <b>IL</b>	ZIP <b>61568</b>	SAMPLER (PLEASE PRINT) <b>Andrew Fetterolf</b>		MATRIX TYPES: WW - WASTE WATER DW - DRINKING WATER GW - GROUND WATER WWSL - SLUDGE NAS - SOLID LGHT - LEACHATE OTHER:		<b>BTEX</b>			PROJECT: _____		PROJ MGR: _____		
CONTACT PERSON <b>Allan Green</b>		SAMPLER'S SIGNATURE 		SAMPLE DESCRIPTION AS YOU WANT TO REPORT		DATE COLLECTED	TIME COLLECTED				SAMPLE TYPE GRAB COMP		MATRIX TYPE	BOTTLE COUNT	REMARKS
5 TURNAROUND TIME REQUESTED (RUSH TAT IS SUBJECT TO APPROVAL AND SURCHARGE)				<input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> RUSH		DATE RESULTS NEEDED		6 The sample temperature will be measured upon receipt at the lab. By initialing this area, you request that we notify you before proceeding with analysis if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area, you allow the lab to proceed with analytical testing regardless of the sample temperature.							
7 RELINQUISHED BY (SIGNATURE) 		DATE <b>3/21/17</b>	RECEIVED BY (SIGNATURE) 		DATE <b>3/21/17</b>	8 COMMENTS (FOR LAB USE ONLY)									
RELINQUISHED BY (SIGNATURE) 		DATE <b>3/21/17</b>	RECEIVED BY (SIGNATURE) 		DATE <b>3/21/17</b>	SAMPLE TEMPERATURE UPON RECEIPT _____ °C									
RELINQUISHED BY (SIGNATURE) 		DATE <b>3/21/17</b>	RECEIVED BY (SIGNATURE) 		DATE <b>3/21/17</b>	CHILL PROCESS STARTED PRIOR TO RECEIPT _____ SAMPLE(S) RECEIVED ON ICE _____ PROPER BOTTLES RECEIVED IN GOOD CONDITION _____ BOTTLES FILLED WITH ADEQUATE VOLUME _____ SAMPLES RECEIVED WITHIN HOLD TIME(S) _____ (EXCLUDES TYPICAL FIELD PARAMETERS) DATE AND TIME TAKEN FROM SAMPLE BOTTLE _____									

**APPENDIX C**  
**WELL SURVEY DATA**



# Illinois State Water Survey

Main Office • 2204 Griffith Drive • Champaign, IL 61820-7495 • Tel (217) 333-2210 • Fax (217) 333-6540  
Peoria Office • P.O. Box 697 • Peoria, IL 61652-0697 • Tel (309) 671-3196 • Fax (309) 671-3106



Ground-Water Section • Tel (217) 333-4300 • Fax (217) 244-0777

September 14, 1998

Mr. Greg Heuer  
Midwest Environmental, Inc.  
22200 Illinois Route 9  
P.O. Box 614  
Tremont, IL 61568-0614

Dear Mr. Heuer:

As you requested by your telefax letter dated September 4, we are enclosing printouts from our Private Well and Public, Industrial, Commercial Survey (PICS) Database for Sections 14, 15, 22 and 23 of Township 23N., Range 2W., in Tazewell County.

No available information is indicated on the printout by the statement "0 records were found for the specified locations." Also enclosed are explanations of the Illinois State Water Survey Private Well and PICS Database.

The data included in the Private Well Database are those non-municipal wells which are known to the Illinois State Water Survey, and the PICS Database is an inventory of municipal well information and large industrial ground-water users. We may not have a copy of well records for these ground-water users.

The invoice accompanying this request covers the \$20.00 query fee for private well information, \$20.00 query fee for PICS information and a \$0.10 per page charge for 4 pages, plus a \$5.00 shipping and handling fee, totaling \$45.40.

If you have any questions or if we can be of further assistance, please call.

Sincerely,

A handwritten signature in cursive script that reads "Susie Dodd".

Susie Dodd  
Assistant Supportive Scientist  
Office of Ground-Water Information  
Phone: (217) 333-9043

Enclosures

Query the Private Well Database through the World Wide Web  
<http://gwinfo.sws.uiuc.edu/gwdb-query.html>

County: Tazewell

Township Code: 23N

Range Code: 2W

Section Codes: 14, 15, 22, 23

12 records were found for the specified locations.

Questions : Contact the Illinois State Water Survey's  
Ground Water Division @ (217)333-9043

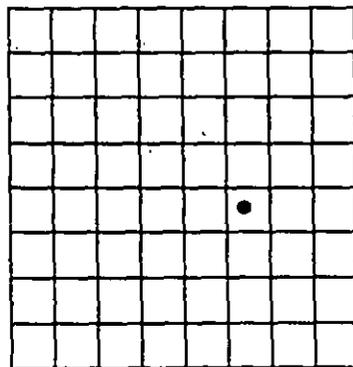
Publication: Please cite the Illinois State Water Survey's  
Private-Well Database in all publications  
based wholly or partially on this information.

Please Note:

The data in the Private Well Inventory Database is a listing of those non-municipal wells which are known to the Illinois State Water Survey (ISWS). This information has been entered verbatim from well logs submitted by the driller, chemical analysis reports, well sealing forms, well inventory forms from the 1930-1934 well survey, and other special projects. The accuracy of this data is controlled by those who submitted the form. Information in the private well database has not been verified.

This data cannot be resold or redistributed. The Illinois State Water Survey must be acknowledged in any use of this material.

Location of 10-acre-plot within a Section



h The origin can be found at the  
g lower-right-hand corner of an  
f 8 x 8 grid. In this example,  
e the well is in 10-acre plot 3d.

8 7 6 5 4 3 2 1

					DRILLER	DATE	PERMIT	DPTH	REC	US	TY	AQ
176837	179	23N	02W	14	3A	RUSH						
250319	179	23N	02W	14	5A	EBERT		195	RG	DO	--	UN
176838	179	23N	02W	14	5F	SCHERTZ	179-196-91W	140	RG	DO	DL	UN
1176840	179	23N	02W	15	4B	SCHERTZ		130	R	DO	--	UN
1176839	179	23N	02W	15	4B	SCHERTZ			O	DO		
176841	179	23N	02W	15	4H	RUSH		168	OGX	DO	--	UN
2176842	179	23N	02W	15	5A	SCHERTZ		168	R	DO		--
178183	179	23N	02W	22	5D	RUSH		170	R	DO	--	UN
178184	179	23N	02W	22	5D	MINIER #2 (ABANDONED)		138	OGX	CS		UN
178185	179	23N	02W	22	5D	VILLAGE OF MINIER #3 (DEEPEMED)		193	RGCX	CS	--	UN
176859	179	23N	02W	23	6H	VILLAGE OF MINIER #4		193	RGCX	CS	--	UN
269181	179	23N	02W	23	7A	RUSH		149	R	DO	--	UN
						COLE SR.		110	RG	DO	DL	UN
							179-125-95					

Query the PICS Database through the World Wide Web  
<http://gwinfo.sws.uiuc.edu/gwdb-query.html>

County: Tazewell

Township Code: 23N

Range Code: 2W

Section Codes: 14, 15, 22, 23

4 records were found for the specified locations.

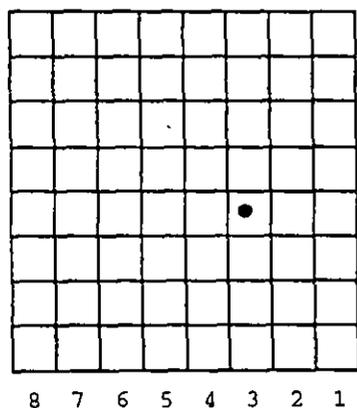
Questions : Contact the Illinois State Water Survey's  
Ground Water Division @ (217)333-7223  
Publication: Please cite the Illinois State Water Survey's  
PICS (Public-Industrial-Commercial) Database  
in all publications based wholly or partially  
on this information.

Please Note:

The data in the PICS Database is a listing of municipal and large industrial and commercial wells which are known to the Illinois State Water Survey (ISWS). The information was initially entered from public water supply data and supplemented with the Illinois Water Inventory Project data. This database is updated as additional information is received and verified.

This data cannot be resold or redistributed. The Illinois State Water Survey must be acknowledged in any publication of this material.

Location of 10-acre-plot within a Section



h The origin can be found at the  
g lower-right-hand corner of an  
f 8 x 8 grid. In this example,  
e the well is in 10-acre plot 3d.

d  
c  
b  
a

SWS ID	Name	No.	Status	Location	Depth	Type log	constructed	Year	Driller
17990450	MINIER	1	S	17923N02W22		-	1891	--	
17990450	MINIER	2	S	17923N02W225D	138	-	1910	--	
17990450	MINIER	4	I	17923N02W225D	193	-	1928	--	
17990450	MINIER	3	I	17923N02W225D	193	-	1914	--	



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 Mary A. Gade, Director

217/782-1020

October 8, 1998

Mr. Greg Heuer  
Midwest Environmental Services, Inc.  
22200 Illinois Route 9, P.O. Box 614  
Tremont, Illinois 61568-0614

Re: Request Regarding the location of Community Water Supply Wells in Tazewell County, Illinois. (FOIA #98P0440)

Dear Mr. Heuer:

This letter responds to your written inquiry dated September 4, 1998 regarding your project area located in Section 14, 15, 22 and 23, T23N, R2W.

You requested information pertaining to the nearest community water supply well. Based upon the information provided, the project area appears to be located outside 2,500 feet from a community water supply well.

Currently, there have not been any regulated recharge areas established pursuant to section 17.3 of the Illinois Environmental Protection Act (Act). Further, there have not been any Class III Groundwaters designed pursuant to 35 Illinois Administrative Code 620.

The Illinois Department of Public Health should be contacted at (217)782-5830 in regard to the location of private, semi-private or non-community public water supply wells. I trust that this meets your needs. Should you require any further information, please feel free to contact me at the above referenced number.

Sincerely,

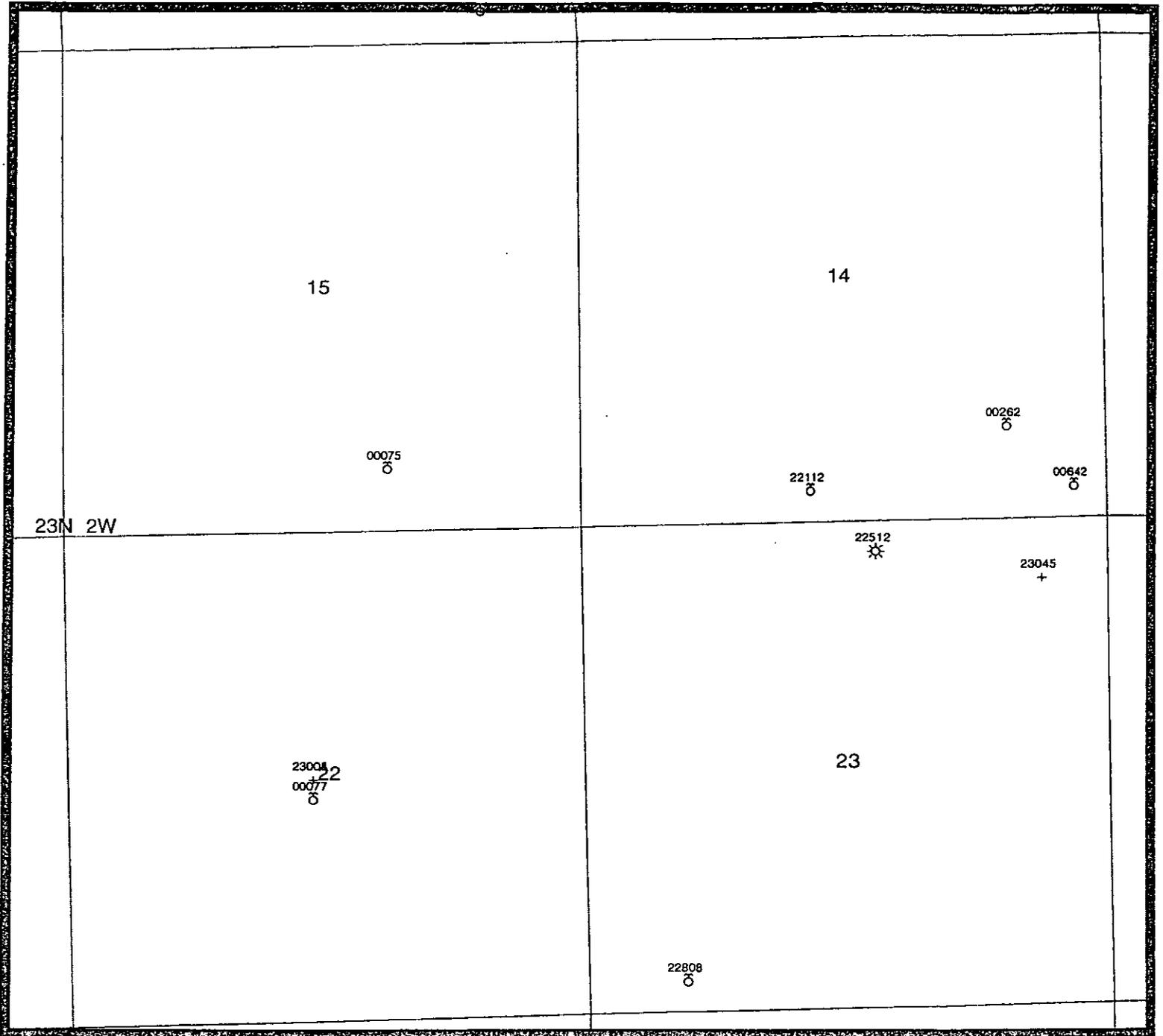
A handwritten signature in cursive script that reads "Janet Christer".

Janet Christer  
FOIA Coordinator, Manager's Office  
Division of Public Water Supply  
Bureau of Water

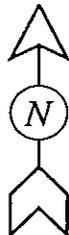
cc: File

R1196

# Map Area: 23N-2W-21 m3 to 23N-2W-12 m3



Explanation		
● Oil	☼ Gas Injection	⊗ Junked
☼ Oil & Gas	⊕ Gas Storage	⊖ Temporarily Abandoned
☼ Gas	⊖ Salt Water Disposal	⊗ Observation
⊕ D&A - Oil Show	⊗ Water Injection	⊗ Other Injection
☼ D&A - Gas Show	⊕ Water Supply	□ Confidential
☼ D&A - Oil & Gas Show	○ Permit	⊗ Other Well Type
⊕ D&A	⊖ Water	+ Status Unknown
/ through any symbol indicates well is currently plugged		



0 1553 3106 ft

Illinois State Geological Survey  
**QuESToR: Custom Map**  
 Date: 09-SEP-98 Scale: 1:18636

Displayed data is based upon information supplied to the Illinois State Geological Survey (ISGS) and are not field verified. The ISGS does not guarantee the validity, accuracy or completeness of these data.

R1197

**APPENDIX D**

**INSTITUTIONAL CONTROLS**

**HAA AND GROUNDWATER ORDINANCE WITH MOU**

CERTIFICATION OF ORDINANCE

I SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that on March 15, 2011 the Corporate Authorities of the above municipality passed and approved Ordinance No. 785.

Ordinance No. 785, including the cover sheet thereof, was prepared and published in pamphlet form on the 15<sup>th</sup> day of March, 2011. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

Dated at Minier, Illinois, this 15<sup>th</sup> day of March, 2011.

(SEAL)

  
Sandy Lancaster, Village Clerk

MEMORANDUM OF UNDERSTANDING BETWEEN  
VILLAGE OF MINIER AND THE ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY REGARDING THE USE OF A LOCAL GROUNDWATER OR  
WATER WELL ORDINANCE AS AN ENVIRONMENTAL INSTITUTIONAL CONTROL

I. PURPOSE AND INTENT

- A. This Memorandum of Understanding ("MOU") between Village of Minier and the Illinois Environmental Protection Agency ("Illinois EPA") is entered into for the purpose of satisfying the requirements of 35 Ill. Adm. Code 742.1015 for the use of groundwater or water well ordinances as environmental institutional controls. The Illinois EPA has reviewed the groundwater or water well ordinance of Village of Minier (Attachment A) and determined that the ordinance prohibits the use of groundwater for potable purposes and/or the installation and use of new potable water supply wells by private entities but does not expressly prohibit those activities by the unit of local government itself. In such cases, 35 Ill. Adm. Code 742.1015(a) provides that the unit of local government may enter into an MOU with the Illinois EPA to allow the use of the ordinance as an institutional control.
- B. The intent of this Memorandum of Understanding is to specify the responsibilities that must be assumed by the unit of local government to satisfy the requirements for MOUs as set forth at 35 Ill. Adm. Code 742.1015(i).

II. DECLARATIONS AND ASSUMPTION OF RESPONSIBILITY

In order to ensure the long-term integrity of the groundwater or water well ordinance as an environmental institutional control and that risk to human health and the environment from contamination left in place in reliance on the groundwater or water well ordinance is effectively managed, Village of Minier hereby assumes the following responsibilities pursuant to 35 Ill. Adm. Code 742.1015(d)(2) and (i):

- A. Village of Minier will notify the Illinois EPA Bureau of Land of any proposed ordinance changes or requests for variance at least 30 days prior to the date the local government is scheduled to take action on the proposed change or request (35 Ill. Adm. Code 742.1015(i)(4));
- B. Village of Minier will maintain a registry of all sites within its corporate limits that have received "No Further Remediation" determinations in reliance on the ordinance from the Illinois EPA (35 Ill. Adm. Code 742.1015(i)(5));
- C. Village of Minier will review the registry of sites established under paragraph II. B. prior to siting public potable water supply wells within the area covered by the ordinance (35 Ill. Adm. Code 742.1015(i)(6)(A));



- D. Village of Minier will determine whether the potential source of potable water has been or may be affected by contamination left in place at the sites tracked and reviewed under paragraphs II. B. and C. (35 Ill. Adm. Code 742.1015(i)(6)(B)); and
- E. Village of Minier will take action as necessary to ensure that the potential source of potable water is protected from contamination or treated before it is used as a potable water supply (35 Ill. Adm. Code 742.1015(i)(6)(C)).

NOTE: Notification under paragraph II. A. above or other communications concerning this MOU should be directed to:

Manager, Division of Remediation Management  
 Bureau of Land  
 Illinois Environmental Protection Agency  
 P.O. Box 19276  
 Springfield, IL 62794-9276

### III. SUPPORTING DOCUMENTATION

The following documentation is required by 35 Ill. Adm. Code 742.1015(i) and is attached to this MOU:

- A. Attachment A: A copy of the groundwater or water well ordinance certified by the city clerk or other official as the current, controlling law (35 Ill. Adm. Code 742.1015(i)(3));
- B. Attachment B: Identification of the legal boundaries within which the ordinance is applicable (certification by city clerk or other official that the ordinance is applicable everywhere within the corporate limits; if ordinance is not applicable throughout the entire city or village, legal description and map of area showing sufficient detail to determine where ordinance is applicable) (35 Ill. Adm. Code 742.1015(i)(2));
- C. Attachment C: A statement of the authority of the unit of local government to enter into the MOU (council resolution, code of ordinances, inherent powers of mayor or other official signing MOU -- attach copies) (35 Ill. Adm. Code 742.1015(i)(1)).

IN WITNESS WHEREOF, the lawful representatives of the parties have caused this MOU to be signed as follows:

FOR: Village of Minier  
 (Name of city or village)

BY: Neill Keneipp  
 (Name and title of signatory)  
 Neill Keneipp, Village President

DATE: 3/15/11

FOR: Illinois Environmental Protection Agency

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
Manager, Division of Remediation Management  
Bureau of Land

# Village of Minier

Neill Keneipp  
Village President



Sandy Lancaster  
Village Clerk

110 W. Central • Box 350 • Minier, Illinois 61759  
Phone: 309/392-2442 • Fax: 309/392-2906

February 2, 2015

Penny Silzer  
Midwest Environmental Consulting &  
Remediation Services Inc.  
22200 IL. Rte. 9, P.O. Box 614  
Tremont, IL. 61568-0614

Dear Penny:

Enclosed please find Ordinance #808, Ordinance #785, Ordinance #783 and Resolution #278 with an updated Certification for these documents.

If you have any other questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Sandy Lancaster". The signature is fluid and cursive, with the first name "Sandy" and last name "Lancaster" clearly legible.

Sandy Lancaster  
Village Clerk

Enclosure

R1203

VILLAGE OF MINIER

---

RESOLUTION NO. 278

A RESOLUTION OF THE VILLAGE OF MINIER,  
ILLINOIS, AUTHORIZING ENTERING INTO A  
MEMORANDUM OF UNDERSTANDING

---

ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS

THIS 1<sup>ST</sup> DAY OF APRIL, 2014

---

Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 1<sup>st</sup> day of April, 2014.

RESOLUTION NO. 278

A RESOLUTION OF THE VILLAGE OF MINIER, ILLINOIS, AUTHORIZING  
ENTERING INTO A MEMORANDUM OF UNDERSTANDING

---

WHEREAS, it is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois, enter into a Memorandum of Understanding with the Illinois Environmental Protection Agency; and

WHEREAS, pursuant to the Illinois Municipal Code, a municipality is authorized to enter into agreements with other governmental entities for lawful public purposes; and

WHEREAS, the Memorandum of Understanding is attached as Exhibit A.

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

SECTION 1. The foregoing recitals are incorporated herein as findings of the Village of Minier.

SECTION 2. The Village of Minier hereby determines that it is advisable, necessary, and in the interests of the public health, safety and welfare that the Municipality enter into a memorandum of understanding with the Illinois Environmental Protection Agency pursuant to the terms of the agreement that is attached as Exhibit A.

SECTION 3. The Village of Minier hereby approves and authorizes the Village president to execute the Memorandum of Understanding which is attached as Exhibit A.

SECTION 4. This Resolution is hereby published in pamphlet form by authority of the Village Board of the Village of Minier.

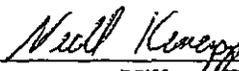
PASSED at a regular meeting of the Village Board of the Village of Minier held the 1<sup>st</sup> day of April, 2014.

AYES: Devine, Burt, LaDew, Crawford, Beccue & Needles

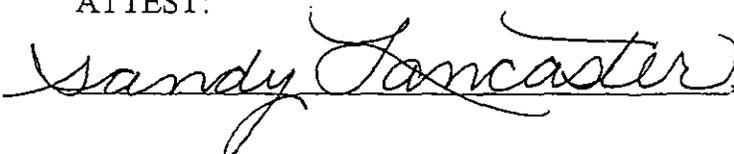
NAYS: None

ABSENT: None

APPROVED this 1<sup>st</sup> day of April, 2014.

  
\_\_\_\_\_  
Village President

ATTEST:

  
\_\_\_\_\_  
Village Clerk

**EXHIBIT A**  
**MEMORANDUM OF UNDERSTANDING**  
**BETWEEN THE VILLAGE OF MINIER AND THE ILLINOIS ENVIRONMENTAL**  
**PROTECTION AGENCY REGARDING THE USE OF A LOCAL GROUNDWATER OR**  
**WATER WELL ORDINANCE AS AN**  
**ENVIRONMENTAL INSTITUTIONAL CONTROL**

**I. PURPOSE AND INTENT**

- A. This Memorandum of Understanding ("MOU") between the Village of Minier and the Illinois Environmental Protection Agency ("Illinois EPA") is entered into for the purpose of satisfying the requirements of 35 Ill. Adm. Code 742.1015 for the use of groundwater or water well ordinances as environmental institutional controls. The Illinois EPA has reviewed the groundwater or water well ordinance of the Village of Minier (Attachment A) and determined that the ordinance prohibits the use of groundwater for potable purposes and/or the installation and use of new potable water supply wells by private entities but does not expressly prohibit those activities by the unit of local government itself. In such cases, 35 Ill. Adm. Code 742.1015(a) provides that the unit of local government may enter into an MOU with the Illinois EPA to allow the use of the ordinance as an institutional control.
- B. The intent of this Memorandum of Understanding is to specify the responsibilities that must be assumed by the unit of local government to satisfy the requirements for MOUs as set forth at 35 Ill. Adm. Code 742.1015(i).

**II. DECLARATIONS AND ASSUMPTION OF RESPONSIBILITY**

In order to ensure the long-term integrity of the groundwater or water well ordinance as an environmental institutional control and that risk to human health and the environment from contamination left in place in reliance on the groundwater or water well ordinance is effectively managed, the Village of Minier hereby assumes the following responsibilities pursuant to 35 Ill. Adm. Code 742.1015(d)(2) and (i):

- A. The Village of Minier will notify the Illinois EPA Bureau of Land of any proposed ordinance changes or requests for variance at least 30 days prior to the date the local government is scheduled to take action on the proposed change or request (35 Ill. Adm. Code 742.1015(i)(4));
- B. The Village of Minier will maintain a registry of all sites within its corporate limits that have received "No Further Remediation" determinations in reliance on the ordinance from the Illinois EPA (35 Ill. Adm. Code 742.1015(i)(5));
- C. The Village of Minier will review the registry of sites established under Paragraph II. B. prior to siting public potable water supply wells within the area covered by the ordinance (35 Ill. Adm. Code 742.1015(i)(6)(A));  
The Village of Minier will determine whether the potential source of potable water has been or may be affected by contamination left in place at the sites tracked and reviewed under paragraphs II. B. and C. (35 Ill. Adm. Code

742.1015(i)(6)(B)); and

- D. The Village of Minier will take action as necessary to ensure that the potential source of potable water is protected from contamination or treated before it is used as a potable water supply (35 Ill. Adm. Code 742.1015(i)(6)(C)).

NOTE: Notification under paragraph II. A. above or other communications concerning this MOU should be directed to:

**Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, Illinois 62794-9276**

### III. SUPPORTING DOCUMENTATION

The following documentation is required by 35 Ill. Adm. Code 742.1015(i) and is attached to this MOU:

- A. Attachment A: A copy of the groundwater or water well ordinance certified by the city clerk or other official as the current, controlling law (35 Ill. Adm. Code 742.1015(i)(3));
- B. Attachment B: Identification of the legal boundaries within which the ordinance is applicable (certification by city clerk or other official that the ordinance is applicable everywhere within the corporate limits; if ordinance is not applicable throughout the entire city or village, legal description and map of area showing sufficient detail to determine where ordinance is applicable) (35 Ill. Adm. Code 742.1015(i)(2));
- C. Attachment C: A statement of the authority of the unit of local government to enter into the MOU (council resolution, code of ordinances, inherent powers of mayor or other official signing MOU – attach copies) (35 Ill. Adm. Code 742.1015(i)(1)).

IN WITNESS WHEREOF, the lawful representatives of the parties have caused this MOU to be signed as follows:

**FOR: The Village of Minier**

BY: Neill Keneipp  
Neill Keneipp, Village President

DATE: 04/01/2014

**FOR: Illinois Environmental Protection Agency**

BY: \_\_\_\_\_  
Manager, Division of Remediation Management  
Bureau of Land

DATE: \_\_\_\_\_

**VILLAGE OF MINIER**

---

**ORDINANCE NO. 783**

**AN ORDINANCE OF THE VILLAGE OF MINIER,  
ILLINOIS AMENDING CHAPTER 9, ARTICLE 1,  
SECTION 9-1-16 OF THE VILLAGE CODE**

---

**ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS**

**THIS 4<sup>th</sup> DAY OF JANUARY, 2011**

---

**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 4<sup>th</sup> day of January, 2011.**

**ORDINANCE NO. 783**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS  
AMENDING THE WATER SYSTEM ORDINANCE**

---

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

SECTION 1. It is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois ("Village"), amend Chapter 9, Article 1, Section 9-1-16 the Water System Ordinance; and

SECTION 2. Certain properties in the Village have been used over a period of time for commercial/industrial purposes; and

SECTION 3. Because of said use, concentrations of certain chemical constituents in the groundwater beneath the Village may exceed Class I groundwater quality standards for potable resource groundwater as forth in 35 Illinois Administrative Code 620, or Tier 1 residential remediation objectives as set forth in 35 Illinois Administrative Code 742; and

SECTION 4. The Village desires to limit potential threats to human health from groundwater contamination while facilitating the redevelopment and productive use of properties that are the source of said chemical constituents; and

SECTION 5. Section 9-1-16 of Chapter 9 of the Code of the Village provides a listing of all properties where the use of private water systems is prohibited; and

SECTION 6. Chapter 9, Article 1, Section 9-1-16 of the Village Code of the Village of Minier is hereby amended to add the language set forth below; and

**NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER, ILLINOIS,** that Section 9-1-16 of Chapter 9 of the Code of the Village is amended as follows:

9-16-16: PRIVATE WATER SYSTEMS PROHIBITED: No person having his residence or place of business within the territorial limits of the Village waterworks and sewerage system shall be permitted to secure water for such residence, or place of business, located in the Village, otherwise than through the water mains of the Village, whenever the water mains of the water system of the Village are adjacent to any subdivided lot, or parcel of real estate upon which said residence or place of business is located, unless such system existed prior to installation of the public water main.

Notwithstanding the preceding paragraph, the use of private water systems is expressly prohibited because of the possibility of ground water contamination at the following location:

A. 208 Route 122, Minier, IL 61759

A tract described as follows: Starting at the Northeast corner of Lot 16 in Livesay's Addition to the Village of Minier, thence North to the south line of the public highway; thence East 166' to the place of beginning; thence east 90'; thence South to the North line of Livesay's addition; thence West 90'; thence north to POB in the NW 1/4 of the NE 1/4 Section 22, TWP 23 N, R2E, Tazewell County, ILL (Also known as part of Lot 17).

PIN: 19-19-22-201-013

SECTION 7. All ordinances or parts of ordinances in conflict herewith are hereby repealed;  
and

SECTION 8. This ordinance is hereby published in pamphlet form by authority of the Village Board of the Village of Minier; and

PASSED at a regular meeting of the Village Board of the Village of Minier held the 4<sup>th</sup> day of January, 2011.

AYES: Devine, Burt, Crawford & Needles

NAYS: None

ABSENT: J. Beccue & M. Beccue

APPROVED this 4<sup>th</sup> day of January, 2011.

Neil Kenney  
Village President

ATTEST:

Yandy Lancaster  
Village Clerk

VILLAGE OF MINIER

---

ORDINANCE NO. 785

AN ORDINANCE OF THE VILLAGE OF MINIER,  
ENTERING INTO A MEMORANDUM OF  
UNDERSTANDING WITH THE ILLINOIS  
ENVIRONMENTAL PROTECTION AGENCY

---

ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS

THIS 15TH DAY OF MARCH, 2011

---

Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 15th day of March, 2011.

ORDINANCE NO. 785

AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS  
ENTERING INTO A MEMORANDUM OF UNDERSTANDING WITH  
THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

---

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE  
VILLAGE OF MINIER, ILLINOIS:

SECTION 1. Certain properties in the Village have been used over a period of time for commercial/industrial purposes; and

SECTION 2. Because of said use, concentrations of certain chemical constituents in the groundwater beneath the Village may exceed Class I groundwater quality standards for potable resource groundwater as forth in 35 Illinois Administrative Code 620, or Tier 1 residential remediation objectives as set forth in 35 Illinois Administrative Code 742; and

SECTION 3. The Village desires to limit potential threats to human health from groundwater contamination while facilitating the redevelopment and productive use of properties that are the source of said chemical constituents; and

SECTION 4. Section 9-1-16 of Chapter 9 of the Code of the Village provides a listing of all properties where the use of private water systems is prohibited; and

SECTION 5. It is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois ("Village"), to enter into a Memorandum of Understanding with the Illinois Environmental Protection Agency to memorialize the institutional controls established to insure that the public water system is safe from contaminates; and

SECTION 7. All ordinances or parts of ordinances in conflict herewith are hereby repealed;  
and

SECTION 8. This ordinance is hereby published in pamphlet form by authority of the Village Board of the Village of Minier; and

NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER, ILLINOIS, that the Village President may enter into and execute the Memorandum of Understanding with the Illinois Environmental Protection Agency attached hereto as Exhibit A.

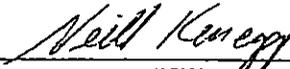
PASSED at a regular meeting of the Village Board of the Village of Minier held the  
15th day of March, 2011.

AYES: Devine, Burt, Crawford & Needles

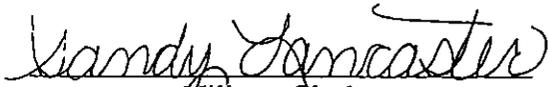
NAYS: None

ABSENT: J. Beccue & M. Beccue

APPROVED this 15th day of March, 2011.

  
\_\_\_\_\_  
Village President

ATTEST:

  
\_\_\_\_\_  
Village Clerk

**VILLAGE OF MINIER**

---

**RESOLUTION NO. 278**

A RESOLUTION OF THE VILLAGE OF MINIER,  
ILLINOIS, AUTHORIZING ENTERING INTO A  
MEMORANDUM OF UNDERSTANDING

---

**ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS**

**THIS 1<sup>ST</sup> DAY OF APRIL, 2014**

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**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 1<sup>st</sup> day of April, 2014.**

RESOLUTION NO. 278

A RESOLUTION OF THE VILLAGE OF MINIER, ILLINOIS, AUTHORIZING  
ENTERING INTO A MEMORANDUM OF UNDERSTANDING

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WHEREAS, it is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois, enter into a Memorandum of Understanding with the Illinois Environmental Protection Agency; and

WHEREAS, pursuant to the Illinois Municipal Code, a municipality is authorized to enter into agreements with other governmental entities for lawful public purposes; and

WHEREAS, the Memorandum of Understanding is attached as Exhibit A.

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

SECTION 1. The foregoing recitals are incorporated herein as findings of the Village of Minier.

SECTION 2. The Village of Minier hereby determines that it is advisable, necessary, and in the interests of the public health, safety and welfare that the Municipality enter into a memorandum of understanding with the Illinois Environmental Protection Agency pursuant to the terms of the agreement that is attached as Exhibit A.

SECTION 3. The Village of Minier hereby approves and authorizes the Village president to execute the Memorandum of Understanding which is attached as Exhibit A.

SECTION 4. This Resolution is hereby published in pamphlet form by authority of the Village Board of the Village of Minier.

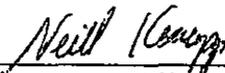
PASSED at a regular meeting of the Village Board of the Village of Minier held the 1<sup>st</sup> day of April, 2014.

AYES: Devine, Burt, LaDew, Crawford, Beccue & Needles

NAYS: None

ABSENT: None

APPROVED this 1<sup>st</sup> day of April, 2014.

  
\_\_\_\_\_  
Village President

ATTEST:

  
\_\_\_\_\_  
Village Clerk

**EXHIBIT A**  
**MEMORANDUM OF UNDERSTANDING**  
**BETWEEN THE VILLAGE OF MINIER AND THE ILLINOIS ENVIRONMENTAL**  
**PROTECTION AGENCY REGARDING THE USE OF A LOCAL GROUNDWATER OR**  
**WATER WELL ORDINANCE AS AN**  
**ENVIRONMENTAL INSTITUTIONAL CONTROL**

**I. PURPOSE AND INTENT**

- A. This Memorandum of Understanding ("MOU") between the Village of Minier and the Illinois Environmental Protection Agency ("Illinois EPA") is entered into for the purpose of satisfying the requirements of 35 Ill. Adm. Code 742.1015 for the use of groundwater or water well ordinances as environmental institutional controls. The Illinois EPA has reviewed the groundwater or water well ordinance of the Village of Minier (Attachment A) and determined that the ordinance prohibits the use of groundwater for potable purposes and/or the installation and use of new potable water supply wells by private entities but does not expressly prohibit those activities by the unit of local government itself. In such cases, 35 Ill. Adm. Code 742.1015(a) provides that the unit of local government may enter into an MOU with the Illinois EPA to allow the use of the ordinance as an institutional control.
- B. The intent of this Memorandum of Understanding is to specify the responsibilities that must be assumed by the unit of local government to satisfy the requirements for MOUs as set forth at 35 Ill. Adm. Code 742.1015(i).

**II. DECLARATIONS AND ASSUMPTION OF RESPONSIBILITY**

In order to ensure the long-term integrity of the groundwater or water well ordinance as an environmental institutional control and that risk to human health and the environment from contamination left in place in reliance on the groundwater or water well ordinance is effectively managed, the Village of Minier hereby assumes the following responsibilities pursuant to 35 Ill. Adm. Code 742.1015(d)(2) and (i):

- A. The Village of Minier will notify the Illinois EPA Bureau of Land of any proposed ordinance changes or requests for variance at least 30 days prior to the date the local government is scheduled to take action on the proposed change or request (35 Ill. Adm. Code 742.1015(i)(4));
- B. The Village of Minier will maintain a registry of all sites within its corporate limits that have received "No Further Remediation" determinations in reliance on the ordinance from the Illinois EPA (35 Ill. Adm. Code 742.1015(i)(5));
- C. The Village of Minier will review the registry of sites established under Paragraph II. B. prior to siting public potable water supply wells within the area covered by the ordinance (35 Ill. Adm. Code 742.1015(i)(6)(A));  
The Village of Minier will determine whether the potential source of potable water has been or may be affected by contamination left in place at the sites tracked and reviewed under paragraphs II. B. and C. (35 Ill. Adm. Code

742.1015(i)(6)(B)); and

- D. The Village of Minier will take action as necessary to ensure that the potential source of potable water is protected from contamination or treated before it is used as a potable water supply (35 Ill. Adm. Code 742.1015(i)(6)(C)).

NOTE: Notification under paragraph II. A. above or other communications concerning this MOU should be directed to:

**Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, Illinois 62794-9276**

### III. SUPPORTING DOCUMENTATION

The following documentation is required by 35 Ill. Adm. Code 742.1015(i) and is attached to this MOU:

- A. Attachment A: A copy of the groundwater or water well ordinance certified by the city clerk or other official as the current, controlling law (35 Ill. Adm. Code 742.1015(i)(3));
- B. Attachment B: Identification of the legal boundaries within which the ordinance is applicable (certification by city clerk or other official that the ordinance is applicable everywhere within the corporate limits; if ordinance is not applicable throughout the entire city or village, legal description and map of area showing sufficient detail to determine where ordinance is applicable) (35 Ill. Adm. Code 742.1015(i)(2));
- C. Attachment C: A statement of the authority of the unit of local government to enter into the MOU (council resolution, code of ordinances, inherent powers of mayor or other official signing MOU – attach copies) (35 Ill. Adm. Code 742.1015(i)(1)).

IN WITNESS WHEREOF, the lawful representatives of the parties have caused this MOU to be signed as follows:

**FOR: The Village of Minier**

BY: Neill Keneipp  
Neill Keneipp, Village President

DATE: 04/01/2014

**FOR: Illinois Environmental Protection Agency**

BY: \_\_\_\_\_  
Manager, Division of Remediation Management  
Bureau of Land

DATE: \_\_\_\_\_

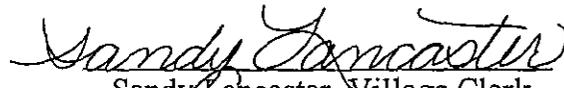
CERTIFICATION

I SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that the attached map is a true and correct legal boundary of the Village of Minier and that the Groundwater ordinance is applicable everywhere within the Village limits.

Dated at Minier, Illinois, this 15<sup>th</sup> day of March, 2011.

(SEAL)

  
Sandy Lancaster, Village Clerk

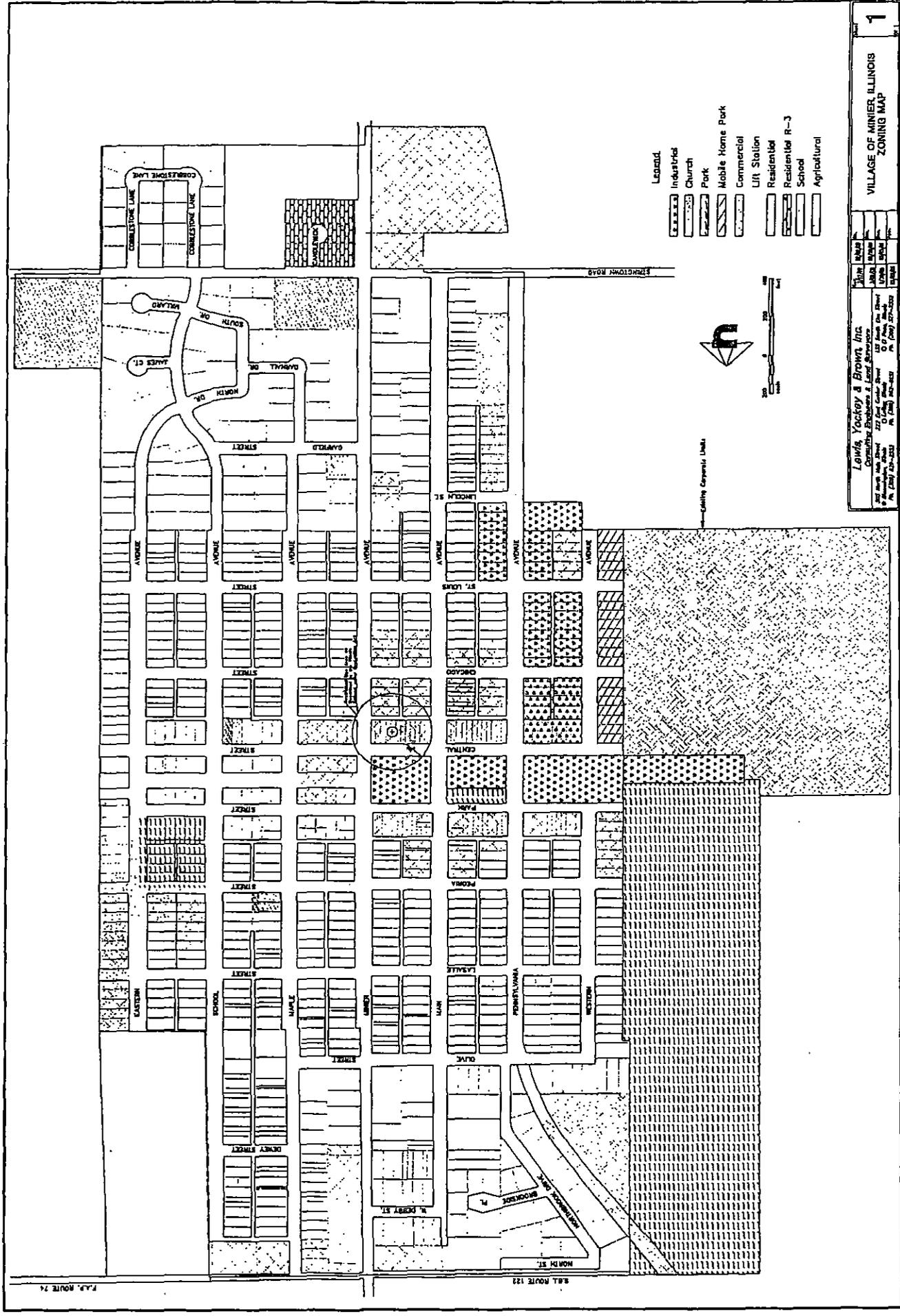
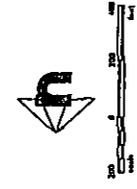
**1**

VILLAGE OF MINIER, ILLINOIS  
ZONING MAP

*Lewis, Yocoy & Brown, Inc.*  
Consulting Engineers & Land Surveyors  
202 North 10th Street  
St. Louis, Missouri 63103  
Phone: (314) 433-1100

*John Lewis*  
Mayor  
1988  
1992  
1996  
2000  
2004

- Legend
- Industrial
- Church
- Park
- Mobile Home Park
- Commercial
- Light Station
- Residential R-3
- School
- Agricultural



**CERTIFICATION OF ORDINANCE**

I SANDY LANCASTER, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that on January 04, 2011 the Corporate Authorities of the above municipality passed and approved Ordinance No. 783.

Ordinance No. 783, including the cover sheet thereof, was prepared and published in pamphlet form on the 04<sup>th</sup> day of January, 2011. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

I further certify that on March 15, 2011 the Corporate Authorities of the above municipality passed and approved Ordinance No. 785.

Ordinance No. 785, including the cover sheet thereof, was prepared and published in pamphlet form on the 15<sup>th</sup> day of March, 2011. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

I further certify that on March 29, 2013 the Corporate Authorities of the above Municipality passed and approved Ordinance No. 808.

Ordinance No. 808, including the cover sheet thereof, was prepared and published in pamphlet form on the 29<sup>th</sup> day of March, 2013. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

I further certify that on April 1, 2014 the Corporate Authorities of the above municipality passed and approve Resolution No. 278.

Resolution No. 278, including the cover sheet thereof, was prepared and published in pamphlet form on the 01<sup>st</sup> day of April, 2014. Copies of the Ordinance were also available for public inspection upon request in the office of the Village Clerk.

Dated at Minier, Illinois, this 02<sup>nd</sup> day of February, 2015.

(SEAL)

  
Sandy Lancaster, Village Clerk

VILLAGE OF MINIER

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ORDINANCE NO. 808

AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS PROHIBITING THE  
USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE  
INSTALLATION OR THE USE OF POTABLE WATER SUPPLY WELLS OR BY ANY  
OTHER METHOD

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ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS

THIS 19th DAY OF MARCH 2013

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Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 19th day of March, 2013.

**ORDINANCE NO. 808**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS PROHIBITING THE  
USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE  
INSTALLATION OR THE USE OF POTABLE WATER SUPPLY WELLS OR BY ANY  
OTHER METHOD**

---

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE  
VILLAGE OF MINIER, ILLINOIS:

WHEREAS, certain properties in the Village of Minier ("Village"), Illinois have been used  
over a period of time for commercial/industrial purposes; and

WHEREAS, because of said use, concentrations of certain chemical constituents in the  
groundwater beneath the Village may exceed Class I groundwater quality standards for potable  
resource groundwater as set forth in 35 Illinois Administrative Code 620 or Tier 1 remediation  
objectives as set forth in 35 Illinois Administrative Code 742; and

WHEREAS, the Village to limit potential threats to human health from groundwater  
contamination while facilitating the redevelopment and productive use of properties that are  
the source of said chemical constituents;

**NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER,  
ILLINOIS:**

**Section One.** Use of groundwater as a potable water supply prohibited.

Except for such uses or methods in existence before the effective date of  
this ordinance, the use or attempt to use as a potable water supply  
groundwater from within the corporate limits of the Village of Minier, as a  
potable water supply, by the installation or drilling of wells or by any other  
method is hereby prohibited. This prohibition does not include the Village  
of Minier.

**Section Two.** Penalties.

Any person violating the provisions of this ordinance shall be subject to a fine of  
up to \$250.00 for each violation.

**Section Three.** Definitions.

"Person" is any individual, partnership, co-partnership, firm, company, limited

liability company, corporation, association, joint stock company, trust, estate, political subdivision, or any other legal entity, or their legal representatives, agents or assigns.

"Potable water" is any water used for human or domestic consumption, including, but not limited to, water used for drinking, bathing, swimming, washing dishes, or preparing foods.

**Section Four. Memorandum of Understanding.**

The President of the Village of Minier was previously authorized and directed to enter into a Memorandum of Understanding on or about January 4, 2011 with the Illinois Environmental Protection Agency ("Illinois EPA") in which the Village of Minier assumes responsibility for tracking all sites that have received no further remediation determinations from the Illinois EPA, notifying the Illinois EPA of changes to this ordinance, and taking certain precautions when siting public potable water supply wells.

**Section Five. Repealer.**

All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed insofar as they are in conflict with this ordinance.

**Section Six. Severability.**

If any provision of this ordinance or its application to any person or under any circumstances is adjudged invalid, such adjudication shall not affect the validity of the ordinance as a whole or of any portion not adjudged invalid.

**Section Seven. Effective date.**

This ordinance shall be in full force and effect from and after its passage, approval and publication as required by law.

PASSED at a regular meeting of the Village Board of the Village of Minier held the 19th day of March, 2013.

AYES: Devine, Burt, LaDew, Crawford, Beccue & Needles

NAYS: None

ABSENT: None

APPROVED this 19th day of March, 2013.

*Neil Kenney*  
Village President

ATTEST:

*Gandy Lancaster*  
Village Clerk



# Illinois Department of Transportation

Office of Chief Counsel  
2300 South Dirksen Parkway / Springfield, Illinois / 62764

October 4, 2013

Midwest Environmental Consulting & Remediation Services, Inc.  
Attn: Penny Silzer  
PO Box 614  
Tremont, IL 61568-0614

Re: TACO Agreement: HAA 1342 in Minier, IL

Dear Ms. Silzer:

I have enclosed a fully executed original Highway Authority Agreement for the above site.

Please submit the agreement to the Illinois Environmental Protection Agency for their approval.

Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in cursive script, appearing to read "Michael Prater".

Michael Prater  
Assistant Chief Counsel

Enclosure

R1226

## HIGHWAY AUTHORITY AGREEMENT

This Agreement is entered into this 6<sup>th</sup> day of September, 2013 pursuant to 35 Ill. Adm. Code 742.1020 by and between the Warsaw ITCO "Owner/Operator" and Illinois Department of Transportation "Highway Authority," collectively known as the "Parties."

**WHEREAS**, Warsaw ITCO is the owner or operator of one or more leaking underground storage tanks presently or formerly located at *IL Route 122, Minier, Illinois* ("the Site");

**WHEREAS**, as a result of one or more releases of contaminants from the above referenced underground storage tanks "the Release(s)", soil and/or groundwater contamination at the Site exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742;

**WHEREAS**, the soil and/or groundwater contamination exceeding Tier 1 residential remediation objectives extends or may extend into the Highway Authority's right-of-way;

**WHEREAS**, the Owner/Operator is conducting corrective action in response to the Release(s);

**WHEREAS**, the Parties desire to prevent groundwater beneath the Highway Authority's right-of-way that exceeds Tier 1 remediation objectives from use as a supply of potable or domestic water and to limit access to soil within the right-of-way that exceeds Tier 1 residential remediation objectives so that human health and the environment are protected during and after any access;

**NOW, THEREFORE**, the Parties agree as follows:

1. The recitals set forth above are incorporated by reference as if fully set forth herein.
2. The Illinois Emergency Management Agency has assigned incident number **981987** to the Release(s).
3. Attached as Exhibit A is a scaled map(s) prepared by the Owner/Operator that shows the Site and surrounding area and delineates the current and estimated future extent of soil and groundwater contamination above the applicable Tier 1 residential remediation objectives as a result of the Release(s).
4. Attached as Exhibit B is a table(s) prepared by the Owner/Operator that lists each contaminant of concern that exceeds its Tier 1 residential remediation objective, its Tier 1 residential remediation objective and its concentrations within the zone where Tier 1 residential remediation objectives are exceeded. The locations of the concentrations listed in Exhibit B are identified on the map(s) in Exhibit A.
5. Attached as Exhibit C is a scaled map prepared by the Owner/Operator showing the area of the Highway Authority's right-of-way that is governed by this agreement ("Right-of-Way"). Because Exhibit C is not a surveyed plat, the Right-of-Way boundary may be an approximation of the actual Right-of-Way lines.
6. The Highway Authority stipulates it has jurisdiction over the Right-of-Way that gives it sole control over the use of the groundwater and access to the soil located within or beneath the Right-of-Way.
7. The Highway Authority agrees to prohibit within the Right-of-Way all potable and domestic uses of groundwater exceeding Tier 1 residential remediation objectives.

8. The Highway Authority further agrees to limit access by itself and others to soil within the Right-of-Way exceeding Tier 1 residential remediation objectives. Access shall be allowed only if human health (including worker safety) and the environment are protected during and after any access. The Highway Authority may construct, reconstruct, improve, repair, maintain and operate a highway upon the Right-of-Way, or allow others to do the same by permit. In addition, the Highway Authority and others using or working in the Right-of-Way under permit have the right to remove soil or groundwater from the Right-of-Way and dispose of the same in accordance with applicable environmental laws and regulations. The Highway Authority agrees to issue all permits for work in the Right-of-Way, and make all existing permits for work in the Right-of-Way, subject to the following or a substantially similar condition:

As a condition of this permit the permittee shall request the office issuing this permit to identify sites in the Right-of-Way where a Highway Authority Agreement governs access to soil that exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742. The permittee shall take all measures necessary to protect human health (including worker safety) and the environment during and after any access to such soil.

9. This agreement shall be referenced in the Agency's no further remediation determination issued for the Release(s).
10. The Agency shall be notified of any transfer of jurisdiction over the Right-of-Way at least 30 days prior to the date the transfer takes effect. This agreement shall be null and void upon the transfer unless the transferee agrees to be bound by this agreement as if the transferee were an original party to this agreement. The transferee's agreement to be bound by the terms of this agreement shall be memorialized at the time of transfer in a writing ("Rider") that references this Highway Authority Agreement and is signed by the Highway Authority, or subsequent transferor, and the transferee.
11. This agreement shall become effective as a Highway Authority Agreement on the date the Agency issues a no further remediation determination for the Release(s). It shall remain effective as a Highway Authority Agreement until the Right-of-Way is demonstrated to be suitable for unrestricted use and the Agency issues a new no further remediation determination to reflect there is no longer a need for this agreement, or until the agreement is otherwise terminated or voided.
12. In addition to any other remedies that may be available, the Agency may bring suit to enforce the terms of this agreement or may, in its sole discretion, declare this agreement null and void if any of the Parties or any transferee violates any term of this agreement. The Parties or transferee shall be notified in writing of any such declaration.
13. This agreement shall be null and void as a Highway Authority Agreement if a court of competent jurisdiction strikes down any part or provision of the agreement.
14. This agreement supersedes any prior written or oral agreements or understandings between the Parties on the subject matter addressed herein. It may be altered, modified or amended only upon the written consent and agreement of the Parties.
15. Any notices or other correspondence regarding this agreement shall be sent to the Parties at following addresses:

Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, IL 62974-9276

If to Owner/Operator:

John Warsaw  
P. O. Box 886  
Minier, Illinois 61759

If to Department:

Illinois Department of Transportation  
Region Three Engineer  
Attn: District Four Environmental Studies Unit  
401 Main Street  
Peoria, Illinois 61602

And to:

Midwest Environmental Consulting  
Attn: Penny Silzer  
PO Box 614  
Tremont, Illinois 61568

And to:

Illinois Department of Transportation  
Attn: Assistant Chief Counsel  
2300 S. Dirksen Parkway, Room 313  
Springfield, Illinois 62764

16. This Agreement is not binding upon the Department until it is executed by the undersigned representative of the Department. Prior to execution by the undersigned representative of the Department this Agreement constitutes an offer by Owner/Operator. The duly authorized representatives of Owner/Operator have signed this Agreement and this Agreement is binding upon them, their successors and assigns.
17. The IEPA and Illinois Attorney General "AG" must review and approve this Agreement, and this Agreement shall be referenced in the IEPA's "No Further Remediation" determination in the chain of title for the Site in the county where the Site is located. This Agreement shall be null and void as a Highway Authority Agreement should the IEPA or AG not approve it or should it not be referenced in the "No Further Remediation" determination, provided, however, that this Agreement shall be effective between the Owner/Operator and the Department immediately upon signature by their representatives.
18. The Owner/Operator agrees to defend, indemnify and hold harmless the Department, and other highway authorities, if any, maintaining the highway Right-of-Way by an agreement with the Department, and the Department's agents, contractors or employees for all obligations asserted against or costs incurred by them, including reasonable attorney's fees and court costs, associated with the release of Contaminants from the Site, regardless whether said obligations or costs were caused by the negligence, but not the gross negligence, of them.
19. As an additional consideration, Owner/Operator agrees to reimburse the Department for reasonable costs to protect human health and the environment, including, but not limited to, identifying, investigating, handling, storing and disposing of contaminated soil and/or groundwater in the Right-of-Way as a result of the release of contaminants at this Site. It has been determined that the Department has not incurred any reimbursable costs at the time this Agreement is executed by the undersigned representative of the Department. If future costs are incurred, a cashier's check made payable to "Treasurer, State of Illinois" shall be tendered to the Department of Transportation upon demand by the Department.
20. Violation of the terms of this Agreement by Owner/Operator, or their successors in interest, may be grounds for voidance of this Agreement as a Highway Authority Agreement. Violation of the terms of this Agreement by the Department will not void this Agreement, unless the IEPA has determined that the violation is grounds for voiding this Agreement as a Highway Authority Agreement and the Department has not cured the violation within such time as IEPA has granted to cure the violation.

21. This Agreement is in settlement of claims the Department may have arising from the release of Contaminants into the Right-of-Way associated with IEMA incident number 981987.
22. Prior to accessing or granting access to the soil as provided in Paragraph 8 herein, the Department will first give Owner/Operator written notice, unless there is an immediate threat to the health or safety to any individual or to the public, that it intends to perform a site investigation in the Right-of-Way and remove or dispose of contaminated soil or groundwater to the extent necessary for its work. Failure to give notice is not a violation of this Agreement. The removal or disposal shall be based upon the site investigation (which may be modified by field conditions during excavation). A copy of the site investigation report will be provided to Owner/Operator. If practicable, as reasonably determined by the Department, the Department may provide Owner/Operator with an opportunity to perform the Site investigation and to remove and dispose of the contaminated soil and/or groundwater necessary for the Department's work in advance of that work.

The Owner/Operator shall reimburse the reasonable costs incurred by the Department to perform the site investigation and to dispose of any contaminated soil or groundwater, provided, however, that if notice to Owner/Operator has not been given and there was no immediate threat to health or safety, reimbursement for those costs shall be limited to \$10,000.00. There is a rebuttable presumption that the Contaminants found in the highway Right-of-Way arose from the release of Contaminants from the Site. Should Owner/Operator not reimburse the reasonable costs under the conditions set forth herein, this Agreement shall be null and void, at the Department's option, upon written notice to Owner/Operator by the Department that those costs have not been reimbursed. Owner/Operator may cure that problem within twenty working days by making payment, or may seek to enjoin that result.

23. The Department's sole responsibility under this Agreement with respect to others using the highway Right-of-Way under permit from the Department is to include the following, or similar language, in the future standard permit provisions and to make an effort to notify its current permit holders of the following:

As a condition of this permit the permittee shall request the office issuing this permit to identify sites in the Right-of-Way where a Highway Authority Agreement governs access to soil that exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742. The permittee shall take all measures necessary to protect human health (including worker safety) and the environment during and after any access to such soil.

Owner/Operator hereby releases the Department from liability for breach of this Agreement by others under permit and agrees to defend and indemnify the Department against claims that may arise from others under permit causing a breach of this Agreement. Owner/ Operator agrees that its personnel, if any, at the Site who are aware of this Agreement will notify anyone they know is excavating in the Right-of-Way about this Agreement.

24. Should the Department breach this Agreement, Owner/Operator's sole remedy is for an action for damages in the Illinois Court of Claims. Any and all claims for damages against the Department, its agents, contractors, employees or its successors in interest arising at any time for a breach of paragraphs 7 and 8 of this Agreement are limited to an aggregate maximum of \$20,000.00. No other breach by the Department, its agents, contractors, employees and its successors in interest of a provision of this Agreement is actionable in either law or equity by Owner/Operator against the Department or them and Owner/Operator hereby releases the Department, its agents, contractors, employees and its successors in interest for any cause of action it may have against them, other than as allowed in this paragraph, arising under this Agreement or environmental laws, regulations or common law governing the contaminated soil or groundwater in the highway Right-of-Way. Should the Department convey, vacate or transfer jurisdiction of that highway Right-of-Way, Owner/Operator

may pursue an action under this Agreement against the successors in interest, other than a State agency, in a court of law.

25. This Agreement is entered into by the Department in recognition of laws passed by the General Assembly and regulations adopted by the Pollution Control Board which encourage a tiered-approach to remediating environmental contamination. This Agreement is entered into by the Department in the spirit of those laws and under its right and obligations as a highway authority.

Should any provisions of this Agreement be struck down as beyond the authority of the Department, however, this Agreement shall be null and void.

**IN WITNESS WHEREOF**, Owner/Operator, Warsaw ITCO, has caused this Agreement to be signed by its duly authorized representative.

BY: *John Warsaw*  
John Warsaw  
President

DATE: 15 August 2013

IN WITNESS WHEREOF, the Department has caused this Agreement to be signed by its Secretary.

Illinois Department of Transportation

BY: *Ann L. Schneider*  
Ann L. Schneider  
Secretary

DATE: 9/6/13

This Agreement is approved on behalf of the Office of the Illinois Attorney General.

BY: *Matthew J. Dunn*  
Matthew J. Dunn  
Assistant Attorney General  
Chief, Division of Environmental/Asbestos Litigation

DATE: 9/30/13

**Exhibit: A**

Agricultural

Route 122

Sump (cleanout)

Sump (cleanout)

Sump (pump)

Agricultural

Maple Street

Riegler's Welding & Repair Service

Garage

pole barn

Garage

House

House

Garage

School Ave

House

Present US Location

Pump Island

Warsaw ITCO

car wash

5000 gal. gasoline ASTs

gravel

concrete

grass

grass

grass

electrical lines

Gravel drive

property line

B-7

MW-7

B-5

MW-2

MW-6

MW-3

B-1/B-1a

B-4

B-6

T-1

T-2

T-3

T-4

T-5

T-6

T-7

T-8

T-9

T-10

MW-3  
+ = Existing Monitoring Well Location

B-2  
• = Existing Boring Location

FIGURE 1

Extent Benzene  
>0.03 ppm in Soil  
Warsaw ITCO  
Minier, IL

Date: 10/19/10

Drawn by: PLS

Job No.: 9890

Approved by: AMG

M.E.C.R.S., Inc.



Agricultural

Route 122

Extent Benzene in GW > 0.005 ppm

Sump (cleanout)

Sump (cleanout)

Sump (pump)

Agricultural

Maple Street

Page 8 of 13



APPROXIMATE SCALE

School Ave

### FIGURE 2

Extent Benzene Contamination  
In Groundwater

Warsaw ITCO  
Minier, IL

Date: 10/19/10

Drawn by: PLS

Job No.: 9890

Approved by: AMG

## M.E.C.R.S., Inc.

HAA 1342

- MW-3  
+ = Existing Monitoring Well Location
- B-2  
• = Existing Boring Location

**Exhibit: B**

TABLE 1.  
Soil Analytical Results  
Warsaw-ITCO  
Minier, IL

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX
B-1, 8-10'	5/3/2000	<0.002	<0.002	<0.002	<0.005	<0.011
B-2, 4-6'	5/3/2000	0.810	1.300	1.700	6.500	10.310
B-2, 6-8'	5/3/2000	0.600	0.220	0.420	1.900	3.140
B-2, 8-10'	5/3/2000	21.0	41.0	47.0	190.0	299.0
B-3, 6-8'	5/3/2000	0.400	0.120	0.210	0.460	1.190
B-3, 8-10'	5/3/2000	2.300	2.100	21	110	135.400
MW-1, 6-8'	5/4/2000	<0.002	<0.002	<0.002	<0.005	<0.011
MW-2, 8-10'	5/3/2000	<0.002	<0.002	<0.002	<0.005	<0.011
MW-3, 8-10'	5/3/2000	<0.002	<0.002	0.006	<0.005	<0.0147
MW-4, 4-6'	5/4/2000	0.230	0.220	0.870	2.500	3.820
MW-4, 6-8'	5/4/2000	0.300	1.200	5.400	20.000	26.900
B-4, 0.5-2.5'	8/23/2001	0.0081 M	0.019 M	0.0447 M	0.0772 M	0.149 M
B-4, 4-6'	8/23/2001	11.6 ME	42.7 ME	9.72 ME	38.0 ME	102.02 ME
B-5, 6-8'	8/23/2001	0.049	0.186 E	0.038	0.130	0.403
B-6, 4-6'	8/23/2001	0.020	0.053	0.031	0.090	0.194
B-6, 8-10'	8/23/2001	0.007	0.012	<0.0024	0.011	<0.0323
B-7, 8-10'	8/23/2001	0.0167 M	0.0615 M	0.0139 M	0.0395 M	0.1316 M
B-7, 12-14'	8/23/2001	0.754	<0.0613	<0.0613	<0.153	<1.0296
MW-5, 8-10'	8/23/2001	0.494 M	4.75 M	5.89 M	7.57 M	18.704 M
MW-6, 6-8'	8/23/2001	0.007	0.012	0.006	0.011	0.037
MW-7, 4-6'	8/23/2001	0.012	0.025	0.011	0.020	0.068
MW-7, 8-10	8/23/2001	0.0155 M	0.0202 M	0.007	0.012	0.054
T-1	10/20/2003	<0.0026	0.0032	<0.0026	<0.0065	<0.0149
T-2	10/20/2003	<0.0026	<0.0026	<0.0026	<0.0065	<0.0143
T-3	10/20/2003	<0.0024	0.0051	0.0051	0.0142	<0.0268
T-4	10/20/2003	<0.0024	<0.0024	<0.0024	<0.0059	<0.0131
T-5	10/20/2003	0.0034	0.0408	0.3600	0.9470	1.3512
T-6	10/20/2003	0.0853	0.6350	1.8400	7.1400	9.7003
T-7	10/20/2003	0.0855	0.0438	1.1200	2.4600	3.7093
T-8	10/20/2003	<0.0025	0.0066	0.0189	0.0568	<0.0848
T-9	10/20/2003	<0.0024	<0.0024	<0.0024	<0.0061	<0.0133
T-10	10/20/2003	<0.0025	<0.0025	<0.0025	<0.0062	<0.0137

## Notes:

- All results in mg/kg (parts per million, ppm).
- IEPA Tier 1 Residential Cleanup Objectives

Benzene	Toluene	Ethylbenzene	Xylenes (total)
0.03	12	13	150

- All bolded values are above Tier 1 Residential Cleanup Objectives
- M = Matrix interferences identified.
- E = Estimated - Value outside linear calibration curve.

Warsaw - ITCO

Minier, Illinois

Sample #	Date	DTW	GWE	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX
<b>MW-1</b> Elevation Top of Casing = 99.82								
SC	5/12/2000	5.89	93.73	4.3	<1.0	<1.0	<3.0	<9.3
1	10/24/2000	7.76	91.86	2.4	<1.0	<1.0	<3.0	<7.4
2	8/23/2001	6.76	92.86	524 E	<2.0	<2.0	<5.0	<533 E
3	11/13/2001	6.26	93.36	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.41	94.21	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.65	94.97	NS	NS	NS	NS	NS
<b>MW-2</b> Elevation Top of Casing = 99.82								
SC	5/9/2000	5.51	93.77	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	7.52	91.76	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	4.35	94.93	2.6 M	<2.0 M	<2.0	7.1	<13.7
3	11/13/2001	6.01	93.27	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.12	94.16	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.38	94.90	NS	NS	NS	NS	NS
<b>MW-3</b> Elevation Top of Casing = 99.100								
SC	5/9/2000	6.09	93.91	<1.0	<1.0	<1.0	<3.0	<6.0
1	10/24/2000	8.04	91.96	<1.0	<1.0	<1.0	<3.0	<6.0
2	8/23/2001	6.22	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
3	11/13/2001	6.20	93.80	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	5.37	94.63	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	4.34	95.66	NS	NS	NS	NS	NS
<b>MW-4</b> Elevation Top of Casing = 99.84								
SC	5/9/2000	5.90	93.94	2,600	12,000	4,500	18,000	37,100
1	10/24/2000	7.80	92.04	2,300	5,200	4,000	13,000	24,500
2	8/23/2001	6.67	93.17	2,290 M	2,380 M	8,150	23,600 E	36,420 E
3	11/13/2001	6.11	93.73	1,910	3,960	3,360	10,000	19,230
4	2/14/2002	5.00	94.84	1,100	1,200	2,900	5,500	10,700
5	1/24/2005	4.47	95.37	NS	NS	NS	NS	NS
<b>MW-5</b> Elevation Top of Casing = 99.57								
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	4.82	94.75	78.3 M	2.4 M	23.9	26.3	130.9
3	11/13/2001	5.67	93.90	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.86	1.4	2.2	1.5	4.5	9.6
5	1/24/2005	3.89	95.68	NS	NS	NS	NS	NS
<b>MW-6</b> Elevation Top of Casing = 100.07								
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	6.55	92.82	4.1	<2.0	<2.0	10.4	<18.5
3	11/13/2001	5.59	93.78	<2.0	<2.0	<2.0	<5.0	<11.0
4	2/14/2002	4.71	94.66	<1.0	<1.0	<1.0	<3.0	<6.0
5	1/24/2005	WELL ICED OVER		NS	NS	NS	NS	NS
<b>MW-7</b> Elevation Top of Casing = 100.07 WELL DESTROYED AT TIME OF 1/25/05 DTW MEASUREMENT								
SC	5/9/2000	--	--	--	--	--	--	--
1	10/24/2000	--	--	--	--	--	--	--
2	8/23/2001	7.28	92.79	<2.0	<2.0	<2.0	5.9	<11.9
3	11/13/2001	6.23	93.84	117 E	<2.0	<2.0	<5.0	<126 E
4	2/14/2002	5.52	94.55	7	<1.0	<1.0	<3.0	<12.0
5	1/24/2005	--	--	NS	NS	NS	NS	NS

1. All results reported in ug/kg (i.e. parts per billion, ppb)

2. IEPA Tier 1 Cleanup Objectives (ug/kg):

Benzene	Toluene	Ethylbenzene	Xylenes
5	1,000	700	10,000

3. -- = No data available

4. MDL = Method Detection Limit

5. DTW = Depth to Water

6. GWE = Groundwater Elevation referenced to datum point

7. NA/NS = Not analyzed/not sampled this event

8. E = Estimated - value outside linear range

9. M = Matrix interferences identified.

Date	Average DTW
5/9/2000	5.85
10/24/2000	7.78
8/23/2001	6.09
11/13/2001	6.01
2/14/2002	5.12
1/24/2005	4.35
Cumulative DTW Average:	6.87

**Exhibit: C**

# Agricultural

Route 122

Sump (cleanout)

Sump (cleanout)

Present US Location  
Pump Island

Warsaw ITCO

car wash

Sump (pump)

House

Riegler's Welding  
&  
Repair Service

Garage

pole barn

Garage

School Ave

Garage

House

House

Agricultural



- MW-3  
+ = Existing Monitoring Well Location
- B-2  
o = Existing Boring Location

**FIGURE 3**  
Highway Authority  
Agreement Area  
Warsaw ITCO  
Minier, IL

Date: 10/19/10

Drawn by: PLS

Job No.: 9890

Approved by: AMG

**M.E.C.R.S., Inc.**

HAA 1342

**APPENDIX D**  
**SOIL SAMPLING PROTOCOL**

**APPENDIX E**  
**SOIL SAMPLING PROTOCOL**

## SOIL SAMPLING PROTOCOL

To be used when sampling L.U.S.T. site excavations for IEPA closure.

1. Sampling Methodology
  - A. All sampling equipment to be used will be cleaned and decontaminated using deionized water prior to and between samples.
  - B. Soil samples will be taken from excavation extents using a stainless steel trowel. The trowel will be inserted into the soil several inches so as to take a sample of undisturbed material. The sample will be immediately placed into a new, airtight, glass jar with a teflon lined lid.
  - C. The sample will be allowed to sit undisturbed for a period of time sufficient for vapor equilibrium to be reached. A headspace analysis of the sample will then be conducted using a portable photoionization detector.
  - D. Sampled extents showing contamination levels above 10 ppm on the PID will be continued. Sampled extents showing below 10 ppm on the PID will be resampled for laboratory analysis.
2. Sample Storage and Transport
  - A. Soil samples will be collected in new, airtight, glass jars\* with teflon lined lids. Samples for analysis will be immediately cooled using a thermally insulated cooler and ice. The samples will be transported, on ice, as soon as possible, to the laboratory or to the engineering office cooler to await transport to the laboratory.
  - B. No sample will be allowed to remain in the possession of the engineer or laboratory for more than two weeks prior to analysis.
  - C. A chain of custody record will be kept for all samples taken for laboratory analysis.
3. Samples will be taken from the excavation sidewalls and floor at the following intervals.
  - A. A minimum of one sample per twenty feet for sidewall extents. When lengths of sidewall exceed twenty feet, samples will be taken at equally spaced intervals, not to exceed twenty feet.
  - B. Samples will be taken at a height relating to the projection of the lower one third of the former under ground storage tanks onto the sidewall extents. Samples will be taken at a distance relating to one-third the total excavation height from the floor if tank elevations are unknown.

- C. A minimum of one sample per 400 square feet of excavation floor. Samples at minimum will be taken from the locations representing the bottoms of the former underground storage tanks.
- D. Compositing samples of excavated materials may also be taken for background reference and landfill verification.

\*Encore sampling system will be substituted for glass jars when required.

**APPENDIX F**  
**BUDGET AMENDMENT**

# General Information for the Budget and Billing Forms

LPC#: 1790455007 County: Tazewell  
City: Minier Site Name: Warsaw, Howard (Warsaw ITCO)  
Site Address: Ill. Rte. 122  
IEMA Incident No: 981987  
IEMA Notification Date: August 11, 1998  
Date this form was prepared: June 22, 2017

This form is being submitted as a (check one if applicable):

- Budget Proposal
- Budget Amendment (Budget Amendments must include only the costs over the previous budget.)
- Billing Package

Please provide the name(s) and date(s) of report(s) documenting the costs as requested:

Name(s): \_\_\_\_\_

Date (s): \_\_\_\_\_

This package is being submitted for the site activities indicated below:

### 35 Ill. Adm. Code 734:

- Early Action
- Free Produce Removal After Early Action
- Site Investigation.....Stage 1:  Stage 2:  Stage 3:   
Actual Costs
- Corrective Action

### 35 Ill. Adm. Code 732:

- Early Action
- Free Produce Removal After Early Action
- Site Classification
- Low Priority Corrective Action
- High Priority Corrective Action

### 35 Ill. Adm. Code 731

- Site Investigation
- Corrective Action

**RECEIVED**

JUN 27 2017

**IEPA/BOL**

# General Information for the Budget and Billing Forms

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund.

Pay to the order of: John Warsaw

Send in care of: Midwest Environmental Consulting & Remediation Services, Inc

Address: PO Box 614

City: Tremont State: IL Zip: 61568

The payee is the: Owner:  Operator:  (Check one or both)

W-9 must be submitted.

**Signature of the owner or operator of the UST(s) (required)** Click [here](#) to print off a W-9 Form.

Number of petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101  101 or more:

Number of USTs at the site: 10 (Number of USTs includes USTs presently at the site and USTs that have been removed).

Number of incidents reported to the IEMA for this site: 1

Incidents Numbers assigned to the site due to releases from USTs: 981987

Please list all tanks that have ever been located at the site and tanks that are presently located at the site.

Product Stored in UST	Size (gallons)	Did UST have a release?	Incident No.	Type of Release Tank Leak / Overfill / Piping Leak
gasoline	500	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
gasoline	500	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
gasoline	2,000	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
diesel	2,500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		

# Budget Summary

Chose the applicable regulation:  734  732

<b>734</b>	Free Product	Stage 1 Site Investigation	Stage 2 Site Investigation	Stage 3 Site Investigation	Corrective Action
Drilling and Monitoring Well Costs Form					\$0.00
Analytical Costs Form					\$0.00
Remediation and Disposal Costs Form					\$0.00
UST Removal and Abandonment Costs Form					\$0.00
Paving, Demolition, and Well Abandonment Costs Form					\$935.25
Consulting Personnel Costs Form					\$23,800.37
Consultant's Materials Costs Form					\$202.00
Handling Charges Form	Handling charges will be determined at the time a billing package is submitted to the Illinois EPA. The amount of allowable charges will be determined in accordance with the				
<b>Total</b>					<b>\$24,937.62</b>

**RECEIVED**

JUN 27 2017

**IEPA/BOL**

# General Information for the Budget and Billing Forms

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund.

Pay to the order of: John Warsaw

Send in care of: Midwest Environmental Consulting & Remediation Services, Inc

Address: PO Box 614

City: Tremont State: IL Zip: 61568

The payee is the: Owner:  Operator:  (Check one or both)

X John D Warsaw W-9 must be submitted.

Signature of the owner or operator of the UST(s) (required) Click [here](#) to print off a W-9 Form.

Number of petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101  101 or more:

Number of USTs at the site: 10 (Number of USTs includes USTs presently at the site and USTs that have been removed).

Number of incidents reported to the IEMA for this site: 1

Incidents Numbers assigned to the site due to releases from USTs: 981987

Please list all tanks that have ever been located at the site and tanks that are presently located at the site.

Product Stored in UST	Size (gallons)	Did UST have a release?	Incident No.	Type of Release Tank Leak / Overfill / Piping Leak
gasoline	500	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
gasoline	500	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
gasoline	2,000	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
diesel	2,500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		



### Consulting Personnel Costs Form

Personnel Costs to close the site

Employee Name	Personnel Title*	Hours	Rate *	Total \$
Remediation Category	Task			
Allan Green	Senior Project Manager	20	\$128.90	\$2,578.09
CA	site closure, final paper work and project management			
Gaye Lynn Green	Sr. Acct Technician	5	\$70.89	\$354.47
CA	final reimbursement application			
Gaye Lynn Green	Sr. Admin. Assistant	5	\$58.01	\$290.05
CA	final reimbursemet and documentation of closure			
				\$0.00
				\$0.00
<b>Subtotal of Consulting Personnel Costs</b>				<b>\$3,222.61</b>

Personnel Costs between October 2010 and September 2014 Not previously approved in a budget

Employee Name	Personnel Title*	Hours	Rate *	Total \$
Remediation Category	Task			
Allan Green	Senior Project Manager	20	\$98.00	\$1,960.00
CA	TACO			
Gaye Lynn Green	Sr. Acct Technician	5	\$98.00	\$490.00
CA	CAP & Budget			
Gaye Lynn Green	Sr. Admin. Assistant	5	\$98.00	\$490.00
CA	Groundwater Model Calculations			

Allan Green	Sr. Env. Manager	5	\$98.00	\$490.00
CA	Highway Authority Agreement			
Allan Green	Sr. Env. Manager	25	\$98.00	\$2,450.00
CA	Groundwater Use Restriction Ordinance			
Penny Silzer	Sr. Env. Hydrogeologist	10	\$98.00	\$980.00
CA	Environmental Land Use Control			
Gaye Lynn Green	Sr. Acct Technician	32	\$61.18	\$1,957.76
CA	Reimbursement			
Penny Silzer	Sr. Env. Hydrogeologist	60	\$98.00	\$5,880.00
CA	Corrective Action Plan and Budget, planning alternative remediation strategies			
Allan Green	Sr. Env. Manager	60	\$98.00	\$5,880.00
CA	Project Management personnel time over that previously approved between from 2010 to 2014			

\*Refer to the applicable Maximum Payment Amounts document.

<b>Subtotal of Consulting Personnel Costs</b>	<b>\$20,577.76</b>
---	--------------------

<b>Total of Consulting Personnel Costs</b>	<b>\$23,800.37</b>
--	--------------------



# Owner/Operator and Licensed Professional Engineer/Geologist Budget Certification Form

I hereby certify that I intend to seek payment from the UST Fund for costs incurred while performing corrective action activities for Leaking UST incident 981987. I further certify that the costs set forth in this budget are necessary activities and are reasonable and accurate to the best of my knowledge and belief. I also certify that the costs included in this budget are not for corrective action in excess of the minimum requirements of 415 ILCS 5/57 and no costs are included in this budget which are not described in the corrective action plan, and no costs exceed Subpart H: Maximum Payment Amounts, Appendix D Sample Handling and Analysis amounts, and Appendix E Personnel Titles and Rates of 35 Ill. Adm. Code 732 or 734. I further certify that costs ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code Section 732.606 or 734.630 are not included in the budget proposal or amendment. Such ineligible costs include but are not limited to:

- Costs associated with ineligible tanks.
- Costs associated with site restoration (e.g., pump islands, canopies).
- Costs associated with utility replacement (e.g., sewers, electrical, telephone, etc).
- Costs incurred prior to IEMA notification.
- Costs associated with planned tank pulls.
- Legal fees or costs.
- Costs incurred prior to July 28, 1989.
- Costs associated with installation of new USTs or the repair of existing USTs.

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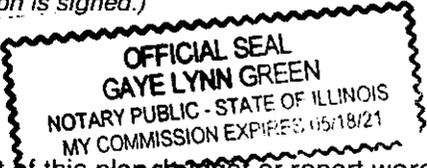
**IEPA/DCL**

Owner/Operator: John Warsaw  
 Authorized Representative: John Warsaw Title: Owner

Signature: [Signature] Date: 6/26/17

Subscribed and sworn to before me the 26<sup>th</sup> day of June, 2017  
*(Budget Proposals and Budget Amendments must be notarized when the certification is signed.)*

[Signature]  
 (Notary Public)

Seal: 

In addition, I certify under penalty of law that all activities that are the subject of this plan, budget or report were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan, budget, or report and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in the plan, budget, or report has been completed in accordance with the Environmental Protection Act [415 ILCS5], 35 Ill. Adm. Code 732-734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 14 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

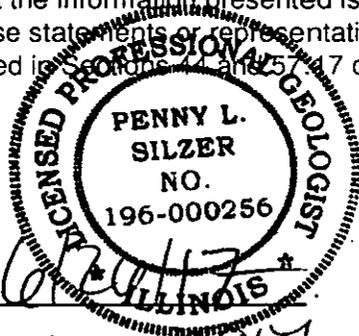
L.P.E./L.P.G.: Penny Silzer L.P.E./L.P.G. Seal:

L.P.E./L.P.G. Signature: [Signature] Date: 6/26/17

Subscribed and sworn to before me the 26<sup>th</sup> day of June, 2017

[Signature]  
 (Notary Public)

Seal: 



The Illinois EPA is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder.

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC.  
22200 ILLINOIS ROUTE 9 POST OFFICE BOX 614  
TREMONT, ILLINOIS 61568  
PHONE NO. (309) 925-5551 FAX (309) 925-5606

#981987

LETTER OF TRANSMITTAL

TO: Brad Dilbatis  
Illinois Environmental Protection Agency  
1021 North Grand Ave East  
PO Box 19276  
Springfield, Illinois 62794-9276

DATE: August 16, 2017  
JOB No.: 9890  
RE: Warsaw ITCO  
Minier, IL

WE ARE SENDING YOU:

- REPORT       LETTER       CONTRACT & RATE SHEET  
 MAP/DRAWINGS       DOCUMENTS REQUIRING SIGNATURES  
 REIMBURSEMENT DOCUMENTATION       OTHER

COPIES	DESCRIPTION
2	Page 3 of CACR form with PE Certification

THESE ARE TRANSMITTED AS CHECKED BELOW:

- REIMBURSEMENT SUBMITTAL     FOR APPROVAL     AS NEEDED FOR REPORT  
 COPY FOR YOUR RECORDS       SIGNATURE REQUIRED     AS REQUESTED

REMARKS:

Attached please find Corrective Action Plan Form page 3 for the subject site.

FROM: Penny Silzer, PG, Project Manager

Midwest Environmental Consulting & Remediation Services, Inc.

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IEPA/BOL

- 8. Site map(s) meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440.
- 9. Development of Tier 2 or 3 remediation objectives, if applicable:
  - a. Equations used;
  - b. Discussion of how input variables were determined;
  - c. Map(s) depicting distances used in equation; and
  - d. Calculations; and
- 10. Property Owner Summary form.

**D. Signatures**

All plans, budgets, and reports must be signed by the owner or operator and list the owner's or operator's full name, address, and telephone number.

**UST Owner or Operator**

Name Warsaw, Howard  
 Contact John Warsaw  
 Address PO Box 886  
 City Minier  
 State IL  
 Zip Code 61759  
 Phone (309) 392-2626  
 Signature *[Handwritten Signature]*  
 Date 6/28/17

**Consultant**

Company Midwest Environmental Consulting & Remed  
 Contact Allan M Green  
 Address PO Box 614  
 City Tremont  
 State IL  
 Zip Code 61568  
 Phone 309-925-5551  
 Signature *[Handwritten Signature]*  
 Date 6/26/2017

**E. Certification**

I certify under penalty of law that all activities that are the subject of this plan, budget, or report were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan, budget, or report and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in this plan, budget, or report has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 Ill. Adm. Code 731, 732, or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

**Licensed Professional Engineer**

Name Kevan Cooper  
 Company Bruner, Cooper & Zuck, Inc.  
 Address 188 E Simmons St  
 City Galesburg  
 State IL  
 Zip Code 61401  
 Phone 309-343-9282  
 Ill. Registration No. 062-49735  
 License Expiration Date 11/30/17

L.P.E. Seal

**RECEIVED**

JUN 27 2017

**IEPA/BOL**



Signature *[Handwritten Signature]*  
 Date 8/15/17

- 8. Site map(s) meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440.
- 9. Development of Tier 2 or 3 remediation objectives, if applicable:
  - a. Equations used;
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  - c. Map(s) depicting distances used in equation; and
  - d. Calculations; and
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 Address PO Box 614  
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 Zip Code 61568  
 Phone 309-925-5551  
 Signature *[Handwritten Signature]*  
 Date 6/26/2017

**E. Certification**

I certify under penalty of law that all activities that are the subject of this plan, budget, or report were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan, budget, or report and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in this plan, budget, or report has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 Ill. Adm. Code 731, 732, or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

**Licensed Professional Engineer**

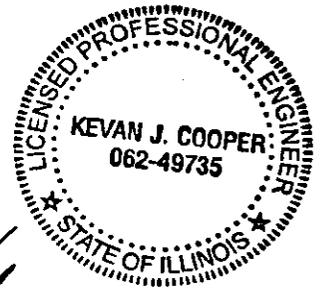
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 License Expiration Date 11/30/17

**RECEIVED**

JUN 27 2017

**IEPA/BOL**



Signature *[Handwritten Signature]*  
 Date 8/15/17

**LEAKING UST TECHNICAL REVIEW NOTES**

Reviewed by: Brad Dilbaitis  
Date Reviewed: 9/8/2017

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 22  
Leaking UST Incident No. 981987 & 991610  
Leaking UST Technical File

EPA-DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

**Document(s) Reviewed:**

6/22/2017 Corrective Action Completion Report—received 6/27/17  
Amended Corrective Action Budget—received 6/27/17

SEP 15 2017

REVIEWER: JKS

**General Site Information:**

Site subject to: 734

IEMA date: 8/11/1998 & 7/6/1999	Payment from the Fund: yes
UST system removed: yes—7/6/1999	OSFM Fac. ID #: 3005023
Encountered groundwater: yes	SWAP mapping and evaluation completion date: 8/30/2017
Free product: no	Site placement correct in SWAP: yes
Current/past land use: gasoline service station	Inspection Required: no
Size & product of USTs: (1) 2,000g and (2) 500g gasoline USTs	
Is site located in EJ area? no	Is investigation of indoor inhalation exposure route required? no

**Corrective Action Completion Report Review Notes:**

- Requesting a NFR with an industrial/commercial land use limitation, an on-site groundwater use restriction, a groundwater ordinance (with a MOU), a construction worker caution notification and a Highway Authority Agreement for Route 122 to the north of the site
- Installed temporary monitoring wells into GP-9 and GP-10 to resample MW-7 and MW-4—the groundwater sample collected from temporary monitoring well MW-4 (GP-10) had an ethylbenzene concentration of 1.5 mg/l, exceeding the Tier 1 GRO of 0.07 mg/l
- Excavated approximately 125 cubic yards of soil near GP-7 to remove the soil that was detected above the site-specific Tier 2 C<sub>sat</sub> for total xylenes
- Collected 4 sidewall soil samples (W-1 through W-4) and 1 floor soil sample (F-1) from the excavation
- Listing the soil contamination (all on-site) that exceed Tier 1 SROs and need to be addressed:
  - GP-11 (4-5')—benzene at 0.22 mg/kg—exceeds Tier 1 SCGIER and inhalation SROs—xylenes at 56 mg/kg—exceeds construction worker inhalation SRO
  - GP-12 (4-5')—benzene at 0.57 mg/kg—exceeds Tier 1 SCGIER SRO—ethylbenzene at 25 mg/kg—exceeds Tier 1 SCGIER SRO—xylenes at 66 mg/kg—exceeds construction worker inhalation SRO

- GP-12 (7-8')— benzene at 1.40 mg/kg—exceeds Tier 1 SCGIER and inhalation SROs—ethylbenzene at 28 mg/kg—exceeds Tier 1 SCGIER SRO—xylenes at 96 mg/kg—exceeds construction worker inhalation SRO
- W-1 (5-6')—benzene at 0.77 mg/kg—exceeds Tier 1 SCGIER SRO—ethylbenzene at 35 mg/kg—exceeds Tier 1 SCGIER SRO—toluene at 28 mg/kg—exceeds Tier 1 SCGIER SRO—xylenes at 200 mg/kg—exceeds Tier 1 C<sub>sat</sub>, SCGIER and construction worker inhalation SROs
- W-2 (5-6')—benzene at 0.70 mg/kg—exceeds Tier 1 SCGIER SRO—ethylbenzene at 31 mg/kg—exceeds Tier 1 SCGIER SRO—xylenes at 150 mg/kg—exceeds Tier 1 C<sub>sat</sub> and construction worker inhalation SROs
- W-4 (5-6')—total xylenes at 18 mg/kg—exceeds Tier 1 construction worker inhalation SRO
- F-1 (8')—benzene at 0.27 mg/kg—exceeds Tier 1 SCGIER SRO—xylenes at 23 mg/kg—exceeds construction worker inhalation SRO
- LF-1(?)—benzene at 0.037 mg/kg—exceeds Tier 1 SCGIER SRO—total xylenes at 36 mg/kg—exceeds construction worker inhalation SRO
- Need site-specific Tier 2 soil remediation objectives to address:
  - Benzene SCGIER (GP-11, GP-12, W-1, W-2, F-1, LF-1)—modeling addressed
  - Benzene inhalation (GP-11, GP-12)—addressed with Tier 2—34 mg/kg
  - Ethylbenzene SCGIER (GP-12, W-1, W-2)—addressed with Tier 2—35 mg/kg
  - Toluene SCGIER (W-1)—did not model off-site
  - Total Xylenes C<sub>sat</sub> (W-1, W-2)—addressed with Tier 2 C<sub>sat</sub>—356 mg/kg
  - Total Xylenes SCGIER (W-1)—addressed with Tier 2 SRO (using C<sub>sat</sub>)
  - Total xylenes construction worker inhalation (GP-11, GP-12, W-1, W-2, W-4, F-1, LF-1)

**Tier 2 TACO Evaluation:**

Hydraulic conductivity (K)	3.14 x 10 <sup>-4</sup> cm/sec
Soil bulk density (ρ <sub>b</sub> )	1.77 g/cm <sup>3</sup> (B-4—4-6' bgs)
Soil particle density (ρ <sub>s</sub> )	2.66 g/cm <sup>3</sup> (subsurface sample)
Moisture content (w)	0.171 g <sub>soil</sub> /g <sub>water</sub> (B-4—4-6' bgs)
Organic carbon content (f <sub>oc</sub> )	0.0072 g/g (GP-10—4-6' bgs)

- The consultant stated in the 11/19/2010 Corrective Action Plan that a slug test would be done on MW-1 to determine the hydraulic conductivity—the next Corrective Action Plan presents the hydraulic conductivity as 3.14 x 10<sup>-4</sup> with no supporting documentation for the slug test—this is needed—they also previously mentioned an ex situ hydraulic conductivity analysis—not sure where this K value comes from

**SSL calculations for site-specific Tier 2 soil remediation objectives**

- Previously calculated a site-specific C<sub>sat</sub> for total xylenes of 356 mg/kg (verified), so the Tier 1 C<sub>sat</sub> exceedances in W-1 and W-2 have been addressed

- Calculated a Tier 2 benzene SCGIER SRO of 0.11 mg/kg—this is incorrect—the air-filled porosity ( $\theta_a$ ) that was used is 0.05 and should be 0.04 (this is a math error—the 0.05 is the default for gravel—this site is silty clay)—also used an oral slope factor ( $SF_o$ ) of 0.029 to calculate the  $GW_{obj}$  in S-23 for use in the and it should be 0.0052—also used a target soil leachate concentration ( $C_w$ ) of 0.2 mg/l in the S-17 calculation when 0.1 mg/l should have been used, the correct Tier 2 benzene SCGIER SRO is 0.053 mg/kg (which is roughly half of the S-17 presented in the report—this does not address any of the exceedances in (GP-11, GP-12, W-1, W-2, F-1, LF-1)—this soil contamination will have to be modeled to Tier 1 GRO of 0.005 mg/l
- Did not calculate a Tier 2 inhalation SRO for benzene to address the Tier 1 inhalation exceedances in GP-11 and GP-12—I used the parameters provided to determine a soil inhalation SRO of 34 mg/kg (S-6)—this addresses all of the benzene inhalation issues
- Calculated a Tier 2 ethylbenzene SCGIER of 35 mg/kg (verified)—this addresses all ethylbenzene Tier 1 exceedances (GP-12, W-1, W-2)
- Did not calculate a Tier 2 SCGIER SRO for toluene to address the Tier 1 SCGIER exceedance in W-1—I used the parameters provided to determine a Tier 2 SCGIER SRO of 26 mg/kg—this does not address the exceedance in W-1 (28 mg/kg)—will need to be modeled
- Calculated a Tier 2 total xylenes SCGIER SRO of 9105.7 mg/kg—this is incorrect—the consultant used the xylenes Tier 1 SCGIER SRO (150 mg/kg) in place of the xylenes  $GW_{obj}$  (should be 10 mg/l) in the calculations—when calculated correctly, the Tier 2 totally xylenes SCGIER SRO is 610 mg/kg—using Tier 2  $C_{sat}$  of 356 mg/kg—addresses all of the total xylenes Tier 1 SCGIER exceedances
- Calculated a Tier 2 total xylenes construction worker inhalation SRO of 93 mg/kg—this is incorrect, my calculation is 450 mg/kg (would use site-specific  $C_{sat}$  of 356 mg/kg)—I believe that this is mainly due to the use of a chronic inhalation reference concentration (RfC) of 0.1 mg/m<sup>3</sup> instead of the subchronic inhalation reference concentration of 0.4 mg/m<sup>3</sup> in the S-5 calculation, as required by 742.705(d)(1)(F)—this is important because the use of the correct subchronic RfC would indicate that a construction worker caution notification is not needed for the NFR—the Property Owner Summary form includes a construction worker caution notification
- My calculations indicate that the highest benzene concentration in soil remaining on site is in soil boring GP-12 (1.40 mg/kg at 7-8' bgs) will model approximately 95 feet before reaching the Tier 1 GRO of 0.005 mg/l—this appears to be right at the northern edge of the limits of the Highway Authority Agreement for Route 122 to the north and the groundwater ordinance using the direction of groundwater flow provided in the Corrective Action Completion Report—the consultant indicated that soil boring location GP-12 was included in the excavation and that excavation wall sample W-2 (5-6') represents the soil conditions in that area—a comparison of the excavation map (Figure 4 in this submittal) and the proposed excavation map (Figure 4) submitted in the 10/26/16 Corrective Action Plan indicates that it is plausible that the GP-12 location was excavated
- The TACO calculations use a gradient of 0.01 m/m—it appears as though this was a 'default' hydraulic gradient instead of site-specific—based on the last groundwater sampling event done in 2005, the gradient should be 0.007 m/m—will accept the use of the more conservative 0.01

m/m (benzene groundwater contamination from GP-12 models approximately 75 feet using the 0.007 m/m hydraulic gradient)

**Amended Corrective Action Budget notes:**

Drilling and Monitoring Well Costs	\$0.00	
Analytical Costs	\$0.00	
Remediation and Disposal Costs	\$0.00	
UST Removal & Abandonment Costs	\$0.00	
Paving, Demo & Well Abandonment Costs	\$935.25	(approving \$907.70)
Consulting Personnel Costs	\$23,800.37	(approving \$3,522.56)
Consultant's Materials Costs	\$202.00	

- The monitoring well abandonment costs requests a total of 72.5 feet at a rate of \$12.90 per foot for a total of \$935.25. The current/applicable Subpart H rate for monitoring well abandonment is \$12.52 per foot. Deducting a total of \$27.55—Subpart H deduction
- The Corrective Action Budget includes a section of costs for personnel costs between October 2010 and September 2014 not previously approved in a budget. These 2010-2014 costs include a request for 20 hours for a Senior Project Manager for “TACO” at a rate of \$98.00 per hour for a total of \$1,960.00. The first budget received by the Agency in this October 2010 to September 2014 timeframe was received on November 19, 2010. This budget included a request for 60 hours for a Senior Project Manager for “HAA, ELUC, Village Ordinance, perform TACO calculations, slug test analysis.” This request was approved in the budget. No TACO calculations were submitted until the Agency received a Corrective Action Plan and Budget on March 10, 2015, which was six months after the October 2010 to September 2014 timeframe expired. The TACO calculations that were included in the Corrective Action Plan that was received March 10, 2015 were site-specific soil saturation calculations for benzene, ethylbenzene, toluene and total xylenes. The soil saturation calculations for total xylenes were the only site-specific calculations required because the only constituent that had contaminant concentrations exceeding the soil saturation limits was total xylenes; there were no soil saturation limit exceedances for benzene, ethylbenzene or toluene. The Consulting Personnel Costs that were approved in the March 18, 2011 decision letter for the Corrective Action Plan and Budget that were submitted on November 19, 2010 included enough personnel time to complete the TACO Tier 2 site-specific soil saturation limit calculations for total xylenes. Deducting the requested \$1,960.00—exceeds minimum requirements, lack of supporting documentation, unnecessary and unreasonable
- The budget requests 5 hours for a Senior Account Technician for a Corrective Action Plan and Budget at a rate of 98.00 per hour for a total of \$490.00. The applicable Subpart H rate for a Senior Account Technician in March of 2014 was \$65.50 per hour. The last Corrective Action Plan and Budget approved during the October 2010 through September 2014 timeframe was received on March 14, 2014. The Senior Account Technician is approved at a rate of \$65.50 per hour and a total of \$327.50—a \$162.50 Subpart H deduction

- The Corrective Action Budget includes a section of costs for personnel costs between October 2010 and September 2014 not previously approved in a budget. These 2010-2014 costs include a request for 5 hours for a Senior Administrative Assistant to perform groundwater modeling calculations at a rate of \$98.00 per hour for a total of \$490.00. It is assumed that the Senior Administrative Assistant title is a mistake and that a Senior Project Manager was the intended personnel title, based on the requested rate and the task. No groundwater modeling calculations were received by the Agency before the Corrective Action Completion Report was received on June 27, 2017. The Consulting Personnel Costs associated with groundwater modeling were approved in the January 12, 2017 approval letter for the Corrective Action Plan and Budget that were received by the Agency on October 28, 2016. Deducting the requested \$490.00—lack of supporting documentation and unreasonable
- The 2010 through 2014 budget requests 5 hours for a Sr. Environmental Manager(?) for “Highway Authority Agreement” at a rate of \$98.00 per hour for a total of \$490.00. The March 18, 2011 Corrective Action Plan and Budget decision letter approved costs associated with the procurement of the Highway Authority Agreement. The Corrective Action Plan included a copy of the Highway Authority Agreement initial information form that was mailed to the Illinois Department of Transportation on November 2, 2010. The next Corrective Action Plan and Budget were received by the Agency on March 14, 2014. This Corrective Action Plan included a copy of the executed Highway Authority Agreement (HAA 1342) that was received from IDOT in September 2013. There was nothing presented in the March 2013 Corrective Action Plan that would indicate that there was additional work required for the Highway Authority Agreement beyond what was presented and approved in the March 2011 Corrective Action Plan and Budget decision letter. In addition, the current Amended Corrective Action Budget does not indicate what the extra five hours for the Highway Authority Agreement entailed beyond what was originally approved for the task and no dates are presented in the budget to document when the work was completed. There has been no supporting documentation presented that would indicate that additional work beyond what was originally approved was necessary obtain the Highway Authority Agreement and or when the work was completed. Nothing has been provided to aid in determining what activities the request entails or when the activities took place. Deducting the requested \$490.00—exceeds minimum requirements, lack of supporting documentation, unnecessary and unreasonable
- The 2010 through 2014 budget requests 25 hours for a Sr. Environmental Manager(?) for “Groundwater Use Restriction Ordinance” at a rate of \$98.00 per hour for a total of \$2,450.00. The March 18, 2011 Corrective Action Plan and Budget decision letter approved costs associated with the groundwater ordinance. There has been no technical information presented that would indicate that additional work beyond what was originally approved was necessary obtain the groundwater ordinance. In addition, the current Amended Corrective Action Budget does not indicate what the extra 25 hours for the groundwater ordinance entailed beyond what was originally approved for the task and no dates are presented in the budget to document when the work was completed. Nothing

has been provided to aid in determining what activities the request entails or when the activities took place.

- The 2010 through 2014 budget requests 10 hours for a Sr. Environmental Hydrogeologist(?) for “Environmental Land Use Control” at a rate of \$98.00 per hour for a total of \$980.00. The March 18, 2011 Corrective Action Plan and Budget decision letter approved costs associated with the Environmental Land Use Control. There has been no technical information presented that would indicate that additional work beyond what was originally approved was necessary obtain the groundwater ordinance. In addition, the current Amended Corrective Action Budget does not indicate what the extra 10 hours for the Environmental Land Use Control entailed beyond what was originally approved for the task and no dates are presented in the budget to document when the work was completed. Nothing has been provided to aid in determining what activities the request entails or when the activities took place.
- The 2010 through 2014 budget requests 32 hours for a Senior Account Technician for “reimbursement” at a rate of \$61.18 per hour for a total of \$1,957.76. Please note that no reimbursement claims were submitted between January 24, 2005 and April 21, 2015. Deducting the requested \$1,957.76—lack of supporting documentation and unreasonable
- The 2010 through 2014 budget requests 60 hours for a Sr. Env. Hydrogeologist for “Corrective Action Plan and Budget, planning alternative remediation strategies” at a rate of \$98.00 per hour for a total of \$5,880.00. The two budgets that were approved (one was modified) included costs approved for the planning and preparation of the two Corrective Action Plans. There has been no information submitted to document when these hours were worked, the plan/budget to which they refer, or a description of the alternative remediation strategies that are being requested. There is no documentation to support these additional requested hours.—deducting the requested \$5,880.00—exceeds minimum requirements, lack of supporting documentation, unnecessary and unreasonable
- The 2010 through 2014 budget requests 60 hours for a Sr. Env. Manager for “Project management personnel time over that previously approved between from 2010 to 2014” at a rate of \$98.00 per hour for a total of \$5,880.00. Nothing has been submitted to document what this request describes. “Project management” is a very vague task description. Without providing specific tasks that were completed and when the hours were worked, it is impossible to make the determination that the request describes eligible activities that don’t exceed the minimum requirements. Corrective action costs associated with the two proposed Corrective Action Budgets during this requested timeframe have been approved. If additional costs are being requested beyond what was previously approved then additional documentation is required that details the additional work required, why the extra work was necessary and when the work took place.—deducting the requested \$5,880.00—exceeds minimum requirements, lack of supporting documentation and unreasonable

**Illinois EPA Decision:**

- Requesting a NFR with an industrial/commercial land use limitation, an on-site groundwater use restriction, a groundwater ordinance (with a MOU), a construction

worker caution notification and a Highway Authority Agreement for Route 122 to the north of the site—the construction worker caution notification is not required—will not include in the NFR

- The Corrective Action Budget will be modified as listed above

BD\CACRnotes.docx

## Dilbaitis, Bradley

---

**From:** Dilbaitis, Bradley  
**Sent:** Tuesday, September 05, 2017 9:27 AM  
**To:** 'mdwstenv@frontier.com'  
**Subject:** Incident #981987 - Warsaw, Howard

Al,

A couple of issues have come up in my review of the Corrective Action Completion Report for incident #981987. First, there are issues with the TACO Tier 2 calculations. The Tier 2 calculations were done using an air-filled porosity ( $\theta_a$ ) for gravel. This isn't correct. The defaults for clay should be used based on the soil boring logs. There was also an incorrect oral slope factor used for benzene. A target soil leachate concentration ( $C_w$ ) of 0.2 mg/l was used in the S-17 calculation when 0.1 mg/l should have been used, the correct Tier 2 benzene SCGIER SRO is 0.053 mg/kg (which is roughly half of the S-17 presented in the report).

The TACO calculations don't include a Tier 2 inhalation SRO for benzene to address the Tier 1 inhalation exceedances in GP-11 and GP-12.

A Tier 2 SCGIER SRO was not calculated for toluene to address the Tier 1 SCGIER exceedance in W-1.

The Tier 2 SCGIER SRO for total xylenes (9105.7 mg/kg) is incorrect. The xylenes Tier 1 SCGIER SRO (150 mg/kg) was used in place of the xylenes  $GW_{obj}$  (should be 10 mg/l) in the calculations.

A Tier 2 total xylenes construction worker inhalation SRO of 93 mg/kg was included in the report. This is incorrect, my calculation is 450 mg/kg (would use site-specific  $C_{sat}$  of 356 mg/kg). I believe that this is mainly due to the use of a chronic inhalation reference concentration (RfC) of 0.1 mg/m<sup>3</sup> instead of the subchronic inhalation reference concentration of 0.4 mg/m<sup>3</sup> in the S-5 calculation, as required by 742.705(d)(1)(F). This is important because the use of the correct subchronic RfC would indicate that a construction worker caution notification is not needed for the NFR.

The highest benzene concentration in sol remaining on site is in soil boring GP-12 (1.40 mg/kg at 7-8' bgs). It wasn't modeled.

Where did you get the gradient of 0.01 m/m? The gradient is supposed to be a site-specific field measurement.

Now on to the budget. I need to stress that the lack of any supporting documentation for these costs is not going to work. If you are requesting extra personnel costs over what was previously approved in a budget for these tasks then additional documentation **MUST** be submitted that details the additional work required, why the extra work was necessary and when the work took place. I don't see how you could have possibly expected me to approve these costs the way they were submitted. I spent hours and hours trying to figure out whether these costs could be paid with the documentation that has already been submitted when I probably should have just denied them. I'm going to pull each of these directly from my notes to save time.

The Corrective Action Budget includes a section of costs for personnel costs between October 2010 and September 2014 not previously approved in a budget. These 2010-2014 costs include a request for 20 hours for a Senior Project Manager for "TACO" at a rate of \$98.00 per hour for a total of \$1,960.00. The first budget received by the Agency in this October 2010 to September 2014 timeframe was received on November 19, 2010. This budget included a request for 60 hours for a Senior Project Manager for "HAA, ELUC, Village Ordinance, perform TACO calculations, slug test analysis." This request was approved in the budget. No TACO calculations were submitted until the Agency received a Corrective Action Plan and Budget on March 10, 2015, which is six months after the October 2010 to September 2014 timeframe expired. The TACO calculations that were included in the Corrective Action Plan that was received March 10, 2015 were

site-specific soil saturation calculations for benzene, ethylbenzene, toluene and total xylenes. The soil saturation calculations for total xylenes were the only site-specific calculations required because the only constituent that had contaminant concentrations exceeding the soil saturation limits was total xylenes. There were no soil saturation limit exceedances for benzene, ethylbenzene or toluene. The Consulting Personnel Costs that were approved in the March 18, 2011 decision letter for the Corrective Action Plan and Budget that were submitted on November 19, 2010 included enough personnel time to complete the TACO Tier 2 site-specific soil saturation limit calculations for total xylenes.

The 2010-2014 costs include a request for 5 hours for a Senior Administrative Assistant to perform groundwater modeling calculations at a rate of \$98.00 per hour for a total of \$490.00. It is assumed that the Senior Administrative Assistant title is a mistake and that a Senior Project Manager was the intended personnel title, based on the requested rate and the task. No groundwater modeling calculations were received by the Agency before the Corrective Action Completion Report was received on June 27, 2017. The Consulting Personnel Costs associated with groundwater modeling were approved in the January 12, 2017 approval letter for the Corrective Action Plan and Budget that were received by the Agency on October 28, 2016.

The 2010 through 2014 budget requests 5 hours for a Sr. Environmental Manager(?) for "Highway Authority Agreement" at a rate of \$98.00 per hour for a total of \$490.00. The March 18, 2011 Corrective Action Plan and Budget decision letter approved costs associated with the procurement of the Highway Authority Agreement. The Corrective Action Plan included a copy of the Highway Authority Agreement initial information form that was mailed to the Illinois Department of Transportation on November 2, 2010. The next Corrective Action Plan and Budget were received by the Agency on March 14, 2014. This Corrective Action Plan included a copy of the executed Highway Authority Agreement (HAA 1342) that was received from IDOT in September 2013. There was nothing presented in the March 2013 Corrective Action Plan that would indicate that there was additional work required for the Highway Authority Agreement beyond what was presented and approved in the March 2011 Corrective Action Plan and Budget decision letter. In addition, the current Amended Corrective Action Budget does not indicate what the extra five hours for the Highway Authority Agreement entailed beyond what was originally approved for the task and no dates are presented in the budget to document when the work was completed. There has been no supporting documentation presented that would indicate that additional work beyond what was originally approved was necessary obtain the Highway Authority Agreement and or when the work was completed. Nothing has been provided to aid in determining what activities the request entails or when the activities took place.

The 2010 through 2014 budget requests 25 hours for a Sr. Environmental Manager(?) for "Groundwater Use Restriction Ordinance" at a rate of \$98.00 per hour for a total of \$2,450.00. The March 18, 2011 Corrective Action Plan and Budget decision letter approved costs associated with the groundwater ordinance. There has been no technical information presented that would indicate that additional work beyond what was originally approved was necessary obtain the groundwater ordinance. In addition, the current Amended Corrective Action Budget does not indicate what the extra 25 hours for the groundwater ordinance entailed beyond what was originally approved for the task and no dates are presented in the budget to document when the work was completed. Nothing has been provided to aid in determining what activities the request entails or when the activities took place.

The 2010 through 2014 budget requests 10 hours for a Sr. Environmental Hydrogeologist(?) for "Environmental Land Use Control" at a rate of \$98.00 per hour for a total of \$980.00. The March 18, 2011 Corrective Action Plan and Budget decision letter approved costs associated with the Environmental Land Use Control. There has been no technical information presented that would indicate that additional work beyond what was originally approved was necessary obtain the groundwater ordinance. In addition, the current Amended Corrective Action Budget does not indicate what the extra 10 hours for the Environmental Land Use Control entailed beyond what was originally approved for the task and no dates are presented in the budget to document when the work was completed. Nothing has been provided to aid in determining what activities the request entails or when the activities took place.

The 2010 through 2014 budget requests 32 hours for a Senior Account Technician for "reimbursement" at a rate of \$61.18 per hour for a total of \$1,957.76. No reimbursement claims were submitted between January 24, 2005 and April 21, 2015.

The 2010 through 2014 budget requests 60 hours for a Sr. Env. Hydrogeologist for "Corrective Action Plan and Budget, planning alternative remediation strategies" at a rate of \$98.00 per hour for a total of \$5,880.00. The two budgets that were approved (one was modified) included costs approved for the planning and preparation of the two Corrective Action

Plans. There has been no information submitted to document when these hours were worked, which plan/budget to which they refer, or a description of the alternative remediation strategies that are being requested. There is no documentation to support these hours.

The 2010 through 2014 budget requests 60 hours for a Sr. Env. Manager for "Project management personnel time over that previously approved between from 2010 to 2014" at a rate of \$98.00 per hour for a total of \$5,880.00. Nothing has been submitted to document what this request describes. "Project management" is a very vague description. Without providing specific tasks that were done and when the hours were worked, it is impossible to make the determination that the request describes eligible activities that don't exceed the minimum requirements. Corrective action costs associated with the two proposed Corrective Action Budgets during this requested timeframe have been approved. If additional costs are being requested beyond what was previously approved then additional documentation is required that details the additional work required, why the extra work was necessary and when the work took place.

Why are you guys still using the Sr. Env. Hydrogeologist and Sr. Env. Manager job titles? These mean nothing to us. In fact, it makes the reviews a lot more difficult for us. I've told you this before and even deducted costs for it previously. You have to use our Subpart H job titles in the budgets and claims. If these titles are being used because they're being pulled directly from old timesheets then we need to see those timesheets as well.

I realize that this is a Corrective Action Completion Report and that once the NFR is issued there is no chance to have a budget approved and the only recourse is for us to go to appeal. This is the only reason I emailed the issues with the budget instead of just denying all of these older costs. I can't approve the 2010-2014 budget the way it was submitted.

Brad Dilbaitis  
Project Manager  
Illinois Environmental Protection Agency  
Leaking Underground Storage Tanks  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, IL 62794-9276  
phone: (217) 785-8378  
fax: (217) 524-4193

Spoke several times with consultant  
after this email was sent - consultant  
indicated that no reply was forthcoming

- 8. Site map(s) meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440.
- 9. Development of Tier 2 or 3 remediation objectives, if applicable:
  - a. Equations used;
  - b. Discussion of how input variables were determined;
  - c. Map(s) depicting distances used in equation; and
  - d. Calculations; and
- 10. Property Owner Summary form.

1790455007 – Tazewell County  
 Warsaw, Howard  
 Incident # 981987  
 Leaking UST Technical File

EPA-DIVISION OF RECORDS MANAGEMENT  
 RELEASABLE

NOV 22 2017

REVIEWER: AJK

**D. Signatures**

All plans, budgets, and reports must be signed by the owner or operator and list the owner's or operator's full name, address, and telephone number.

**UST Owner or Operator**

Name Warsaw, Howard  
 Contact John Warsaw  
 Address PO Box 886  
 City Minier  
 State IL  
 Zip Code 61759  
 Phone (309) 392-2628  
 Signature *John D. Warsaw*  
 Date 6/26/17

**Consultant**

Company Midwest Environmental Consulting & Remed  
 Contact Allan M Green  
 Address PO Box 614  
 City Tremont  
 State IL  
 Zip Code 61568  
 Phone 309-925-5551  
 Signature *Allan M Green*  
 Date 6/26/2017

**E. Certification**

I certify under penalty of law that all activities that are the subject of this plan, budget, or report were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan, budget, or report and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in this plan, budget, or report has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 Ill. Adm. Code 731, 732, or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

**Licensed Professional Engineer**

L.P.E. Seal

Name Kevan Cooper  
 Company Bruner, Cooper & Zuck, Inc.  
 Address 188 E Simmons St  
 City Galesburg  
 State IL  
 Zip Code 61401  
 Phone 309-343-9282  
 Ill. Registration No. 062-49735  
 License Expiration Date 11/30/17

RECEIVED

SEP 11 2017

IEPA/BOL



Signature *Kevan J. Cooper*  
 Date 8/15/17



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

217/524-3300

CERTIFIED MAIL

SEP 12 2017

7014 2120 0002 3285 9741

Warsaw Family Trust  
John Warsaw  
P.O Box 886  
Minier, IL 61759

IEPA-DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

SEP 29 2017

REVIEWER: JKS

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 122  
Leaking UST Incident No. 981987 and 991610  
Leaking UST Technical File

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Corrective Action Plan Budget (budget) submitted for the above-referenced incident. This budget, dated June 22, 2017, was received by the Illinois EPA on June 27, 2017. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature <input checked="" type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee  <i>John Warsaw</i></p> <p>B. Received by (Printed Name) <i>John WARSAW</i> C. Date of Delivery <i>9-16-17</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes          If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to:</p> <p>Warsaw Family Trust Attn: John Warsaw Post Office Box 886 Minier, IL 61759</p>	<p><i>SC/BO 981987</i></p> <p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail® <input type="checkbox"/> Priority Mail Express™  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> Collect on Delivery</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label)</p>	<p><i>7014 2120 0002 3285 9741</i></p>

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Total Warsaw Family Trust  
 Attn: John Warsaw

Sent To: Post Office Box 886  
 Street or PO: Minier, IL 61759  
 City, State, ZIP+4: \_\_\_\_\_

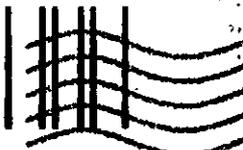
PS Form 3800, July 2014

See Reverse for Instructions

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 Protection Agency  
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R1



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

217/524-3300

CERTIFIED MAIL

SEP 12 2017

7014 2120 0002 3285 9758

Warsaw Family Land Trust  
John Warsaw  
P.O Box 886  
Minier, IL 61759

IEPA - DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

OCT 02 2017

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 122  
Leaking UST Incident No. 981987 and 991610—NFR Letter  
Leaking UST Technical File

REVIEWER: RDH

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Corrective Action Completion Report submitted for the above-referenced incident. The information was dated June 22, 2017 and was received by the Illinois EPA on June 27, 2017. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

The Corrective Action Completion Report and associated Professional Engineer Certification submitted pursuant to Section 57.7(b)(5) of the Act indicate corrective action for the above-referenced site was conducted in accordance with the Corrective Action Plan approved by the Illinois EPA. The Corrective Action Completion Report demonstrates that the requirements of Section 57.7(b) of the Act have been satisfied.

Based upon the certification by Kevan Cooper, a Licensed Professional Engineer, and pursuant to Section 57.10 of the Act (415 ILCS 5/57.10), your request for a no further remediation determination is granted under the conditions and terms specified in this letter.

Issuance of this No Further Remediation Letter (Letter), based on the certification of the Licensed Professional Engineer, signifies that: (1) all statutory and regulatory corrective action requirements applicable to the occurrence have been complied with; (2) all corrective action concerning the remediation of the occurrence has been completed; and (3) no further corrective action concerning the occurrence is necessary for the protection of human health, safety, and the environment. Pursuant to Section 57.10(d) of the Act, this Letter shall apply in favor of the following parties:

1. Warsaw Family Land Trust, John Warsaw, the owner or operator of the underground storage tank system(s).
2. Any parent corporation or subsidiary of such owner or operator.
3. Any co-owner or co-operator, either by joint tenancy, right-of-survivorship, or any other party sharing a legal relationship with the owner or operator to whom the Letter is issued.

R1270

4. Any holder of a beneficial interest of a land trust or inter vivos trust whether revocable or irrevocable.
5. Any mortgagee or trustee of a deed of trust of such owner or operator.
6. Any successor-in-interest of such owner or operator.
7. Any transferee of such owner or operator whether the transfer was by sale, bankruptcy proceeding, partition, dissolution of marriage, settlement or adjudication of any civil action, charitable gift, or bequest.
8. Any heir or devisee of such owner or operator.
9. An owner of a parcel of real property to the extent that this Letter applies to the occurrence on that parcel.

This Letter and all attachments, including but not limited to the Leaking Underground Storage Tank Environmental Notice, must be filed within 45 days of receipt as a single instrument with the Office of the Recorder or Registrar of Titles in the county in which the above-referenced site is located. In addition, the Groundwater Ordinance (photocopy attached) must be filed as an attachment of this Letter with the Office of the Recorder or Registrar of Titles of the applicable county. This Letter shall not be effective until officially recorded by the Office of the Recorder or Registrar of Titles of the applicable county in accordance with Illinois law so it forms a permanent part of the chain of title for the above-referenced property. Within 30 days of this Letter being recorded, an accurate and official copy of this Letter, as recorded, shall be obtained and submitted to the Illinois EPA. For recording purposes, it is recommended that the Leaking Underground Storage Tank Environmental Notice of this Letter be the first page of the instrument filed.

#### CONDITIONS AND TERMS OF APPROVAL

##### LEVEL OF REMEDIATION AND LAND USE LIMITATIONS

1. The remediation objectives have been established in accordance with an industrial/commercial land use limitation. The remediation objectives for the above-referenced site, more particularly described in the Leaking Underground Storage Tank Environmental Notice of this Letter, were established in accordance with the requirements of the Tiered Approach to Corrective Action Objectives (35 Ill. Adm. Code 742) rules.
2. As a result of the release from the underground storage tank system(s) associated with the above-referenced incident, the above-referenced site, more particularly described in the attached Leaking Underground Storage Tank Environmental Notice of this Letter, shall not be used in a manner inconsistent with the following land use limitation: The land use shall be industrial/commercial. The groundwater under the site shall not be used as a potable water supply.
3. The land use limitation specified in this Letter may be revised if:

- a. Further investigation or remedial action has been conducted that documents the attainment of objectives appropriate for the new land use; and
- b. A new No Further Remediation Letter is obtained and recorded in accordance with Title XVII of the Act and regulations adopted thereunder.

PREVENTIVE, ENGINEERING, AND INSTITUTIONAL CONTROLS

4. Preventive: The groundwater under the site described in the attached Leaking Underground Storage Tank Environmental Notice of this Letter shall not be used as a potable supply of water. No person shall construct, install, maintain, or utilize a potable water supply well. In accordance with Section 3.65 of the Act, "potable" means generally fit for human consumption in accordance with accepted water supply principles and practices.

Engineering: . . . None.

Institutional: This Letter shall be recorded as a permanent part of the chain of title for the above-referenced site, more particularly described in the attached Leaking Underground Storage Tank Environmental Notice of this Letter.

Highway Authority Agreement

The Illinois Department of Transportation agrees, through the use of a Highway Authority Agreement, to allow contaminated groundwater and/or soils to remain beneath its highway right-of-way adjacent to the site located at Route 122 in Minier, Illinois. Specifically, as shown on the attached map, contamination will remain in the right-of-way for Route 122 as indicated in the Highway Authority Agreement 1342. The Highway Authority agrees to: (a) prohibit the use of groundwater under the highway right-of-way that is contaminated above Tier 1 groundwater remediation objectives as a potable or other domestic supply of water, and (b) limit access to soil contamination under the highway right-of-way that is contaminated above residential Tier 1 soil remediation objectives. A copy of the Highway Authority Agreement can be obtained through a written request under the Freedom of Information Act (5 ILCS 140) to the Bureau of Land, FOIA Unit as detailed elsewhere in this letter. Questions regarding the Highway Authority Agreement should be directed to:

Illinois Department of Transportation  
Region Three Engineer  
Attn: District Four Environmental Studies Unit  
401 Main Street  
Peoria, IL 61602

Groundwater Use Ordinance

Ordinance No. 808 adopted by the Village of Minier, in conjunction with Resolution No. 278 effectively prohibits the installation of potable water supply wells (and the use of such wells) and is an acceptable institutional control under the following conditions:

Each affected or potentially affected (as shown through contaminant modeling) property owner and the Village of Minier must receive written notification from the owner or operator desiring to use the ordinance as an institutional control that groundwater remediation objectives have been approved by the Illinois EPA. Written proof of this notification shall be submitted to the Illinois EPA in accordance with 35 Ill. Adm. Code 742.1015(b) and (c) within 45 days from the date this Letter is recorded. The notification shall include:

- a. The name and address of the unit of local government;
- b. The citation of the ordinance used as an institutional control in this Letter;
- c. A description of the property being sent notice by adequate legal description or by reference to a plat showing the boundaries;
- d. A statement that the ordinance restricting the groundwater use was used by the Illinois EPA in reviewing a request for groundwater remediation objectives;
- e. A statement as to the nature of the release and response action with the name, address, and Illinois EPA inventory identification number; and
- f. A statement as to where more information may be obtained regarding the ordinance.

The following activities shall be grounds for voidance of the ordinance as an institutional control and this Letter:

- a. Modification of the reference ordinance to allow potable uses of groundwater.
- b. Approval of a site-specific request, such as a variance, to allow use of groundwater at the site.
- c. Violation of the terms of a recorded institutional control.

As a part of its corrective action, the leaking underground storage tank site has relied upon Ordinance No. 808 adopted by the Village of Minier, in conjunction with Resolution No. 278 that prohibits potable uses of groundwater as defined therein.

5. Failure to establish, operate, and maintain controls in full compliance with the Act, applicable regulations, and the approved corrective action plan, if applicable, may result in voidance of this Letter.

OTHER TERMS

6. Any contaminated soil or groundwater removed or excavated from, or disturbed at, the above-referenced site, more particularly described in the Leaking Underground Storage Tank Environmental Notice of this Letter, must be handled in accordance with all applicable laws and regulations under 35 Ill. Adm. Code Subtitle G.
7. Further information regarding the above-referenced site can be obtained through a written request under the Freedom of Information Act (5 ILCS 140) to:

Illinois Environmental Protection Agency  
Attention: Freedom of Information Act Officer  
Division of Records Management - #16  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

8. Pursuant to 35 Ill. Adm. Code 734.720, should the Illinois EPA seek to void this Letter, the Illinois EPA shall provide notice to the owner or operator of the leaking underground storage tank system(s) associated with the above-referenced incident and the current title holder of the real estate on which the tanks were located, at their last known addresses. The notice shall specify the cause for the voidance, explain the provisions for appeal, and describe the facts in support of the voidance. Specific acts or omissions that may result in the voidance of this Letter include, but shall not be limited to:
  - a. Any violation of institutional controls or industrial/commercial land use restrictions;
  - b. The failure to operate and maintain preventive or engineering controls or to comply with any applicable groundwater monitoring plan;
  - c. The disturbance or removal of contamination that has been left in-place in accordance with the Corrective Action Plan or Completion Report;
  - d. The failure to comply with the recording requirements for the Letter;
  - e. Obtaining the Letter by fraud or misrepresentation; or
  - f. Subsequent discovery of contaminants, not identified as part of the investigative or remedial activities upon which the issuance of the Letter was based, that pose a threat to human health or the environment.

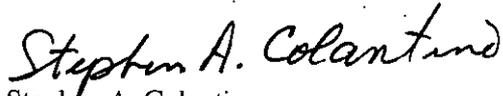
Submit an accurate and official copy of this Letter, as recorded, to:

Illinois Environmental Protection Agency  
Bureau of Land - #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

Page 6

If you have any questions or need further assistance, please contact the Illinois EPA project manager, Brad Dilbaitis, at (217) 785-8378 or Bradley.Dilbaitis@illinois.gov.

Sincerely,



Stephen A. Colantino  
Acting Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

SAC:BD\NFR.docx

Attachments: Leaking Underground Storage Tank Environmental Notice  
Site Base Map  
Village of Minier Ordinance No. 808 and Resolution No. 207

c: Al Green, Midwest Environmental (electronic copy), mdwstenv@frontier.com  
BOL File

R1275

PREPARED BY:

Name: John Warsaw  
Warsaw Family Land Trust

Address: Route 122  
Minier, IL 61759

RETURN TO:

Name: John Warsaw  
Warsaw Family Land Trust

Address: P.O. Box 886  
Minier, IL 61759

(THE ABOVE SPACE FOR RECORDER'S OFFICE)

LEAKING UNDERGROUND STORAGE TANK ENVIRONMENTAL NOTICE

**THE OWNER AND/OR OPERATOR OF THE LEAKING UNDERGROUND STORAGE TANK SYSTEM(S) ASSOCIATED WITH THE RELEASE REFERENCED BELOW, WITHIN 45 DAYS OF RECEIVING THE NO FURTHER REMEDIATION LETTER CONTAINING THIS NOTICE, MUST SUBMIT THIS NOTICE AND THE REMAINDER OF THE NO FURTHER REMEDIATION LETTER TO THE OFFICE OF THE RECORDER OR REGISTRAR OF TITLES OF TAZEWELL COUNTY IN WHICH THE SITE DESCRIBED BELOW IS LOCATED.**

Illinois EPA No.: 1790455007

Leaking UST Incident No.: 981987 and 991610

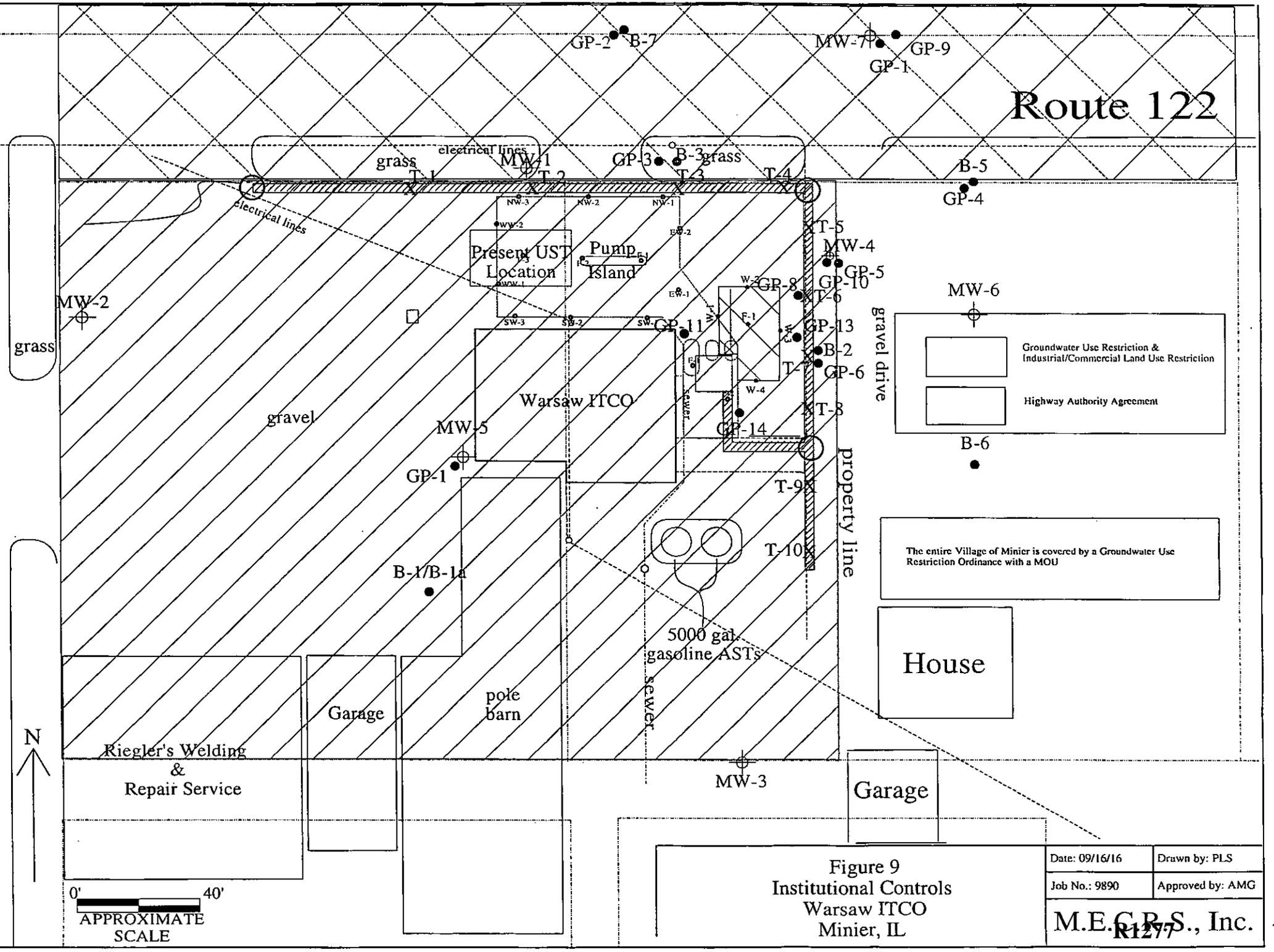
Warsaw Family Land Trust, John Warsaw, the owner and/or operator of the leaking underground storage tank system(s) associated with the above-referenced incident, whose address is P.O. Box 886, Minier, Illinois, has performed investigative and/or remedial activities for the site identified as follows and depicted on the attached Site Base Map:

1. Legal Description or Reference to a Plat Showing the Boundaries:  
SEC 22 T23N R2W TRACT B NE 1/4 .88 AC III 81,82,83
2. Common Address: Rt. 122, Minier, Illinois
3. Real Estate Tax Index/Parcel Index Number: 19-19-22-201-020
4. Site Owner: Warsaw Family Trust
5. Land Use Limitation: The land use shall be industrial/commercial. The groundwater under the site shall not be used as a potable water supply.
6. See the attached No Further Remediation Letter for other terms.

BD

Attachment: Site Base Map  
Village of Minier Ordinance No. 808 and Resolution No. 207

Route 122



Groundwater Use Restriction & Industrial/Commercial Land Use Restriction
   
 Highway Authority Agreement

The entire Village of Minier is covered by a Groundwater Use Restriction Ordinance with a MOU

House

Figure 9  
 Institutional Controls  
 Warsaw ITCO  
 Minier, IL

Date: 09/16/16	Drawn by: PLS
Job No.: 9890	Approved by: AMG

M.E.C.R.S., Inc. R1277

VILLAGE OF MINIER

---

ORDINANCE NO. 808

AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS PROHIBITING THE  
USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE  
INSTALLATION OR THE USE OF POTABLE WATER SUPPLY WELLS OR BY ANY  
OTHER METHOD

---

ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS

THIS 19th DAY OF MARCH 2013

---

Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 19th day of March, 2013.

**ORDINANCE NO. 808**

**AN ORDINANCE OF THE VILLAGE OF MINIER, ILLINOIS PROHIBITING THE  
USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE  
INSTALLATION OR THE USE OF POTABLE WATER SUPPLY WELLS OR BY ANY  
OTHER METHOD**

---

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE  
VILLAGE OF MINIER, ILLINOIS:

WHEREAS, certain properties in the Village of Minier ("Village"), Illinois have been used  
over a period of time for commercial/industrial purposes; and

WHEREAS, because of said use, concentrations of certain chemical constituents in the  
groundwater beneath the Village may exceed Class I groundwater quality standards for potable  
resource groundwater as set forth in 35 Illinois Administrative Code 620 or Tier 1 remediation  
objectives as set forth in 35 Illinois Administrative Code 742; and

WHEREAS, the Village to limit potential threats to human health from groundwater  
contamination while facilitating the redevelopment and productive use of properties that are  
the source of said chemical constituents;

**NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE OF MINIER,  
ILLINOIS:**

**Section One.** Use of groundwater as a potable water supply prohibited.

Except for such uses or methods in existence before the effective date of  
this ordinance, the use or attempt to use as a potable water supply  
groundwater from within the corporate limits of the Village of Minier, as a  
potable water supply, by the installation or drilling of wells or by any other  
method is hereby prohibited. This prohibition does not include the Village  
of Minier.

**Section Two.** Penalties.

Any person violating the provisions of this ordinance shall be subject to a fine of  
up to \$250.00 for each violation.

**Section Three.** Definitions.

"Person" is any individual, partnership, co-partnership, firm, company, limited

liability company, corporation, association, joint stock company, trust, estate, political subdivision, or any other legal entity, or their legal representatives, agents or assigns.

"Potable water" is any water used for human or domestic consumption, including, but not limited to, water used for drinking, bathing, swimming, washing dishes, or preparing foods.

**Section Four. Memorandum of Understanding.**

The President of the Village of Minier was previously authorized and directed to enter into a Memorandum of Understanding on or about January 4, 2011 with the Illinois Environmental Protection Agency ("Illinois EPA") in which the Village of Minier assumes responsibility for tracking all sites that have received no further remediation determinations from the Illinois EPA, notifying the Illinois EPA of changes to this ordinance, and taking certain precautions when siting public potable water supply wells.

**Section Five. Repealer.**

All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed insofar as they are in conflict with this ordinance.

**Section Six. Severability.**

If any provision of this ordinance or its application to any person or under any circumstances is adjudged invalid, such adjudication shall not affect the validity of the ordinance as a whole or of any portion not adjudged invalid.

**Section Seven. Effective date.**

This ordinance shall be in full force and effect from and after its passage, approval and publication as required by law.

PASSED at a regular meeting of the Village Board of the Village of Minier held the 19th day of March, 2013.

AYES: Devine, Burt, LaDew, Crawford, Beccue & Needles

NAYS: None

ABSENT: None

APPROVED this 19th day of March, 2013.

*Neil Koenig*

Village President

ATTEST:

*Gandy Lancaster*  
Village Clerk

**VILLAGE OF MINIER**

---

**RESOLUTION NO. 278**

**A RESOLUTION OF THE VILLAGE OF MINIER,  
ILLINOIS, AUTHORIZING ENTERING INTO A  
MEMORANDUM OF UNDERSTANDING**

---

**ADOPTED BY THE  
VILLAGE BOARD  
OF THE  
VILLAGE OF MINIER, ILLINOIS**

**THIS 1<sup>ST</sup> DAY OF APRIL, 2014**

---

**Published in pamphlet form by authority of the Village Board of the Village of Minier,  
Tazewell County, Illinois, this 1<sup>st</sup> day of April, 2014.**

**RECEIVED**

JUL 16 2015

**IEPA/BOL** R1282

RESOLUTION NO. 278

A RESOLUTION OF THE VILLAGE OF MINIER, ILLINOIS, AUTHORIZING  
ENTERING INTO A MEMORANDUM OF UNDERSTANDING

---

WHEREAS, it is deemed advisable, necessary and in the public interest that the Village of Minier, Illinois, enter into a Memorandum of Understanding with the Illinois Environmental Protection Agency; and

WHEREAS, pursuant to the Illinois Municipal Code, a municipality is authorized to enter into agreements with other governmental entities for lawful public purposes; and

WHEREAS, the Memorandum of Understanding is attached as Exhibit A.

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MINIER, ILLINOIS:

SECTION 1. The foregoing recitals are incorporated herein as findings of the Village of Minier.

SECTION 2. The Village of Minier hereby determines that it is advisable, necessary, and in the interests of the public health, safety and welfare that the Municipality enter into a memorandum of understanding with the Illinois Environmental Protection Agency pursuant to the terms of the agreement that is attached as Exhibit A.

SECTION 3. The Village of Minier hereby approves and authorizes the Village president to execute the Memorandum of Understanding which is attached as Exhibit A.

SECTION 4. This Resolution is hereby published in pamphlet form by authority of the Village Board of the Village of Minier.

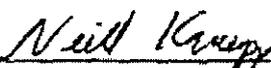
PASSED at a regular meeting of the Village Board of the Village of Minier held the 1<sup>st</sup> day of April, 2014.

AYES: Devine, Burt, LaDew, Crawford, Beccue & Needles

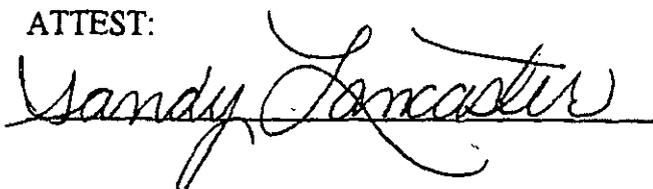
NAYS: None

ABSENT: None

APPROVED this 1<sup>st</sup> day of April, 2014.

  
\_\_\_\_\_  
Village President

ATTEST:

  
\_\_\_\_\_, Village Clerk

**EXHIBIT A**  
**MEMORANDUM OF UNDERSTANDING**  
**BETWEEN THE VILLAGE OF MINIER AND THE ILLINOIS ENVIRONMENTAL**  
**PROTECTION AGENCY REGARDING THE USE OF A LOCAL GROUNDWATER OR**  
**WATER WELL ORDINANCE AS**  
**AN ENVIRONMENTAL INSTITUTIONAL CONTROL**

**I. PURPOSE AND INTENT**

- A. This Memorandum of Understanding ("MOU") between the Village of Minier and the Illinois Environmental Protection Agency ("Illinois EPA") is entered into for the purpose of satisfying the requirements of 35 Ill. Adm. Code 742.1015 for the use of groundwater or water well ordinances as environmental institutional controls. The Illinois EPA has reviewed the groundwater or water well ordinance of the Village of Minier (Attachment A) and determined that the ordinance prohibits the use of groundwater for potable purposes and/or the installation and use of new potable water supply wells by private entities but does not expressly prohibit those activities by the unit of local government itself. In such cases, 35 Ill. Adm. Code 742.1015(a) provides that the unit of local government may enter into an MOU with the Illinois EPA to allow the use of the ordinance as an institutional control.
- B. The intent of this Memorandum of Understanding is to specify the responsibilities that must be assumed by the unit of local government to satisfy the requirements for MOUs as set forth at 35 Ill. Adm. Code 742.1015(i).

**II. DECLARATIONS AND ASSUMPTION OF RESPONSIBILITY**

In order to ensure the long-term integrity of the groundwater or water well ordinance as an environmental institutional control and that risk to human health and the environment from contamination left in place in reliance on the groundwater or water well ordinance is effectively managed, the Village of Minier hereby assumes the following responsibilities pursuant to 35 Ill. Adm. Code 742.1015(d)(2) and (i):

- A. The Village of Minier will notify the Illinois EPA Bureau of Land of any proposed ordinance changes or requests for variance at least 30 days prior to the date the local government is scheduled to take action on the proposed change or request (35 Ill. Adm. Code 742.1015(i)(4));
- B. The Village of Minier will maintain a registry of all sites within its corporate limits that have received "No Further Remediation" determinations in reliance on the ordinance from the Illinois EPA (35 Ill. Adm. Code 742.1015(i)(5));
- C. The Village of Minier will review the registry of sites established under Paragraph II. B. prior to siting public potable water supply wells within the area covered by the ordinance (35 Ill. Adm. Code 742.1015(i)(6)(A));  
The Village of Minier will determine whether the potential source of potable water has been or may be affected by contamination left in place at the sites tracked and reviewed under paragraphs II. B. and C. (35 Ill. Adm. Code

742.1015(i)(6)(B)); and

- D. The Village of Minier will take action as necessary to ensure that the potential source of potable water is protected from contamination or treated before it is used as a potable water supply (35 Ill. Adm. Code 742.1015(i)(6)(C)).

NOTE: Notification under paragraph II. A. above or other communications concerning this MOU should be directed to:

**Manager, Division of Remediation Management  
Bureau of Land  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, Illinois 62794-9276**

### **III. SUPPORTING DOCUMENTATION**

The following documentation is required by 35 Ill. Adm. Code 742.1015(i) and is attached to this MOU:

- A. Attachment A: A copy of the groundwater or water well ordinance certified by the city clerk or other official as the current, controlling law (35 Ill. Adm. Code 742.1015(i)(3));
- B. Attachment B: Identification of the legal boundaries within which the ordinance is applicable (certification by city clerk or other official that the ordinance is applicable everywhere within the corporate limits; if ordinance is not applicable throughout the entire city or village, legal description and map of area showing sufficient detail to determine where ordinance is applicable) (35 Ill. Adm. Code 742.1015(i)(2));
- C. Attachment C: A statement of the authority of the unit of local government to enter into the MOU (council resolution, code of ordinances, inherent powers of mayor or other official signing MOU – attach copies) (35 Ill. Adm. Code 742.1015(i)(1)).

IN WITNESS WHEREOF, the lawful representatives of the parties have caused this MOU to be signed as follows:

**FOR: The Village of Minier**

BY: Neill Keneipp  
Neill Keneipp, Village President

DATE: 04/01/2014

**FOR: Illinois Environmental Protection Agency**

BY: Heather McFarland  
Manager, Division of Remediation Management  
Bureau of Land

DATE: 7-22-15

**CERTIFICATION OF RESOLUTION**

I, Sandy Landcaster, certify that I am the duly appointed and acting Village Clerk of the Village of Minier, Tazewell County, Illinois.

I further certify that on April 1st, 2014, the Corporate Authorities of the above municipality passed and approved the resolution authorizing the Village to enter into a Memorandum of Understanding with the Illinois Environmental Protection Agency.

Resolution No. 278, including the cover sheet thereof, was prepared, and published in pamphlet form on the 1<sup>st</sup> day of April, 2014. Copies of the Resolution were also available for public inspection upon request in the office of the Village Clerk.

Dated at Minier, Illinois, this 1<sup>st</sup> day of April, 2014.

  
Sandy Landcaster, Village Clerk

(SEAL)



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

## RECORDING REQUIREMENTS FOR NO FURTHER REMEDIATION LETTERS

### Introduction

The Illinois Environmental Protection Agency's (Illinois EPA) Bureau of Land/Leaking Underground Storage Tank Section issues a No Further Remediation (NFR) Letter after a demonstration of compliance with Title XVI of the Environmental Protection Act and applicable regulations is made. The NFR Letter signifies that: (1) all statutory and regulatory corrective action requirements applicable to the occurrence have been complied with, (2) all corrective action concerning the remediation of the occurrence has been completed, and (3) no further corrective action concerning the occurrence is necessary so long as the site is used in accordance with the terms and conditions of the NFR Letter.

### Significance

When properly recorded, the NFR Letter holds legal significance for all applicable parties outlined at Section 57.10(d) of the Environmental Protection Act. (See 415 ILCS 5/57.10(d).) If not properly recorded, the Illinois EPA *will* take steps to void the NFR Letter in accordance with the regulations.

### Duty to Record

**The duty to record the NFR Letter is *mandatory*. You *must* submit the NFR Letter, with a copy of any applicable institutional controls proposed as part of a corrective action completion report, to the Office of the Recorder or the Registrar of Titles of the county in which the site is located *within 45 days after receipt of the NFR Letter*. You must record the NFR Letter and any attachments. The NFR Letter shall be filed in accordance with Illinois law so that it forms a permanent part of the chain of title to ensure current and future users of the property will be informed of the conditions and terms of approval including level of remediation; land use limitations; and preventive, engineering, and institutional controls. A certified or otherwise accurate and official copy of the NFR Letter and any attachments, as recorded, must be submitted to the Illinois EPA. Failure to record the NFR Letter in accordance with the regulations will make the NFR Letter voidable.**

### For More Information

Please refer to the Tiered Approach to Corrective Action Objectives (TACO) fact sheet entitled *No Further Remediation Letters*, which is available from the Illinois EPA by calling (217) 524-3300 or by accessing it on the Illinois EPA Web site at <http://www.epa.illinois.gov/topics/cleanup-programs/taco/fact-sheets/no-further-remediation-letters/index>.



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

217/524-3300

CERTIFIED MAIL

SEP 12 2017

7014 2120 0002 3285 9758

Warsaw Family Land Trust  
John Warsaw  
P.O Box 886  
Minier, IL 61759

EPA DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

SEP 29 2017

REVIEWER: JKS

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 122  
Leaking UST Incident No. 981987 and 991610—NFR Letter  
Leaking UST Technical File

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Corrective Action Completion Report submitted for the above-referenced incident. The information was dated June 22, 2017 and was received by the Illinois EPA on June 27, 2017. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

The Corrective Action Completion Report and associated Professional Engineer Certification submitted

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature <input type="checkbox"/> Agent  <input checked="" type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery          John WARSAW 9-16-17</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes          If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to:</p> <p>Warsaw Family Trust Attn: John Warsaw Post Office Box 886 Minier, IL 61759</p>	<p>SC/BO 981987</p> <p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail® <input type="checkbox"/> Priority Mail Express™  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> Collect on Delivery</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label)</p>	<p>7014 2120 0002 3285 9758</p>

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Restrict (Endor): Warsaw Family Trust  
Total Attn: John Warsaw  
Post Office Box 886  
Minier, IL 61759

Sent to: \_\_\_\_\_  
Street or PO Box No. \_\_\_\_\_  
City, State, ZIP+4 \_\_\_\_\_

PS Form 3800, July 2014 See Reverse for Instructions

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Illinois Environmental  
Protection Agency  
P.O. BOX 19276 MAIL CODE #  
SPRINGFIELD, IL 62794-9276



R1



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

217/524-3300

CERTIFIED MAIL

SEP 12 2017

7014 2120 0002 3285 9741

Warsaw Family Trust  
John Warsaw  
P.O Box 886  
Minier, IL 61759

IEPA - DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

OCT 02 2017

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 122  
Leaking UST Incident No. 981987 and 991610  
Leaking UST Technical File

REVIEWER: RDH

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Corrective Action Plan Budget (budget) submitted for the above-referenced incident. This budget, dated June 22, 2017, was received by the Illinois EPA on June 27, 2017. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

The budget is modified pursuant to Sections 57.7(b)(3) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(b). Based on the modifications listed in Section 2 of Attachment A, the amounts listed in Section 1 of Attachment A are approved. Please note that the costs must be incurred in accordance with the approved plan. Be aware that the amount of payment from the Fund may be limited by Sections 57.7(c), 57.8(d), 57.8(e) and 57.8(g) of the Act, as well as 35 Ill. Adm. Code 734.630 and 734.655.

All future correspondence must be submitted to:

Illinois Environmental Protection Agency  
Bureau of Land - #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

An underground storage tank system owner or operator may appeal this decision to the Illinois Pollution Control Board. Appeal rights are attached.

Page 2

If you have any questions or need further assistance, please contact Brad Dilbaitis at (217) 785-8378 or Bradley.Dilbaitis@illinois.gov.

Sincerely,



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Stephen A. Colantino  
Acting Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

SAC:BD\CACRBUDmod.dotx

Attachment: Attachment A  
Appeal Rights

c: Al Green, Midwest Environmental (electronic copy), mdwstenv@frontier.com  
BOL File

R1291

Attachment A

Re: LPC #1790455007—Tazewell County  
Minier/ Warsaw, Howard  
Warsaw Itco/ Rt. 122  
Leaking UST Incident No. 981987 and 991610  
Leaking UST Technical File

**SECTION 1**

As a result of Illinois EPA's modification(s) in Section 2 of this Attachment A, the following amounts are approved:

\$0.00	Drilling and Monitoring Well Costs
\$0.00	Analytical Costs
\$0.00	Remediation and Disposal Costs
\$0.00	UST Removal and Abandonment Costs
\$907.70	Paving, Demolition, and Well Abandonment Costs
\$3,522.56	Consulting Personnel Costs
\$202.00	Consultant's Materials Costs

Handling charges will be determined at the time a billing package is reviewed by the Illinois EPA. The amount of allowable handling charges will be determined in accordance with Section 57.1(a) of the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code) 734.635.

**SECTION 2**

1. The monitoring well abandonment rate has been reduced to \$12.52 per foot. The costs exceed the maximum payment amounts set forth in Subpart H, Appendix D, and/or Appendix E of 35 Ill. Adm. Code 734. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(zz). In addition, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they are not reasonable.

Based upon the above deduction, a total of \$ 27.55 was deducted from Paving, Demo & Well Abandonment Costs.

2. \$1,960.00 for Consulting Personnel Costs, which exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o). In addition, the request lacks supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Furthermore, costs for activities and related services or materials that are unnecessary are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(aa). In addition, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they are not reasonable and/or will be used for site investigation or corrective action activities in excess of those required to meet the minimum

requirements of Title XVI of the Act. Moreover, the request is not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd). In accordance with 35 Ill. Adm. Code 734.510(b), a financial review must consist of a detailed review of the costs associated with each element necessary to accomplish the goals of the plan as required pursuant to the Act and regulations. Items to be reviewed must include, but are not limited to, costs associated with any materials, activities, or services that are included in the budget. The overall goal of the financial review must be to assure that costs associated with materials, activities, and services must be reasonable, must be consistent with the associated technical plan, must be incurred in the performance of corrective action activities, must not be used for corrective action activities in excess of those necessary to meet the minimum requirements of the Act and regulations, and must not exceed the maximum payment amounts set forth in Subpart H of this Part.

The Corrective Action Budget includes a section of costs for Consulting Personnel Costs incurred between October 2010 and September 2014 that were not previously approved in a budget. These 2010 through 2014 Consulting Personnel Costs include a request for 20 hours for a Senior Project Manager for "TACO" at a rate of \$98.00 per hour for a total of \$1,960.00. The first budget received by the Agency in this October 2010 to September 2014 timeframe was received on November 19, 2010. This budget included a request for 60 hours for a Senior Project Manager for "HAA, ELUC, Village Ordinance, perform TACO calculations, slug test analysis." This request was approved in the Corrective Action Budget. No TACO calculations were submitted to the Agency until the Agency received a Corrective Action Plan and Budget on March 10, 2015, which was six months after the October 2010 to September 2014 timeframe expired. The TACO calculations that were included in the Corrective Action Plan that was received March 10, 2015 were site-specific soil saturation calculations for benzene, ethylbenzene, toluene and total xylenes. The soil saturation calculations for total xylenes were the only site-specific calculations required because the only constituent that had contaminant concentrations exceeding the soil saturation limits was total xylenes; there were no soil saturation limit exceedances for benzene, ethylbenzene or toluene. The Consulting Personnel Costs that were approved in the March 18, 2011 decision letter for the Corrective Action Plan and Budget that were submitted on November 19, 2010 included enough personnel time to complete the TACO Tier 2 site-specific soil saturation limit calculations for total xylenes.

3. The Senior Account Technician rate has been reduced to \$65.50 per hour. The costs exceed the maximum payment amounts set forth in Subpart H, Appendix D, and/or Appendix E of 35 Ill. Adm. Code 734. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(zz). In addition, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they are not reasonable.

The Corrective Action Budget includes a section of costs for Consulting Personnel Costs incurred between October 2010 and September 2014 that were not previously approved in a budget. These 2010 through 2014 Consulting Personnel Costs include a request for 5 hours for a Senior Account Technician for a Corrective Action Plan and Budget at a rate of 98.00 per hour for a total of \$490.00. The applicable Subpart H rate for a Senior Account Technician in March of 2014 was \$65.50 per hour. The last Corrective Action Plan and Budget approved during the October 2010 through September 2014 timeframe was received on March 14, 2014. The Senior Account Technician is approved at a rate of \$65.50 per hour and a total of \$327.50.

4. \$490.00 for Consulting Personnel Costs; which lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be

used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. In addition, the request is not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd). In accordance with 35 Ill. Adm. Code 734.510(b), a financial review must consist of a detailed review of the costs associated with each element necessary to accomplish the goals of the plan as required pursuant to the Act and regulations. Items to be reviewed must include, but are not limited to, costs associated with any materials, activities, or services that are included in the budget. The overall goal of the financial review must be to assure that costs associated with materials, activities, and services must be reasonable, must be consistent with the associated technical plan, must be incurred in the performance of corrective action activities, must not be used for corrective action activities in excess of those necessary to meet the minimum requirements of the Act and regulations, and must not exceed the maximum payment amounts set forth in Subpart H of this Part.

The Corrective Action Budget includes a section of costs for Consulting Personnel Costs incurred between October 2010 and September 2014 that were not previously approved in a budget. These 2010 through 2014 costs include a request for 5 hours for a Senior Administrative Assistant to perform groundwater modeling calculations at a rate of \$98.00 per hour for a total of \$490.00. It is assumed that the Senior Administrative Assistant title is a mistake and that a Senior Project Manager was the intended personnel title, based on the requested rate and the task. No groundwater modeling calculations were received by the Agency before the Corrective Action Completion Report was received on June 27, 2017. The Consulting Personnel Costs associated with groundwater modeling were approved in the January 12, 2017 approval letter for the Corrective Action Plan and Budget that were received by the Agency on October 28, 2016.

5. 490.00 for Consulting Personnel Costs, which exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o). In addition, the request lacks supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Furthermore, costs for activities and related services or materials that are unnecessary are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(aa). In addition, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they are not reasonable and/or will be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Moreover, the request is not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd). Additionally, unreasonable costs for justifiable activities, materials, or services are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(aa). In addition, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they are not reasonable and/or will be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. In accordance with 35 Ill. Adm. Code 734.510(b), a financial review must consist of a detailed review of the costs associated with each element necessary to accomplish the goals of the plan as required pursuant

to the Act and regulations. Items to be reviewed must include, but are not limited to, costs associated with any materials, activities, or services that are included in the budget. The overall goal of the financial review must be to assure that costs associated with materials, activities, and services must be reasonable, must be consistent with the associated technical plan, must be incurred in the performance of corrective action activities, must not be used for corrective action activities in excess of those necessary to meet the minimum requirements of the Act and regulations, and must not exceed the maximum payment amounts set forth in Subpart H of this Part.

The Corrective Action Budget includes a section of costs for Consulting Personnel Costs incurred between October 2010 and September 2014 that were not previously approved in a budget. These 2010 through 2014 costs include a request for 5 hours for a Sr. Environmental Manager for "Highway Authority Agreement" at a rate of \$98.00 per hour for a total of \$490.00. The March 18, 2011 Corrective Action Plan and Budget decision letter approved costs associated with the procurement of the Highway Authority Agreement. The Corrective Action Plan included a copy of the Highway Authority Agreement initial information form that was mailed to the Illinois Department of Transportation on November 2, 2010. The next Corrective Action Plan and Budget were received by the Agency on March 14, 2014. This Corrective Action Plan included a copy of the executed Highway Authority Agreement (HAA 1342) that was received from IDOT in September 2013. There was nothing presented in the March 2013 Corrective Action Plan that would indicate that there was additional work required for the Highway Authority Agreement beyond what was previously presented and approved in the March 2011 Corrective Action Plan and Budget decision letter. In addition, the current Amended Corrective Action Budget does not indicate what the extra five hours for the Highway Authority Agreement entailed beyond what was originally approved for the task and no dates are presented in the budget to document when the work was completed. There has been no supporting documentation presented that would indicate that additional work beyond what was originally approved was necessary to obtain the Highway Authority Agreement or when the work was completed. Nothing has been provided to aid in determining what activities the request entails or when the activities took place. Please note that the personnel title that was included in this task request, Sr. Environmental Manager, is not consistent with the Personnel Titles listed in 35 Ill. Adm. Code 734. Appendix E, Personnel Titles and Rates. The use of the Personnel Titles in 35 Ill. Adm. Code 734. Appendix E, Personnel Titles and Rates is required for all budgets and applications for payment. Please refer to the Agency's Instructions for the Budget and Billing Forms and Personnel Title Descriptions and Duties Summary reference documents at <http://www.epa.illinois.gov/Assets/iepa/forms/land/ust/budget/instructions.pdf>.

6. 2,450.00 for Consulting Personnel Costs, which exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o). In addition, the request lacks supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Furthermore, costs for activities and related services or materials that are unnecessary are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(aa). In addition, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they are not reasonable and/or will be used for

site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Moreover, the request is not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd). Additionally, unreasonable costs for justifiable activities, materials, or services are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(aa). In addition, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they are not reasonable and/or will be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. In accordance with 35 Ill. Adm. Code 734.510(b), a financial review must consist of a detailed review of the costs associated with each element necessary to accomplish the goals of the plan as required pursuant to the Act and regulations. Items to be reviewed must include, but are not limited to, costs associated with any materials, activities, or services that are included in the budget. The overall goal of the financial review must be to assure that costs associated with materials, activities, and services must be reasonable, must be consistent with the associated technical plan, must be incurred in the performance of corrective action activities, must not be used for corrective action activities in excess of those necessary to meet the minimum requirements of the Act and regulations, and must not exceed the maximum payment amounts set forth in Subpart H of this Part.

The Corrective Action Budget includes a section of costs for Consulting Personnel Costs incurred between October 2010 and September 2014 that were not previously approved in a budget. These 2010 through 2014 costs include a request for 25 hours for a Sr. Environmental Manager for "Groundwater Use Restriction Ordinance" at a rate of \$98.00 per hour for a total of \$2,450.00. The March 18, 2011 Corrective Action Plan and Budget decision letter approved costs associated with the groundwater ordinance. There has been no technical information presented that would indicate that additional work beyond what was originally approved was necessary to obtain the groundwater ordinance. In addition, the current Amended Corrective Action Budget does not indicate what the extra 25 hours for the groundwater ordinance entailed beyond what was originally approved for the task and no dates are presented in the budget to document when the work was completed. Nothing has been provided to aid in determining what activities the request entails or when the activities took place. Please note that the personnel title that was included in this task request, Sr. Environmental Manager, is not consistent with the Personnel Titles listed in 35 Ill. Adm. Code 734.Appendix E, Personnel Titles and Rates. The use of the Personnel Titles in 35 Ill. Adm. Code 734.Appendix E, Personnel Titles and Rates is required for all budgets and applications for payment. Please refer to the Agency's Instructions for the Budget and Billing Forms and Personnel Title Descriptions and Duties Summary reference documents at <http://www.epa.illinois.gov/Assets/iepa/forms/land/ust/budget/instructions.pdf>.

7. 980.00 for Consulting Personnel Costs, which exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o). In addition, the request lacks supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Furthermore, costs for activities and related services or materials that are unnecessary are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(aa). In addition, such costs are not approved

pursuant to Section 57.7(c)(3) of the Act because they are not reasonable and/or will be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Moreover, the request is not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd). In accordance with 35 Ill. Adm. Code 734.510(b), a financial review must consist of a detailed review of the costs associated with each element necessary to accomplish the goals of the plan as required pursuant to the Act and regulations. Items to be reviewed must include, but are not limited to, costs associated with any materials, activities, or services that are included in the budget. The overall goal of the financial review must be to assure that costs associated with materials, activities, and services must be reasonable, must be consistent with the associated technical plan, must be incurred in the performance of corrective action activities, must not be used for corrective action activities in excess of those necessary to meet the minimum requirements of the Act and regulations, and must not exceed the maximum payment amounts set forth in Subpart H of this Part.

The Corrective Action Budget includes a section of costs for Consulting Personnel Costs incurred between October 2010 and September 2014 that were not previously approved in a budget. These 2010 through 2014 costs include a request for 10 hours for a Sr. Environmental Hydrogeologist for "Environmental Land Use Control" at a rate of \$98.00 per hour for a total of \$980.00. The March 18, 2011 Corrective Action Plan and Budget decision letter approved costs associated with the Environmental Land Use Control. There has been no technical information presented that would indicate that additional work beyond what was previously approved was necessary. In addition, the current Amended Corrective Action Budget does not indicate what the extra 10 hours for the Environmental Land Use Control entailed beyond what was originally approved for the task and no dates are presented in the budget to document when the work was completed. Nothing has been provided to aid in determining what activities the request entails or when the activities took place. Please note that the personnel title that was included in this task request, Sr. Environmental Hydrogeologist, is not consistent with the Personnel Titles listed in 35 Ill. Adm. Code 734. Appendix E, Personnel Titles and Rates. The use of the Personnel Titles in 35 Ill. Adm. Code 734. Appendix E, Personnel Titles and Rates is required for all plans and budgets. Please refer to the Agency's Instructions for the Budget and Billing Forms and Personnel Title Descriptions and Duties Summary reference documents at <http://www.epa.illinois.gov/Assets/iepa/forms/land/ust/budget/instructions.pdf>.

8. \$1,957.76 for Consulting Personnel Costs, which exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o). In addition, the request lacks supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Furthermore, the request is not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd). In accordance with 35 Ill. Adm. Code 734.510(b), a financial review must consist of a detailed review of the costs associated with each element necessary to accomplish the goals of the plan as required pursuant to the Act and regulations. Items to be reviewed must include, but are not limited to, costs associated with any materials, activities, or services that are included in the budget. The overall

goal of the financial review must be to assure that costs associated with materials, activities, and services must be reasonable, must be consistent with the associated technical plan, must be incurred in the performance of corrective action activities, must not be used for corrective action activities in excess of those necessary to meet the minimum requirements of the Act and regulations, and must not exceed the maximum payment amounts set forth in Subpart H of this Part.

The Corrective Action Budget includes a section of costs for Consulting Personnel Costs incurred between October 2010 and September 2014 that were not previously approved in a budget. These 2010 through 2014 costs include a request for a Senior Account Technician for "reimbursement" at a rate of \$61.18 per hour for a total of \$1,957.76. Please note that no reimbursement claims were submitted between January 24, 2005 and April 21, 2015.

9. 5,880.00 for Consulting Personnel Costs, which exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o). In addition, the request lacks supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Furthermore, costs for activities and related services or materials that are unnecessary are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(aa). In addition, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they are not reasonable and/or will be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Moreover, the request is not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd). Additionally, unreasonable costs for justifiable activities, materials, or services are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(aa). In addition, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they are not reasonable and/or will be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. In accordance with 35 Ill. Adm. Code 734.510(b), a financial review must consist of a detailed review of the costs associated with each element necessary to accomplish the goals of the plan as required pursuant to the Act and regulations. Items to be reviewed must include, but are not limited to, costs associated with any materials, activities, or services that are included in the budget. The overall goal of the financial review must be to assure that costs associated with materials, activities, and services must be reasonable, must be consistent with the associated technical plan, must be incurred in the performance of corrective action activities, must not be used for corrective action activities in excess of those necessary to meet the minimum requirements of the Act and regulations, and must not exceed the maximum payment amounts set forth in Subpart H of this Part.

The Corrective Action Budget includes a section of costs for Consulting Personnel Costs incurred between October 2010 and September 2014 that were not previously approved in a budget. These 2010 through 2014 costs include a request for a Sr. Environmental Hydrogeologist for "Corrective Action Plan and Budget, planning alternative remediation strategies" at a rate of \$98.00 per hour for a total of \$5,880.00. The two budgets that were approved (one with

modifications) included costs approved for the planning and preparation of the two Corrective Action Plans. There has been no information submitted to document when these hours were worked, the plan/budget to which they refer, or an explanation of the alternative remediation strategies that are being requested for payment. There is no documentation to support these additional requested hours. Please note that the personnel title that was included in this task request, Sr. Environmental Hydrogeologist, is not consistent with the Personnel Titles listed in 35 Ill. Adm. Code 734.Appendix E, Personnel Titles and Rates. The use of the Personnel Titles in 35 Ill. Adm. Code 734.Appendix E, Personnel Titles and Rates is required for all plans and budgets. Please refer to the Agency's Instructions for the Budget and Billing Forms and Personnel Title Descriptions and Duties Summary reference documents at <http://www.epa.illinois.gov/Assets/iepa/forms/land/ust/budget/instructions.pdf>.

10. 5,880.00 for Consulting Personnel Costs, which exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o). In addition, the request lacks supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Furthermore, costs for activities and related services or materials that are unnecessary are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(aa). In addition, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they are not reasonable and/or will be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Moreover, the request is not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd). In accordance with 35 Ill. Adm. Code 734.510(b), a financial review must consist of a detailed review of the costs associated with each element necessary to accomplish the goals of the plan as required pursuant to the Act and regulations. Items to be reviewed must include, but are not limited to, costs associated with any materials, activities, or services that are included in the budget. The overall goal of the financial review must be to assure that costs associated with materials, activities, and services must be reasonable, must be consistent with the associated technical plan, must be incurred in the performance of corrective action activities, must not be used for corrective action activities in excess of those necessary to meet the minimum requirements of the Act and regulations, and must not exceed the maximum payment amounts set forth in Subpart H of this Part.

The Corrective Action Budget includes a section of costs for Consulting Personnel Costs incurred between October 2010 and September 2014 that were not previously approved in a budget. These 2010 through 2014 costs include a request for a Sr. Environmental Manager for "Project management personnel time over that previously approved between from 2010 to 2014" at a rate of \$98.00 per hour for a total of \$5,880.00. Nothing has been submitted to document what this request describes. "Project management" is a very vague task description. Without providing specific tasks that were completed and when the hours were worked, it is impossible to make the determination that the request describes eligible activities that don't exceed the minimum requirements. Corrective action costs associated with the two proposed Corrective Action Budgets during this requested timeframe have been approved. If additional costs are being requested beyond what was previously approved then additional documentation is required that

details the additional work required, why the extra work was necessary and when the work took place. Please note that the personnel title that was included in this task request, Sr. Environmental Manager, is not consistent with the Personnel Titles listed in 35 Ill. Adm. Code 734.Appendix E, Personnel Titles and Rates. The use of the Personnel Titles in 35 Ill. Adm. Code 734.Appendix E, Personnel Titles and Rates is required for all plans and budgets. Please refer to the Agency's Instructions for the Budget and Billing Forms and Personnel Title Descriptions and Duties Summary reference documents at <http://www.epa.illinois.gov/Assets/iepa/forms/land/ust/budget/instructions.pdf>.

**Please note that all personnel titles submitted in budgets and applications for payment must be consistent with the Personnel Titles listed in 35 Ill. Adm. Code 734.Appendix E, Personnel Titles and Rates. The use of the Personnel Titles in 35 Ill. Adm. Code 734.Appendix E, Personnel Titles and Rates is required for all plans and budgets. Please refer to the Agency's Instructions for the Budget and Billing Forms and Personnel Title Descriptions and Duties Summary reference documents at <http://www.epa.illinois.gov/Assets/iepa/forms/land/ust/budget/instructions.pdf>.**

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## Appeal Rights

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board pursuant to Sections 40 and 57.7(c)(4) of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

~~For information regarding the filing of an appeal, please contact:~~

John Therriault, Assistant Clerk  
Illinois Pollution Control Board  
James R. Thompson Center  
100 West Randolph, Suite 11-500  
Chicago, IL 60601  
312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency  
Division of Legal Counsel  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276  
217/782-5544

QUEUE DATE TRACKING SHEET  
LUST CLAIMS UNIT

LPC # 1790455007  
INCIDENT # 981987 -- 69111

QUEUE DATE 3/13/2018 120-DAY DATE 7/11/2018

SITE NAME: Warsaw, Howard

OWNER/ OPERATOR: Warsaw Family Land Trust

CLASS CODE: CA PROGRAM: 734

AMOUNT REQUESTED: \$30,783.67

BILLING PERIOD FROM: 11/24/2014 TO: 2/28/2018

CONSULTANT: MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION

OPT-IN: 6/8/2010 - need new o/o... (2/22)  
- need new payment certification form (2/22)

NFR: 9/12/2017

SENT TO DIVISION FILE:

COMMENTS:

First claim for this Incident Number? Yes  No

Yearly breakdowns required? Yes  No

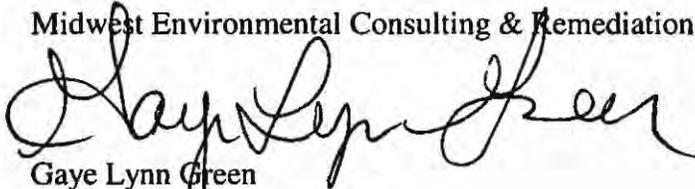
- 8) Invoice #6752B dated 12/29/17 for **\$4,958.12** from MECRS, along with the subcontractor invoices.
- 9) Invoices #020110006403 and #020110006404 for **\$7,660.00** from JAYDEE Trucking.
- 10) Invoice #201733 dated 12/11/17 for **\$937.05** from MECRS, along with the subcontractor invoices.

The total amount being requested for this reimbursement submittal is **\$30,783.67**.

Please feel free to contact our office with any comments or questions.

Sincerely,

Midwest Environmental Consulting & Remediation Services, Inc.



Gaye Lynn Green  
Reimbursement Manager

**Midwest Environmental Consulting & Remediation Services Inc.**

**22200 Illinois Route 9 • P.O. Box 614**

**Tremont, IL 61568-0614**

**Phone : (309) 925-5551 • Fax : (309) 925-5606**

**E-mail : mdwstenv@frontier.com**

February 12, 2018

Illinois Environmental Protection Agency  
Division of Remediation Management  
Remedial Projects Accounting and Procurement Unit  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

RE: LPC #1790455007 - Tazewell County  
Minier/Howard Warsaw - ITCO  
Route 122  
Incident #981987  
LUST Fiscal File

Dear Sirs:

Please find enclosed the most recent reimbursement application for the subject site. Attached are the following listed invoices and corresponding documentation:

- 1) Invoice #7360 dated 02/13/15 from Midwest Environmental Consulting & Remediation Service, Inc. (MECRS), for **\$408.21**, along with the supporting documentation.
- 2) Invoice #7450 dated 09/21/15 for **\$12,045.18** from Midwest Environmental Consulting & Remediation Service, Inc. (MECRS), along with the subcontractor invoices.
- 3) Invoice #6613B 11/22/16 for **\$218.64** from MECRS.
- 4) Invoice #6652B dated 12/30/16 for **\$1,251.34** from MECRS.
- 5) Invoice #6678B dated 02/03/17 for **\$665.14** from MECRS.
- 6) Invoice #6728B dated 06/09/17 for **\$2,585.74** from MECRS.
- 7) Receipt #774784 dated 09/26/17 fir **\$54.25** from the Tazewell County Clerk & Recorder.

**RECEIVED**

**IEPA/BOL**

**RECEIVED**

MAR 13 2018

General Information for the Budget and Billing Forms

LPC#: 1790455007 County: Tazewell

City: Minier Site Name: Warsaw, Howard (Warsaw ITCO)

Site Address: Ill. Rte. 122

IEMA Incident No: 981987

IEMA Notification Date: August 11, 1998

Date this form was prepared: February 12, 2018

This form is being submitted as a (check one if applicable):

- Budget Proposal
- Budget Amendment (Budget Amendments must include only the costs over the previous budget.)
- Billing Package

Please provide the name(s) and date(s) of report(s) documenting the costs as requested:

Name(s): CACR

Date (s): 6/27/2017

This package is being submitted for the site activities indicated below:

35 Ill. Adm. Code 734:

- Early Action
- Free Produce Removal After Early Action
- Site Investigation.....Stage 1:  Actual Costs      Stage 2:
- Corrective Action

**RECEIVED**  
**IEPA/BOL**

35 Ill. Adm. Code 732:

- Early Action
- Free Produce Removal After Early Action
- Site Classification
- Low Priority Corrective Action
- High Priority Corrective Action

35 Ill. Adm. Code 731

- Site Investigation
- Corrective Action

**RECEIVED**  
**MAR 13 2018**  
**IEPA/BOL**

# General Information for the Budget and Billing Forms

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund.

Pay to the order of: John Warsaw WARSAW Family Land Trust

Send in care of: Midwest Environmental Consulting & Remediation Services, Inc

Address: PO Box 614

City: Tremont State: IL Zip: 61568

The payee is the: Owner:  Operator:  (Check one or both)

John D. Warsaw W-9 must be submitted.

Signature of the owner or operator of the UST(s) (required) Click [here](#) to print off a W-9 Form.

Number of petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 10:  101 or more:

Number of USTs at the site: 10 (Number of USTs includes USTs presently at the site and USTs that have been removed).

Number of incidents reported to the IEMA for this site: 1

Incidents Numbers assigned to the site due to releases from USTs: 981987

**RECEIVED**

**IEPA/BOL**

Please list all tanks that have ever been located at the site and tanks that are presently located at the site.

Product Stored in UST	Size (gallons)	Did UST have a release?	Incident No.	Type of Release Tank Leak / Overfill / Piping Leak
gasoline	500	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
gasoline	500	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
gasoline	2,000	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	981987	tank leak/overfill/piping leak
diesel	2,500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
gasoline	2500	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		

**RECEIVED**

MAR 13 2018

**IEPA/BOL**

R1306

# Private Insurance Coverage Questionnaire

This form must be completed in full by all owners or operators, or their authorized representatives, that have a claim for payment from the State of Illinois Underground Storage Tank Fund for the labor, materials, overhead, and profit costs related to the investigation and/or remediation of a Leaking UST site.

1. Site Name: Warsaw ITCO

Address: Ill. Hwy 122

City: Minier State: Illinois Zip: 61759

2. Name of insurance company providing coverage for this Leaking UST site:

N/A

3. Amount of coverage provided: N/A

4. Have you or your firm filed a claim against your insurance company for this Leaking UST site?

Yes  No

a. If yes, how much is the claim? N/A

b. If no, explain why. No Insurance

5. Have you or your firm received payment for a claim against your insurance company for this Leaking UST site?

Yes  No

a. If yes, how much and when? N/A  
Date: \_\_\_\_\_

b. If no, explain why. No Insurance  
\_\_\_\_\_  
\_\_\_\_\_

6. Are you going to file a claim against your insurance policy?

Yes  No

a. If yes, how much and when? N/A  
Date: \_\_\_\_\_

b. If no, explain why. No Insurance  
\_\_\_\_\_  
\_\_\_\_\_

This Illinois EPA is authorized to request this information under the Environmental Protection Act, 415 ILCS 5/1 et seq. (formerly Ill. Rev. Stat. Ch 11-1/2, 1001 et seq.). Disclosure of this information is required. Failure to properly complete this form in its entirety may result in the delay or denial of any payment requested hereunder. This form has been approved by the Forms Management Center.

## Women and Minority Business Enterprises Form

The Illinois EPA is required to report State and Federal funds paid to Women's Business Enterprises (WBE) and Minority Business Enterprises (MBE). Therefore, please provide their required information for all Prime Consultants/Contractors and Subcontractors used to perform the work for this billing:

Name of LUST Site: Warsaw ITCO Incident No. 981987

The work for this billing was performed from: November 24, 2014 to: February 15, 2018

Prime Consultant: Midwest Environmental Consulting and Remediation Services, Inc. (MECRS)

FIRM'S NAME, ADDRESS AND TELEPHONE NUMBER	IS THIS FIRM A WBE OR MBE?*	IF WBE OR MBE WHAT IS ITS STATE OF ILLINOIS VENDOR NUMBER?	AMOUNT PAID OR DUE THIS BILLING (\$)
MECRS, 22200 IL Rt. 9, Tremont, IL 309-925-5551	no		\$22,569.47
Bruner, Cooper & Zuck	no		\$506.03
USPS	no		\$48.17
JAYDEE Trucking	No		\$7,660.00
		<i>Subtotal</i>	<i>\$8,214.20</i>

**BILLING TOTAL** \$30,783.67

The Illinois EPA is authorized to request this information under Environmental Protection act, 415 ILCS 5/1 et seq. (formerly Ill Rev. Stat. Ch 111 1/2, 1001 et seq.). Disclosure of this information is required. Failure to properly complete this form in its entirety may result in the delay or denial of any payment requested hereunder. This form has been approved by the Forms Management Center.

**Federal Taxpayer Identification Number and Legal Status Disclosure  
Certification Requirements**

In order to comply with requirements mandated by Internal Revenue Service rules and regulations, the tank owner or operator must complete the section entitled TAXPAYER IDENTIFICATION NUMBER AND LEGAL STATUS DISCLOSURE CERTIFICATION below.

Enter your taxpayer identification number (TIN) in the appropriate space. For individuals and sole proprietors, this is your social security number. For other entities, it is your employer identification number. Federal employer identification numbers (FEINs) must not be used for sole proprietorships.

If you do not have a TIN, apply for one immediately. To apply, get Form SS-5, Application for a Social Security Number Card (for individuals) from your local office of the Social Security administration, or Form SS-4, Application for Employer Identification Number (for businesses and all other entities), from your local Internal Revenue Service office.

To complete the certification if you do not have a TIN, fill out the certification indicating that a TIN has been applied for, sign and date the form, and return it to the Illinois EPA. As soon as you receive your TIN, fill out another such form including your TIN, sign and date the form, and send it to the Illinois EPA.

If you fail to furnish your correct TIN to the Illinois EPA, you are subject to an IRS penalty of \$50.00 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**WILLFULLY FALSIFYING CERTIFICATIONS OR AFFIRMATIONS MAY SUBJECT YOU TO CRIMINAL PENALTIES INCLUDING FINES AND/OR IMPRISONMENT.**

Please return the completed form to the Illinois EPA, Bureau of Land, Leaking UST Claims Unit, Post Office Box 19276, Springfield, Illinois 62794-9276.

**TAXPAYER IDENTIFICATION NUMBER AND LEGAL STATUS DISCLOSURE CERTIFICATION.**

Under penalties of perjury, I certify that the FEIN or Social Security Number indicated below is my correct Federal Taxpayer Identification Number. I am doing business as a (please check one):

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Individual                 | <input type="checkbox"/> Sole Proprietorship     | <input type="checkbox"/> Real Estate Agent       |
| <input type="checkbox"/> Partnership                | <input type="checkbox"/> Governmental Entity     | <input type="checkbox"/> Not-for-Profit Corp.    |
| <input type="checkbox"/> Corporation                | <input type="checkbox"/> Tax Exempt Organization | <input type="checkbox"/> Medical & Health Care   |
| <input checked="" type="checkbox"/> Trust or Estate | (IRC 501(a) only)                                | <input type="checkbox"/> Services Provider Corp. |

37-6362803

Taxpayer Identification Number

Signature

Date

John Warsaw

Name of Firm (please print or type)

Note: Original signature required.

If you have a change of address,  
click here to print off a W-98 form.

The Illinois EPA authorized to request this information under the Illinois Environmental Protection Act, 415 ILCS 5/1 et. Seq. (former Rev. Stat. Ch 111 1/2, 1001 et seq.). Disclosure of this information is required. Failure to properly complete this form in its entirety may result in the delay or denial of any payment requested hereunder. This form has been approved by the Forms Management Cent

# Owner/Operator and Licensed Professional Engineer/Geologist Billing Certification Form

Under penalty of perjury as defined in Section 32-2 of the Criminal Code of 1961 [720 ILCS 5/32-2], I certify to the following:

- \* The bills in the attached application for reimbursement are for performing corrective action activities associated with Incident # 981987 reported for the Leaking Underground Storage Tank site located at address: Ill. Rt. 122  
City: Minier State: Illinois Zip: 61759
- \* The bills are for the billing period: November 24, 2014 through February 28, 2018 and were incurred in conformance with the Environmental Protection Act and 35 Ill. Adm. Code 731, 732 or 734.
- \* The attached application for reimbursement and all documents submitted with it were prepared under the supervision of the licensed professional engineer or licensed professional geologist and the owner and/or operator whose signatures are set forth below and in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information provided. The information in the attached application for reimbursement is, to the best of my knowledge and belief, true, accurate, and complete.
- \* The costs for remediating the above-listed incident are correct, are reasonable, and if applicable, were determined in accordance with Subpart H: Maximum Payment Amounts, Appendix D Sample Handling and Analysis amounts, and Appendix E Personnel Titles and Rates of 35 Ill. Adm. Code 732 or 734.
- \* I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Section 44 of the Environmental Protection Act [415 ILCS 5/44] and Section 32-2 of the Criminal Code of 1961 [720 ILCS 5/32-2].

Owner/Operator Name: Warsaw, Howard

Authorized Representative\*\*: John Warsaw

Address: PO Box 886 Phone: (309) 392-2626

City: Minier State: IL Zip: 61759

Signature: [Handwritten Signature] Date: 2/22/18

Subscribed and sworn to before me the 22nd day of February, 2018

[Handwritten Signature]  
(Notary Public)

Seal: OFFICIAL SEAL  
GAYE LYNN GREEN  
NOTARY PUBLIC - STATE OF ILLINOIS  
MY COMMISSION EXPIRES: 05/18/21

RECEIVED

L.P.E./L.P.G. Name: Penny Silzer

L.P.E./L.P.G. Illinois Registration No: 196-000256

L.P.E./L.P.G. Registration Expiration Date: 3/31/2019

Company Name: Midwest Environmental Consulting & Remediation Service, Inc.

Address: 22200 IL Rte. 9; P.O. Box 614 Phone: (309) 926-5551

City: Tremont State: Illinois Zip: 61568

L.P.E./L.P.G. Signature: [Handwritten Signature] Date: 2/22/18

Subscribed and sworn to before me the 22nd day of February, 2018

[Handwritten Signature]  
(Notary Public)

Seal: OFFICIAL SEAL  
GAYE LYNN GREEN  
NOTARY PUBLIC - STATE OF ILLINOIS  
MY COMMISSION EXPIRES: 05/18/21

RECEIVED

\*\*For a corporation, a principal executive officer of at least the level of vice president, or a person authorized by a resolution of the board of directors to sign the applicable document if a copy of the resolution, certified as a true copy by the secretary of the corporation, is submitted with the document.

MAR 13 2018

IERA/BOL

**PRIVATE INSURANCE AFFIDAVIT**

I, John Warsaw, a duly authorized representative of Warsaw ITCO,  
(owner/operator or firm's name)

hereby certify that Warsaw ITCO (does, does not) does not have private  
(owner/operator or firm's name) (choose one)

insurance coverage for all or part of the costs related to claim for payment of Warsaw ITCO  
(owner/operator or firm's name)

investigation or remediation costs for work performed at Warsaw ITCO located at  
(site name)

Ill. Hwy 122  
(address)

I, John Warsaw, Owner of John Warsaw,  
(name) (title) (owner/operator or firm's name)

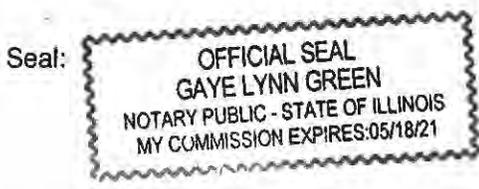
certify that, as of this date, the above information is accurate and complete. Furthermore, I also agree to reimburse the Illinois EPA for any overpayment made by my private insurance company in excess of the deductible amount for each site.

Owner/Operator: John Warsaw Title: Owner

Signature: [Handwritten Signature] Date: 2-22-18

Subscribed and sworn to before me the 22<sup>nd</sup> day of February 2018.

[Handwritten Signature]  
(Notary Public)



The Illinois EPA is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder. This form has been approved by the Forms Management Center.

**Payment Certification Form**

This certification form must be included with every request for payment.

I, John Warsaw, the owner or operator of the Leaking UST (s) for which this application for payment is being submitted, certify that \$30,783.67 is the amount being sought in this application for payment, \$659,626.50 has already been paid from the FUND for this occurrence, and \$0.00 has been sent to the Illinois EPA for payment for this occurrence but has not yet been paid.

I further certify that the number of petroleum USTs in Illinois presently owned or operated by the owner or operator, any subsidiary, parent or joint stock company of the owner or operator, and any company owned by any parent, subsidiary or joint stock company of the owner or operator is (check one):

Fewer than 101

101 or more

Except for applications for payment associated with Early Action, I certify that a plan for the work included in this application for payment was approved by the Illinois EPA on September 12, 2017; except for applications for payment associated with to 35 Ill. Adm. Code 731, certify that a budget for the work included in this application for payment was approved by the Illinois EPA on September 12, 2017; and certify that the amount sought for payment was expended in conformance with the approved budget and approved plan. I further certify that, if the costs included in this application for payment are approved for payment, the following limitations will not be exceeded:

1. Payment will not result in the owner or operator receiving payment of corrective action costs or indemnification costs from the Fund for more than \$1,000,000 per occurrence for sites subject to 35 Ill. Admin. Code 731 or 732. (OR) Payment will not result in the owner or operator receiving payment of corrective action costs or indemnification costs from the Fund for more than \$1,500,000 per occurrence for sites subject to 35 Ill. Admin. Code 734.
2. Payment of this claim will not result in the owner or operator receiving payment of corrective action costs or indemnification costs from the Fund incurred during a calendar year in excess of the following amounts:

For costs incurred in calendar years prior to 2002:

- \$1,000,000, if fewer than 101 tanks were owned or operated in Illin
- \$2,000,000, if 101 or more tanks are owned or operated in Illinois.

For costs incurred in calendar years 2002 and later:

- \$2,000,000, fi fewer than 101 tanks were owned or operated in Illin
- \$3,000,000, if 101 or more tanks are owned or operated in Illinois.

Owner/Operator Name: Warsaw, Howard

Authorized Representative\* John Warsaw

Title: Owner

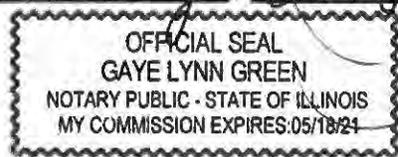
Signature: [Handwritten Signature]

Date: 2/22/18

*need new*

Subscribed and sworn to before me the 22<sup>nd</sup> day of February, 2018.  
(this certification must be notarized when the certification is signed.)

[Handwritten Signature]  
(Notary Public)



\*For a corporation, a principal executive officer of at least the level of vice president, or a person authorized by a resolution of the board of directors to sign the applicable document if a copy of the resolution, certified as a true copy by the secretary of the corporation, is submitted with the document.

# Billing Summary

	\$ Amount Approved in the Budget	\$ Amount Requested for Payment from the Fund
1. Drilling and Monitoring Well Costs Form	\$3,795.30	\$0.00
2. Analytical Costs Form	\$4,573.87	\$0.00
3. Remediation and Disposal Costs From	\$20,465.08	\$0.00
4. UST Removal and Abandonment Costs Form	\$0.00	\$0.00
5. Paving, Demolition, and Well Abandonment Costs Form	\$10,907.70	90770 <del>\$8,595.25</del>
6. Consulting Personnel Costs Form	\$38,731.51	\$18,762.03
7. Consultant's Materials Costs Form	\$961.80	\$147.30
<b>Total Amount Approved in the Budget*</b>		<b>NOT APPLICABLE</b>
Subtotal of lines 1-7:	<b>NOT APPLICABLE</b>	\$27,504.58
8. Handling Charges Form	<b>NOT APPLICABLE</b>	\$3,279.09
<b>TOTAL AMOUNT REQUESTED FOR PAYMENT</b>	<b>NOT APPLICABLE</b>	\$30,783.67

\*Date(s) this Budget(s) was approved:

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# Paving, Demolition, and Well Abandonment Costs Form

## A. Concrete and Asphalt Placement/Replacement

Number of Square Feet	Asphalt or Concrete	Thickness (inches)	Cost (\$) per Square Foot	Replacement or Placement for an Engineered Barrier	Total Cost
120	asphalt	3"	\$63.83		\$7,660.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00

invoice says 91 sq. yds  
 = 819 Sqr Ft  
 232/51 Ft

<b>Total Concrete and Asphalt Placement/Replacement Costs:</b>	<del>\$7,660.00</del>
--	-----------------------

## B. Building Destruction or Dismantling and Canopy Removal

Item to Be Destroyed, Dismantled, or Removed	Unit Cost (\$)	Total Cost (\$)
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00

<b>Total Building Destruction or Dismantling and Canopy Removal Costs:</b>	\$0.00
--	--------



**Consulting Personnel Costs Form**

Personnel Costs to close the site

Employee Name	Personnel Title*	Hours	Rate *	Total \$
Remediation Category	Task			
Penny Silzer	Sr. Project Manager	20 42.73	\$103.25	\$4,412.07
CA	site closure, final paper work and project management			
Gaye Lynn Green	Sr. Acct Technician	0.5	\$69.00	\$34.50
CA	final reimbursement application			
Allan Green	Sr. Project Manager	68.47	\$121.49	\$8,318.41
CA	final reimbursemet and documentation of closure			
Penny Silzer	Sr. Geologist/PG	6.5	\$133.64	\$868.66
	PG review of Budget and Reimbursements			
Kevan Cooper	PE	3.5	\$144.58	\$506.03
	PE Cert and Review of CACR			
Andrew Fetterolf	Project Manager	3	\$109.32	\$327.96
CA	TACO			
Penny Silzer	Geologist III	19.5	\$115.26	\$2,247.57
CA	CAP & Budget 2015			
Allan Green	Sr. Project Manager	8	\$121.49	\$971.92
CA	Groundwater Model Calculations, groundwater ordinance 2015			
Penny Silzer	Geologist III	5	\$4.75	\$528.39
CA	Highway Authority Agreement			
Allan Green	Sr. Env. Manager	3	\$126.00	\$378.00
CA	Groundwater Use Restriction Ordinance			
Andrew Fetterolf	Sr. Project Manager	1.5	\$112.35	\$168.52
CA	Environmental Land Use Control			

-2,347.07

OK

1-8,028.36

OK

OK

OK

-2,247.57

3-11  
OB  
OB  
OB  
OB

**Total of Consulting Personnel Costs \$18,762.03**

**Consultant's Materials Costs Form**

Consulting Materials Costs:

Materials, Equipment, or Field Purchases		Time or Amount Use	Rate (\$)	Units	Total Cost
Remediation Category	Description/Justification				
County Recording Fees		54.25			\$54.25
CA - closure	county recording fees				
final postage					\$48.17
Copies		561	\$0.08	/page	\$44.88
					\$0.00
					\$0.00
					\$0.00
					\$0.00

OK

**Total Consultant's Material's Costs: \$147.30**

## Handling Charges Form

Handling charges for field purchases and subcontractor billings must be calculated based on the table below. Handling charged do not need to be submitted in a budget or approved as a part of a budget. Copies of invoices and/or receipts of the subcontractor charges and/or field purchase must be submitted with an Application for Payment. Invoices and/or receipts must include a breakdown of the date the work was conducted and documentation of all activities and materials purchased. If the invoices and receipts do not contain this information, additional documentation must be submitted providing this information.

Subcontractor and Field Purchase Costs	Eligible Handling Charges as a Percentage of Cost
\$1 - \$5,000	12%
\$5,001 - \$15,000	\$600 + 10% of amt. over \$5,000
\$15,001 - \$50,000	\$1,600 + 8% of amt. over \$15,000
\$50,001 - \$100,000	\$4,400 + 5% of amt. over \$50,000
\$100,001 - \$1,000,000	\$6,900 + 2% of amt. over \$100,000

Subcontractor Name of Field Purchase	Type of Work Performed by Subcontractor	Subcontractor or Field Purchase Amount \$
USPS	Postage	48.17
Bruner, Cooper and Zuck	PE Review	NO P.O.P 506.03
Reynolds Drilling	Cut in previous claim	amount paid \$3,324.24 3564.24
Prairie Analytical	inadequate P.O.P.	1652.16
USPS		7.35
JAYDEE Truck Services		prev ded 21547.8
Total Subcontractor and Field Purchase Costs:		\$27,325.75

Previously paid handling on 39.50 Teklab and 777.16 PDC Laboratories

Total Handling Charges: \$3,279.09

NO P.O.P  
25,167.56  
= 2,413.40

prev A.P  
2,391.56

20

2,586.06  
-\$693.03  
P.O.P.

2,391.56  
- 194.50  
prev ded

R1318

st Environmental Consulting &  
 diation Services Inc  
 / Illinois Route 9  
 Box 614  
 mont, IL 61568-0614

# Invoice

DATE	INVOICE NO.
2/13/2015	7360

<b>BILL TO</b>
MR. JOHN WARSAW POST OFFICE BOX 2302 EAST PEORIA, ILLINOIS 61611

ITEM	DATE	QTY.	RATE	TERMS	PROJECT	SITE LOCATION	AMOUNT	
				NET 31 DAYS		MINIER		
SR. ENV MANAG	1/26/2015	1	98.00				98.00	
SR. ENV HYDRO	1/26/2015	3	98.00				294.00	
SR. ENV MANAG	1/27/2015	0.5	98.00				49.00	
SR. ENV HYDRO	1/27/2015	1	98.00				98.00	
SR. ENV MANAG	1/28/2015	0.5	98.00				49.00	
SR. ENV HYDRO	1/28/2015	2	98.00				196.00	
P.G	1/29/2015	2.5	100.00				250.00	
SR. ENV MANAG	1/29/2015	1.25	98.00				122.50	
SR. ENV MANAG	1/30/2015	0.5	98.00				49.00	
P.G	2/2/2015	1	100.00				100.00	
REIMB. MANGR. Reimb Group	2/10/2015	1	55.00				55.00	
	11/25/2014		1,749.60				1,749.60	
	12/12/2014		1,652.16				1,652.16	
							Total Reimbursable Expenses	3,401.76
			12.00%				Markup	408.21
							Total Reimbursable Expenses	3,809.97

*\$408.21  
 requested at this  
 time*

THANK YOU!  
 PLEASE CALL WITH ANY QUESTIONS.  
 (309) 925-5551

<b>Total</b>	\$13,505.57
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Reynolds Drilling Corp.  
 8172 East State Route 54  
 Riverton, IL 62561

# Invoice

Date	Invoice #
11/14/2014	14-573.001

<b>Bill To</b>
Midwest Environmental Consultants 22200 IL Rte. 9 Tremont, IL 61568

<b>Project</b>
Direct Push Services Warsaw ITSO Minier, Illinois

<b>P.O. Number</b>	<b>Terms</b>	<b>Project</b>
November 2014	Due on receipt	

Quantity	Description	Price Each	Amount
80	Probing, per ft. w/ sampling, LUST Rate	21.87	1,749.60
<b>Total</b>			\$1,749.60

# Bill

Midwest Environmental Consulting &  
Remediation Services Inc  
22200 Illinois Route 9  
P.O. Box 614  
Tremont, IL 61568-0614

Date	Ref. No.
11/25/14	14 573 001

Vendor
REYNOLDS DRILLING CORPORATION 8172 EAST STATE ROUTE 54 RIVERTON, ILLINOIS 62561

**PAID**

Bill Due	12/26/14
Terms	
Memo	

## Expenses

Account	Memo	Amount	Customer:Job
Job Cost Subcontract	PROBING (REYNOLDS)	1,749.60	ITCO SERVICE

Expense Total : 1,749.60

**Bill Total : \$1,749.60**

**R1321**

7/27/16

REYNOLDS DRILLING CORPORATION

\*\*23,675.15

Twenty-Three Thousand Six Hundred Seventy-Five and 15/100\*\*\*\*\*

REYNOLDS DRILLING CORPORATION  
8172 EAST STATE ROUTE 54  
RIVERTON, ILLINOIS 62561

14559;14573;15585;15594;15610;15606;15635;156

REYNOLDS DRILLING CORPORATION				7/27/16		
Date	Type	Reference	Original Amt.	Balance Due	Discount	Payment
9/22/14	Bill	14559001	2,701.44	2,701.44		2,701.44
11/25/14	Bill	14 573 001	1,749.60	1,749.60		1,749.60
2/6/15	Bill	15585.001	2,952.45	2,952.45		2,952.45
4/4/15	Bill	15 594001	1,715.20	1,715.20		1,715.20
6/23/15	Bill	15610001	1,457.81	1,457.81		1,457.81
6/23/15	Bill	15606001	2,688.15	2,688.15		2,688.15
11/13/15	Bill	15-635-001	2,233.50	2,233.50		2,233.50
12/23/15	Bill	15-639.001	2,318.00	2,318.00		2,318.00
1/20/16	Bill	16-649.001	925.00	925.00		925.00
1/20/16	Bill	15-635.002	233.00	233.00		233.00
2/4/16	Bill	16-653.001	1,887.00	1,887.00		1,887.00
2/4/16	Bill	16-655.001	1,804.00	1,804.00		1,804.00
2/17/16	Bill	15-635.003	1,010.00	1,010.00		1,010.00
					Check Amount	23,675.15
Cash-Operating Acco 14559;14573;15585;15594;15610;15606;15635;						23,675.15

REYNOLDS DRILLING CORPORATION				7/27/16		
Date	Type	Reference	Original Amt.	Balance Due	Discount	Payment
9/22/14	Bill	14559001	2,701.44	2,701.44		2,701.44
11/25/14	Bill	14 573 001	1,749.60	1,749.60		1,749.60
2/6/15	Bill	15585.001	2,952.45	2,952.45		2,952.45
4/4/15	Bill	15 594001	1,715.20	1,715.20		1,715.20
6/23/15	Bill	15610001	1,457.81	1,457.81		1,457.81
6/23/15	Bill	15606001	2,688.15	2,688.15		2,688.15
11/13/15	Bill	15-635-001	2,233.50	2,233.50		2,233.50
12/23/15	Bill	15-639.001	2,318.00	2,318.00		2,318.00
1/20/16	Bill	16-649.001	925.00	925.00		925.00
1/20/16	Bill	15-635.002	233.00	233.00		233.00
2/4/16	Bill	16-653.001	1,887.00	1,887.00		1,887.00
2/4/16	Bill	16-655.001	1,804.00	1,804.00		1,804.00
2/17/16	Bill	15-635.003	1,010.00	1,010.00		1,010.00
					Check Amount	23,675.15
Cash-Operating Acco 14559;14573;15585;15594;15610;15606;15635;						23,675.15

R1322

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC. TREMONT COMMUNITY BANK 18117  
 PHONE: (309) 525-5551 TREMONT, IL 61586 7/27/2016  
 22200 ILLINOIS ROUTE 8 P.O. BOX 814 TREMONT, IL 61586

PAY TO THE ORDER OF [REDACTED] \$ [REDACTED] DOLLARS

MEMO 7/16 SPADONOVIC CAVATING

MEMO 58561;59556

#016117# #071109435# #134 422#

16117 \$7,248.00 8/4/2016

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC. TREMONT COMMUNITY BANK 18123  
 PHONE: (309) 525-5551 TREMONT, IL 61586 7/27/2016  
 22200 ILLINOIS ROUTE 8 P.O. BOX 814 TREMONT, IL 61586

PAY TO THE ORDER OF [REDACTED] \$ [REDACTED] DOLLARS

MEMO 25130,25257,25329,25448,25490,25846,25783

MEMO

#016123# #071109435# #134 422#

16123 \$4,153.33 8/1/2016

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC. TREMONT COMMUNITY BANK 18118  
 PHONE: (309) 525-5551 TREMONT, IL 61586 7/27/2016  
 22200 ILLINOIS ROUTE 8 P.O. BOX 814 TREMONT, IL 61586

PAY TO THE ORDER OF [REDACTED] \$ [REDACTED] DOLLARS

MEMO [REDACTED] LAKE ROAD COLLINSVILLE, IL 62234-7425

MEMO 174538,175454,176504,182148,182744,185

#016118# #071109435# #134 422#

16118 \$1,295.00 8/4/2016

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC. TREMONT COMMUNITY BANK 18124  
 PHONE: (309) 525-5551 TREMONT, IL 61586 7/27/2016  
 22200 ILLINOIS ROUTE 8 P.O. BOX 814 TREMONT, IL 61586

PAY TO THE ORDER OF [REDACTED] \$ [REDACTED] DOLLARS

MEMO [REDACTED]

MEMO Pay Period: 07/07/2016 - 07/29/2016

#016124# #071109435# #134 422#

16124 \$5,054.55 8/1/2016

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC. TREMONT COMMUNITY BANK 18119  
 PHONE: (309) 525-5551 TREMONT, IL 61586 7/27/2016  
 22200 ILLINOIS ROUTE 8 P.O. BOX 814 TREMONT, IL 61586

PAY TO THE ORDER OF REYNOLDS DRILLING CORPORATION \$ 23,675.15

Twenty-Three Thousand Six Hundred Seventy-Five and 15/100 DOLLARS

MEMO REYNOLDS DRILLING CORPORATION 8172 EAST STATE ROUTE 54 RIVERTON, ILLINOIS 62551

MEMO 14558;14573;15585;15594;15610;15606;15935;156

#016119# #071109435# #134 422#

16119 \$23,675.15 8/2/2016

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC. TREMONT COMMUNITY BANK 18126  
 PHONE: (309) 525-5551 TREMONT, IL 61586 8/4/2016  
 22200 ILLINOIS ROUTE 8 P.O. BOX 814 TREMONT, IL 61586

PAY TO THE ORDER OF [REDACTED] \$ [REDACTED] DOLLARS

MEMO WASTE MANAGEMENT OF ILLINOIS

MEMO 1154 NEW [REDACTED] AGCT. 500-844

#01125# #071109435# #134 422#

16126 \$3,718.55 8/11/2016

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC. TREMONT COMMUNITY BANK 18120  
 PHONE: (309) 525-5551 TREMONT, IL 61586 7/27/2016  
 22200 ILLINOIS ROUTE 8 P.O. BOX 814 TREMONT, IL 61586

PAY TO THE ORDER OF [REDACTED] \$ [REDACTED] DOLLARS

MEMO [REDACTED] SERVICES, INC

MEMO 803841;863;884;882;880;885;80265;286;80810,8

#016120# #071109435# #134 422#

16120 \$9,350.30 8/1/2016

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC. TREMONT COMMUNITY BANK 18127  
 PHONE: (309) 525-5551 TREMONT, IL 61586 8/4/2016  
 22200 ILLINOIS ROUTE 8 P.O. BOX 814 TREMONT, IL 61586

PAY TO THE ORDER OF [REDACTED] \$ [REDACTED] DOLLARS

MEMO [REDACTED] SERVICES

MEMO [REDACTED] EPA LUST REME

#016127# #071109435# #134 422#

16127 \$12,775.00 8/10/2016

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC. TREMONT COMMUNITY BANK 18121  
 PHONE: (309) 525-5551 TREMONT, IL 61586 7/27/2016  
 22200 ILLINOIS ROUTE 8 P.O. BOX 814 TREMONT, IL 61586

PAY TO THE ORDER OF [REDACTED] \$ [REDACTED] DOLLARS

MEMO [REDACTED]

MEMO ON ACCT. 2929,000.1

#016121# #071109435# #134 422#

16121 \$1,650.00 8/1/2016

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC. TREMONT COMMUNITY BANK 18128  
 PHONE: (309) 525-5551 TREMONT, IL 61586 8/10/2016  
 22200 ILLINOIS ROUTE 8 P.O. BOX 814 TREMONT, IL 61586

PAY TO THE ORDER OF [REDACTED] \$ [REDACTED] DOLLARS

MEMO [REDACTED]

MEMO Pay Period: 07/21/2016 - 08/03/2016

#016128# #071109435# #134 422#

16128 \$5,054.55 8/10/2016

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC. TREMONT COMMUNITY BANK 18122  
 PHONE: (309) 525-5551 TREMONT, IL 61586 7/27/2016  
 22200 ILLINOIS ROUTE 8 P.O. BOX 814 TREMONT, IL 61586

PAY TO THE ORDER OF [REDACTED] \$ [REDACTED] DOLLARS

MEMO [REDACTED]

MEMO

#016122# #071109435# #134 422#

16122 \$238.08 8/11/2016

MIDWEST ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES, INC. TREMONT COMMUNITY BANK 18129  
 PHONE: (309) 525-5551 TREMONT, IL 61586 8/5/2016  
 22200 ILLINOIS ROUTE 8 P.O. BOX 814 TREMONT, IL 61586

PAY TO THE ORDER OF [REDACTED] \$ [REDACTED] DOLLARS

MEMO [REDACTED]

MEMO Pay Period: 07/21/2016 - 08/03/2016

#016129# #071109435# #134 422#

16129 \$1,560.70 8/8/2016

R1323

# Bill

Midwest Environmental Consulting &  
Remediation Services Inc  
22200 Illinois Route 9  
P.O. Box 614  
Tremont, IL 61568-0614

Date	Ref. No.
12/12/14	1404808

Vendor  
PRAIRIE ANALYTICAL SYSTEMS,  
INC.  
ACCOUNTS RECEIVABLE  
1210 CAPITAL AIRPORT DRIVE  
SPRINGFIELD, ILLINOIS 62707

**PAID**

Bill Due 04/11/15  
Terms 120 days  
Memo

## Expenses

Account	Memo	Amount	Customer:Job
Job Cost Subcontract	LABORATORY ANALYSIS (PRAIRIE)	1,652.16	ITCO SERVICE

Expense Total : 1,652.16

**Bill Total : \$1,652.16**

R1324



**INVOICE**

**Remit To:** Accounts Receivable  
Prairie Analytical Systems, Inc.  
1210 Capital Airport Drive  
Springfield, IL 62707  
217.753.1148

<b>Invoice Number</b>	<b>1404808</b>
-----------------------	----------------

**Invoice Date:** December 09, 2014  
**Due Date:** January 08, 2015

**Invoice To:** Midwest Environmental Consulting  
PO Box 614  
Tremont, IL 61568-0614

**Project:** Warsaw ITCO

**PO:** Job #9890  
**Received:** 11/14/2014  
**Work Order(s):** 14K0287

**Attn:** Accounts Payable  
**Phone:** (309) 925-5551

Quantity	Analysis/Description	Matrix	Unit Cost	Extended Cost
16	ASTM D2974 % Solids [5 day]	Solid	\$0.00	\$0.00
16	SW 8260B BETX [5 day]	Solid	\$103.26	\$1,652.16
10	SW 8260B BETX [5 day]	Solid	\$0.00	\$0.00

**Invoice Total:** \$1,652.16

## PRAIRIE ANALYTICAL SYSTEMS, INC.

PRAIRIE ANALYTICAL SYSTEMS, INC.  
 ACCOUNTS RECEIVABLE  
 1210 CAPITAL AIRPORT DRIVE  
 SPRINGFIELD, ILLINOIS 62707

1404810;4808;4293;3871;3776;3775;3774;4006;310

PRAIRIE ANALYTICAL SYSTEMS, INC.				11/15/16		
Date	Type	Reference	Original Amt.	Balance Due	Discount	Payment
7/1/14	Bill	402367	10,223.76	10,223.76	-10,223.76	
7/19/14	Bill	1402761	757.92	189.05	-189.05	
7/21/14	Bill	1402473	4,036.50	4,036.50	-4,036.50	
8/5/14	Bill	1402877	96.48	96.48	-96.48	
8/5/14	Bill	1402979	856.43	856.43	-856.43	
8/7/14	Bill		2,126.04	2,126.04	-2,126.04	
9/22/14	Bill	1403101	2,907.40	2,907.40	-2,907.40	
10/15/14	Bill	1404006	1,727.52	1,727.52	-1,727.52	
10/15/14	Bill	1403774	98.41	98.41	-98.41	
10/15/14	Bill	1403775	2,851.18	2,851.18	-2,851.18	
10/15/14	Bill	1403776	103.26	103.26	-103.26	
10/31/14	Bill	1403871	619.56	619.56	-619.56	
10/31/14	Bill	1404293	688.87	688.87	-688.87	
12/12/14	Bill	1404808	1,652.16	1,652.16	-1,652.16	
12/12/14	Bill	1404810	892.09	892.09	-892.09	

TREMONT OPERATI 1404810;4808;4293;3871;3776;3775;3774;4006;

PRAIRIE ANALYTICAL SYSTEMS, INC.				11/15/16		
Date	Type	Reference	Original Amt.	Balance Due	Discount	Payment
7/1/14	Bill	402367	10,223.76	10,223.76	-10,223.76	
7/19/14	Bill	1402761	757.92	189.05	-189.05	
7/21/14	Bill	1402473	4,036.50	4,036.50	-4,036.50	
8/5/14	Bill	1402877	96.48	96.48	-96.48	
8/5/14	Bill	1402979	856.43	856.43	-856.43	
8/7/14	Bill		2,126.04	2,126.04	-2,126.04	
9/22/14	Bill	1403101	2,907.40	2,907.40	-2,907.40	
10/15/14	Bill	1404006	1,727.52	1,727.52	-1,727.52	
10/15/14	Bill	1403774	98.41	98.41	-98.41	
10/15/14	Bill	1403775	2,851.18	2,851.18	-2,851.18	
10/15/14	Bill	1403776	103.26	103.26	-103.26	
10/31/14	Bill	1403871	619.56	619.56	-619.56	
10/31/14	Bill	1404293	688.87	688.87	-688.87	
12/12/14	Bill	1404808	1,652.16	1,652.16	-1,652.16	
12/12/14	Bill	1404810	892.09	892.09	-892.09	

TREMONT OPERATI 1404810;4808;4293;3871;3776;3775;3774;4006;



# Londrigan Potter Randle P.C.

ATTORNEYS AT LAW

James R. Potter  
Craig A. Randle  
Alexandra de Saint Phalle  
Colleen R. Lawless  
Ashton N. Nowlan  
• • •

Thomas F. Londrigan (Of Counsel)  
Joseph A. Londrigan (1919-1970)

December 11, 2015

SENT VIA U.S. MAIL

Mr. Al Green  
Midwest Environmental Consulting  
P.O. Box 614  
Tremont, IL 61568-0614

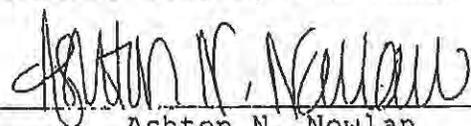
RE: Prairie Analytical Systems, Inc. and Midwest  
Environmental Consulting and Remediation Services,  
Inc. - Satisfaction of Settlement of Agreement

Dear Mr. Green:

This letter hereby provides notice that Midwest Environmental has provided Prairie Analytical with three (3) payments of \$25,000.00, \$20,000.00, and \$20,000.00, per the terms of the Settlement Agreement and Release dated July 30, 2015. Therefore, Midwest Environmental has completely satisfied all obligations it had to Prairie Analytical pursuant to the Settlement Agreement and Release dated July 30, 2015.

Very respectfully yours,

LONDRIGAN, POTTER, & RANDLE, P.C.

BY: 

Ashton N. Nowlan

ANN/ca

Encls.

cc: Prairie Analytical Systems, Inc.

Midwest Environmental Consulting &  
Remediation Services Inc  
22200 Illinois Route 9  
P.O. Box 614  
Tremont, IL 61568-0614

# Invoice

DATE	INVOICE NO.
9/21/15	7450

<b>BILL TO</b>
MR. JOHN WARSAW POST OFFICE BOX 2302 EAST PEORIA, ILLINOIS 61611

TERMS	PROJECT	SITE LOCATION
NET 31 DAYS		MINIER

ITEM	DATE	QTY.	RATE		AMOUNT
GEOLOGIST III /PS	2/9/15	2	103.26	CORRECTIVE ACTION PLAN & BUDGET	206.52
SR. PROFESSIONAL ...	2/10/15	2	133.64	CORRECTIVE ACTION PLAN & BUDGET REVIEW & CERTIFICATION	267.28
SR. PROFESSIONAL ...	2/12/15	2	133.64	REIMBURSEMENT REVIEW AND CERTIFICATION	267.28
GEOLOGIST III /PS	2/13/15	2.5	103.26	CORRECTIVE ACTION; REIMBURSEMENT	258.15
SR. PROJ. MGR/AJF	2/13/15	1	121.49	CORRECTIVE ACTION	121.49
GEOLOGIST III /PS	2/16/15	1	103.26	CORRECTIVE ACTION; REIMBURSEMENT	103.26
SR. PROJ. MGR/AJF	2/16/15	1	121.49	CORRECTIVE ACTION	121.49
GEOLOGIST III /PS	2/17/15	1	103.26	CORRECTIVE ACTION; REIMBURSEMENT	103.26
GEOLOGIST III /PS	2/18/15	0.5	103.26	CORRECTIVE ACTION; REIMBURSEMENT	51.63
SR. PROJ. MGR/AJF	2/18/15	0.5	121.49	CORRECTIVE ACTION	60.75
GEOLOGIST III /PS	2/19/15	3.25	103.26	CORRECTIVE ACTION PLAN & BUDGET	335.60
GEOLOGIST III /PS	2/25/15	2	103.26	CORRECTIVE ACTION PLAN & BUDGET	206.52
GEOLOGIST III /PS	4/2/15	2	103.26	C.ACTION; REIMB.	206.52
SR. PROJ. MGR/AJF	4/3/15	1.25	121.49	C.ACTION	151.86
SR. PROJ. MGR/AJF	4/7/15	2	121.49	C.ACTION	242.98
SR. PROFESSIONAL ...	4/8/15	1	133.64	CERT. PG	133.64
PROJECT MANAG/AJF	4/9/15	1	109.34	C. ACTION; REIMB.	109.34
SR. PROJ. MGR/AJF	4/9/15	0.5	121.49	CORRECTIVE ACTION	60.75
PROJECT MANAG/AJF	4/10/15	1	109.34	C. ACTION; REIMB.	109.34
SR. PROJ. MGR/AJF	4/13/15	1	121.49	CORRECTIVE ACTION	121.49
PROJECT MANAG/AJF	4/14/15	1	109.34	C. ACTION; REIMB.	109.34
GEOLOGIST III /PS	4/16/15	1	103.26	REIMBURSEMENT; CORRECTIVE ACTION PLAN REVISIONS	103.26
GEOLOGIST III /PS	4/20/15	1	103.26	REIMBURSEMENT; CORRECTIVE ACTION PLAN REVISIONS	103.26
GEOLOGIST III /PS	4/21/15	2	103.26	REIMBURSEMENT; CORRECTIVE ACTION PLAN REVISIONS	206.52
GEOLOGIST III /PS	4/22/15	2	103.26	REIMBURSEMENT; CORRECTIVE ACTION PLAN REVISIONS	206.52
GEOLOGIST III /PS	4/23/15	3	103.26	CORRECTIVE ACTION PLAN; GROUNDWATER ORDINANCE	309.78
SR. PROJ. MGR/AJF	4/23/15	0.75	121.49	C. ACTION	91.12

**Total**

Midwest Environmental Consulting &  
 Remediation Services Inc  
 22200 Illinois Route 9  
 P.O. Box 614  
 Tremont, IL 61568-0614

# Invoice

DATE	INVOICE NO.
9/21/15	7450

<b>BILL TO</b>
MR. JOHN WARSAW POST OFFICE BOX 2302 EAST PEORIA, ILLINOIS 61611

TERMS	PROJECT	SITE LOCATION
NET 31 DAYS		MINIER

ITEM	DATE	QTY.	RATE		AMOUNT
SR. PROJ. MGR/AJF	4/24/15	1.5	121.49	C. ACTION	182.24
GEOLOGIST III /PS	4/27/15	4	103.26	CORRECTIVE ACTION PLAN; GROUNDWATER ORDINANCE	413.04
SR. PROJ. MGR/AJF	4/27/15	0.75	121.49	C. ACTION	91.12
SR. PROJ. MGR/AJF	4/29/15	1.5	121.49	C. ACTION	182.24
SR. PROJ. MGR/AJF	4/30/15	1	121.49	C. ACTION	121.49
SR. PROJ. MGR/AJF	5/1/15	0.75	121.49	C. ACTION	91.12
GEOLOGIST III /PS	5/5/15	1	103.26	CORRECTIVE ACTION PLAN	103.26
SR. PROFESSIONAL ...	5/5/15	1.5	133.64	CORRECTIVE ACTION PLAN REVIEW AND CERTIFICATION	200.46
SR. PROJ. MGR/AJF	5/5/15	1	121.49	C. ACTION	121.49
GEOLOGIST III /PS	5/6/15	1	103.26	CORRECTIVE ACTION PLAN	103.26
GEOLOGIST III /PS	5/7/15	2	103.26	CORRECTIVE ACTION PLAN & BUDGET	206.52
SR. PROJ. MGR/AJF	5/7/15	1	121.49	C. ACTION	121.49
GEOLOGIST III /PS	5/8/15	3	103.26	CORRECTIVE ACTION PLAN & BUDGET	309.78
SR. PROJ. MGR/AJF	5/8/15	1.5	121.49	C. ACTION	182.24
GEOLOGIST III /PS	5/11/15	2	103.26	CORRECTIVE ACTION PLAN & BUDGET	206.52
SR. PROJ. MGR/AJF	5/11/15	0.75	121.49	C. ACTION	91.12
SR. PROJ. MGR/AJF	5/12/15	1.25	121.49	C. ACTION	151.86
SR. PROJ. MGR/AJF	5/13/15	0.25	121.49	C. ACTION	30.37
SR. PROJ. MGR/AJF	5/21/15	0.5	121.49	CORRECTIVE ACTION	60.75
SR. PROJ. MGR/AJF	5/22/15	1	121.49	CORRECTIVE ACTION	121.49
GEOLOGIST III /PS	5/26/15	1.5	103.26	GROUNDWATER ORDINANCE	154.89
SR. PROJ. MGR/AJF	5/26/15	0.75	121.49	CORRECTIVE ACTION	91.12
GEOLOGIST III /PS	5/27/15	1	103.26	GROUNDWATER ORDINANCE	103.26
SR. PROJ. MGR/AJF	5/27/15	1	121.49	CORRECTIVE ACTION	121.49
SR. PROJ. MGR/AJF	5/29/15	1	121.49	CORRECTIVE ACTION	121.49
SR. PROJ. MGR/AJF	6/3/15	0.5	121.49	CORRECTIVE ACTION	60.75
SR. PROJ. MGR/AJF	6/15/15	1.25	121.49	CORRECTIVE ACTION	151.86
SR. PROJ. MGR/AJF	6/17/15	1.5	121.49	CORRECTIVE ACTION	182.24
SR. PROJ. MGR/AJF	6/18/15	1.25	121.49	CORRECTIVE ACTION	151.86
GEOLOGIST III /PS	6/19/15	1	103.26	CORRECTIVE ACTION	103.26
SR. PROJ. MGR/AJF	6/22/15	1	121.49	CORRECTIVE ACTION	121.49

**Total**

Midwest Environmental Consulting &  
 Remediation Services Inc  
 22200 Illinois Route 9  
 P.O. Box 614  
 Tremont, IL 61568-0614

# Invoice

DATE	INVOICE NO.
9/21/15	7450

<b>BILL TO</b>
MR. JOHN WARSAW POST OFFICE BOX 2302 EAST PEORIA, ILLINOIS 61611

TERMS	PROJECT	SITE LOCATION
NET 31 DAYS		MINIER

ITEM	DATE	QTY.	RATE		AMOUNT
SR. PROJ. MGR/AJF	6/24/15	1	121.49	CORRECTIVE ACTION	121.49
SR. PROJ. MGR/AJF	7/2/15	0.75	121.49	CORRECTIVE ACTION	91.12
SR. PROJ. MGR/AJF	7/6/15	0.75	121.49	CORRECTIVE ACTION	91.12
SR. PROJ. MGR/AJF	7/7/15	1	121.49	CORRECTIVE ACTION	121.49
GEOLOGIST III /PS	7/8/15	1	103.26	CORRECTIVE ACTION	103.26
SR. PROJ. MGR/AJF	7/8/15	0.5	121.49	CORRECTIVE ACTION	60.75
GEOLOGIST III /PS	7/9/15	0.5	103.26	CORRECTIVE ACTION	51.63
GEOLOGIST III /PS	7/10/15	0.5	103.26	CORRECTIVE ACTION	51.63
SR. PROJ. MGR/AJF	7/10/15	1.25	121.49	CORRECTIVE ACTION	151.86
SR. PROJ. MGR/AJF	7/14/15	0.5	121.49	CORRECTIVE ACTION	60.75
SR. PROJ. MGR/AJF	7/15/15	0.75	121.49	CORRECTIVE ACTION	91.12
SR. PROJ. MGR/AJF	7/16/15	0.75	121.49	CORRECTIVE ACTION	91.12
SR. PROJ. MGR/AJF	7/17/15	1	121.49	CORRECTIVE ACTION	121.49
SR. PROJ. MGR/AJF	7/21/15	0.75	121.49	CORRECTIVE ACTION	91.12
SR. PROJ. MGR/AJF	8/12/15	1.75	121.49	CORRECTIVE ACTION	212.61
SR. PROJ. MGR/AJF	8/13/15	1.5	121.49	CORRECTIVE ACTION	182.24
SR. PROJ. MGR/AJF	8/18/15	1.5	121.49	CORRECTIVE ACTION	182.24
SR. PROJ. MGR/AJF	8/19/15	1	121.49	CORRECTIVE ACTION	121.49
SR. PROJ. MGR/AJF	8/20/15	1	121.49	CORRECTIVE ACTION	121.49
SR. PROJ. MGR/AJF	8/21/15	0.5	121.49	CORRECTIVE ACTION	60.75
SR. PROJ. MGR/AJF	8/24/15	0.5	121.49	CORRECTIVE ACTION	60.75
SR. PROJ. MGR/AJF	8/26/15	1	121.49	CORRECTIVE ACTION	121.49
GEOLOGIST III /PS	9/3/15	1	103.26	REIMBURSEMENT; CORRECTIVE ACTION	103.26
SR. PROJ. MGR/AJF	9/3/15	0.5	121.49	CORRECTIVE ACTION	60.75
SR. PROJ. MGR/AJF	9/4/15	1.25	121.49	CORRECTIVE ACTION	151.86
GEOLOGIST III /PS	9/8/15	0.5	103.26	REIMBURSEMENT; CORRECTIVE ACTION	51.63
SR. PROJ. MGR/AJF	9/8/15	0.75	121.49	CORRECTIVE ACTION	91.12
SR. PROJ. MGR/AJF	9/10/15	1	121.49	CORRECTIVE ACTION	121.49
SR. PROJ. MGR/AJF	9/14/15	0.75	121.49	CORRECTIVE ACTION	91.12
SR. PROJ. MGR/AJF	9/15/15	1.25	121.49	CORRECTIVE ACTION	151.86
Reimb Group					
	3/3/15		5.95	POSTAGE (AL)	5.95 ✓
	4/4/15		6.70	POSTAGE (AL)	6.70 ✓

**Total**



TREMONT  
109 W WALNUT ST  
TREMONT  
IL  
615689998  
05/06/2015 (800)275-8777 12:20 PM

Product Description	Sale Qty	Final Price
---------------------	----------	-------------

PM 1-Day (Domestic) (MINIER, IL 61759) (Weight: 1 Lb 2.10 Oz) (Expected Delivery Day) (Thursday 05/07/2015) (USPS Tracking #) (9114 9011 5981 8415 2802 65)	1	\$5.95
--	---	--------

Insurance 1 \$0.00  
(Amount: \$50.00)

Total \$5.95

Cash \$10.00  
Change (\$4.05)

For tracking or inquiries go to  
USPS.com or call 1-800-222-1811.

Save this receipt as evidence of  
insurance. For information on filing  
an insurance claim go to  
[usps.com/ship/file-domestic-claims.htm](http://usps.com/ship/file-domestic-claims.htm)

Order stamps at [usps.com/shop](http://usps.com/shop) or call  
1-800-Stamp24. Go to  
[usps.com/clicknship](http://usps.com/clicknship) to print shipping  
labels with postage. For other  
information call 1-800-ASK-USPS

=====  
 TREMONT  
 109 W WALNUT ST  
 TREMONT  
 IL  
 615689998  
 05/12/2015 (800)275-8777 12:26 PM  
 =====

Product Description	Sale Qty	Final Price
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PM 2-Day (Domestic) (EAST PEORIA, IL 61611) (Weight:4 Lb 11.30 Oz) (Expected Delivery Day) (Thursday 05/14/2015) (USPS Tracking #) (9114 9011 5981 8415 2816 99)	1	\$8.95
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*McB  
Riverside  
Retail  
R-Search*

Insurance (Amount:\$50.00)	1	\$0.00
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PM 2-Day (Domestic) (SPRINGFIELD, IL 62794) (Weight:2 Lb 9.10 Oz) (Expected Delivery Day) (Thursday 05/14/2015) (USPS Tracking #) (9114 9011 5981 8415 2817 12)	1	\$6.70
--	---	--------

*Road  
Ranger*

Insurance (Amount:\$50.00)	1	\$0.00
-------------------------------	---	--------

PM 2-Day (Domestic) (SPRINGFIELD, IL 62794) (Weight:1 Lb 15.10 Oz) (Expected Delivery Day) (Thursday 05/14/2015) (USPS Tracking #) (9114 9011 5981 8415 2817 36)	1	\$5.95
---	---	--------

*Warsaw  
Itw*

Insurance (Amount:\$50.00)	1	\$0.00
-------------------------------	---	--------

First-Class Mail Large Envelope (Domestic) (PEORIA, IL 61602) (Weight:0 Lb 3.70 Oz) (Expected Delivery Day) (Thursday 05/14/2015)	1	\$1.61
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*05-43*

Clear Package Tape 1.88" x 8 00"	1	\$3.49
--	---	--------

Pkg Tape 2" x 10 Yds	1	\$4.29
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R1333

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TREMONT IL  
TREMONT, Illinois  
615689998  
1615500896-0098  
04/10/2015 (309)925-5213 10:12:07 AM

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=====

Sales Receipt

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Product Description	Sale Unit Qty	Final Price
SPRINGFIELD IL 62703 Zone-2 First-Class Mail Large Env 3.60 oz.	1	\$1.61
Expected Delivery: Mon 04/13/15		

Issue Postage: \$1.61

MINIER IL 61759 Zone-2 First-Class Mail Large Env 7.50 oz.	1	\$2.45
Expected Delivery: Mon 04/13/15		

Issue Postage: \$2.45

LE ROY IL 61752 Zone-2 First-Class Mail Large Env 8.10 oz.	1	\$2.66
Expected Delivery: Mon 04/13/15		

Issue Postage: \$2.66

SPRING VALLEY IL 61362 Zone-1 First-Class Mail Large Env 7.40 oz.	1	\$2.45
Expected Delivery: Mon 04/13/15		

Issue Postage: \$2.45

Total: \$9.17

Paid by:  
Cash \$10.00  
Change Due: -\$0.83

Order stamps at [usps.com/shop](http://usps.com/shop) or

R1334

=====

TREMONT  
 109 W WALNUT ST  
 TREMONT  
 IL  
 615689998  
 07/10/2015 (800)275-8777 10:47 AM

=====

Product Description	Sale Qty	Final Price
First-Class Mail Large Envelope (Domestic) (SPRINGFIELD, IL 62703) (Weight:0 Lb 1.80 Oz) (Expected Delivery Day) (Monday 07/13/2015)	1	\$1.20

*Warsaw  
 Ill*

Total \$1.20

---

Cash \$10.00  
 Change (\$8.80)

Order stamps at [usps.com/shop](http://usps.com/shop) or call 1-800-Stamp24. Go to [usps.com/clicknship](http://usps.com/clicknship) to print shipping labels with postage. For other information call 1-800-ASK-USPS.

\*\*\*\*\*  
 Get your mail when and where you want

=====

TREMONT IL  
TREMONT, Illinois  
615689998  
1615500896-0099  
04/16/2015 (309)925-5213 02:29:06 PM

=====

=====

Sales Receipt

=====

Product Description	Sale Unit Qty	Final Price
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@@ ~ BARTONVILLE IL 61607-1755 Zone-1 Priority Mail 2-Day By Weight 5 lb. 4.50 oz. Expected Delivery: Sat 04/18/15 USPS Tracking #: 9114 9011 5981 8415 2446 32 Includes up to \$50 insurance		\$9.60 <i>MLB Rewards Bartonville</i>
---	--	--

=====

Issue Postage: \$9.60

SPRINGFIELD IL 62794 Zone-2  
First-Class Mail Large Env  
8.30 oz.  
Expected Delivery: Sat 04/18/15

*Warsaw*

=====

Issue Postage: \$2.66

@@ ~ SPRINGFIELD IL  
62794-9276 Zone-2  
Priority Mail 2-Day By  
Weight  
1 lb. 9.80 oz.  
Expected Delivery: Sat 04/18/15

*Plotkin*

TREMONT IL  
TREMONT, Illinois  
615689998  
1615500896-0099  
02/13/2015 (309)925-5213 03:44:05 PM

Sales Receipt

Product Description	Sale Unit Qty	Price	Final Price
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@@ ~ STREATOR IL 61364-9312			\$5.75
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Zone-1  
Priority Mail 2-Day By *Cautelys*  
Weight  
14.20 oz.  
Expected Delivery: Tue 02/17/15  
USPS Tracking #:  
9114 9011 5981 8415 2344 66  
Includes \$50 insurance

Issue Postage: \$5.75

@@ ~ MINIER IL 61759-0886			\$5.95
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Zone-2  
Priority Mail 1-Day By *Mark y LMM*  
Weight  
1 lb. 15.20 oz.  
Expected Delivery: Sat 02/14/15  
USPS Tracking #:  
9114 9011 5981 8415 2344 80  
Includes \$50 insurance

Issue Postage: \$5.95

@@ ~ EAST PEORIA IL 61611-2468			\$5.95
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Zone-1  
Priority Mail 2-Day By *Warsaw*  
Weight  
1 lb. 11.80 oz.  
Expected Delivery: Tue 02/17/15  
USPS Tracking #:  
9114 9011 5981 8415 2345 03  
Includes \$50 insurance

Issue Postage: \$5.95

Total: \$17.65

Paid by: MasterCard \$17.65  
Account #: XXXXXXXXXXXX6340  
Approval #: 02125G  
Transaction #: 823

TREMONT IL  
TREMONT, Illinois  
615689998  
1615500896-0099  
03/04/2015 (309)925-5213 12:55:50 PM

Sales Receipt

Product Description	Sale Unit Qty	Price	Final Price
---------------------	---------------	-------	-------------

@@ ~ SPRINGFIELD IL 62702-4059			\$6.70
--------------------------------	--	--	--------

Zone-2  
Priority Mail 2-Day By  
Weight  
2 lb. 5.10 oz.  
Expected Delivery: Fri 03/06/15  
USPS Tracking #:  
9114 9011 5981 8415 2496 75  
Includes \$50 insurance

Issue Postage: *Warsaw* \$6.70  
*Itco*

Total: \$6.70

Paid by: MasterCard \$6.70  
Account #: XXXXXXXXXXXX6340  
Approval #: 06447G  
Transaction #: 897  
23902935436

@@ For tracking or inquiries go to USPS.com or call 1-800-222-1811.

~ Save this receipt as evidence of insurance. For information on filing an insurance claim go to [usps.com/ship/file-domestic-claims.htm](http://usps.com/ship/file-domestic-claims.htm)

Order stamps at [usps.com/shop](http://usps.com/shop) or call 1-800-Stamp24. Go to [usps.com/clicknship](http://usps.com/clicknship) to print shipping labels with postage. For



-----  
TREMONT  
109 W WALNUT ST  
TREMONT  
IL  
61568-9998  
1678540896  
10/25/2016 (800)275-8777 12:39 PM  
-----

Product Description	Sale Qty	Final Price
PM 2-Day (Domestic) (SPRINGFIELD, IL 62794) (Weight:2 Lb 8.70 Oz) (Expected Delivery Day) (Thursday 10/27/2016) (USPS Tracking #) (9505 5109 7142 6299 0110 95)	1	\$7.35
Insurance (Up to \$50.00 included)	1	\$0.00

Total \$7.35

Credit Card Remitd \$7.35  
(Card Name:MasterCard)  
(Account #:XXXXXXXXXXXX1997) *Warsaw*  
(Approval #:08580G) *Itew*  
(Transaction #:348)

Includes up to \$50 insurance

\*\*\*\*\*  
BRIGHTEN SOMEONE'S MAILBOX. Greeting cards available for purchase at select Post Offices.  
\*\*\*\*\*

Text your tracking number to 28777 (2USPS) to get the latest status. Standard Message and Data rates may apply. You may also visit USPS.com USPS Tracking or call 1-800-222-1811.

Save this receipt as evidence of insurance. For information on filing an insurance claim go to <https://www.usps.com/help/claims.htm>.

Reynolds Drilling Corp.  
 8172 East State Route 54  
 Riverton, IL 62561

# Invoice

Date	Invoice #
8/19/2016	16-692.001

<b>Bill To</b>
Midwest Environmental Consultants 22200 IL Rte. 9 Tremont, IL 61568

<b>Project</b>
Direct Push Services Warsaw ITCO Miner, Illinois

P.O. Number	Terms	Project
August 2016	Due on receipt	

Quantity	Description	Price Each	Amount
1	Daily rate for probing services	1,501.84	1,501.84
20	Temp. Monitor Well Installation, ft.	15.64	312.80
<b>Total</b>			\$1,814.64

**R1340**

# Bill

Midwest Environmental Consulting &  
Remediation Services Inc  
22200 Illinois Route 9  
P.O. Box 614  
Tremont, IL 61568-0614

Date	Ref. No.
08/23/16	16-692.001

Vendor  
REYNOLDS DRILLING  
CORPORATION  
8172 EAST STATE ROUTE 54  
RIVERTON, ILLINOIS 62561

**PAID**

Bill Due 09/23/16  
Terms  
Memo

## Expenses

Account	Memo	Amount	Customer:Job
Job Cost Subcontract	SOIL BORINGS (REYNOLDS)	1,814.64	ITCO SERVICE

Expense Total : 1,814.64

**Bill Total : \$1,814.64**

**R1341**

2/9/18

REYNOLDS DRILLING CORPORATION

\*\*9,356.04

Nine Thousand Three Hundred Fifty-Six and 04/100\*\*\*\*\*

REYNOLDS DRILLING CORPORATION  
8172 EAST STATE ROUTE 54  
RIVERTON, ILLINOIS 62561

16-689.001;16-688.001;16-693.001;16-692.001;16-6

REYNOLDS DRILLING CORPORATION			2/9/18			
Date	Type	Reference	Original Amt.	Balance Due	Discount	Payment
8/18/16	Bill	16-689.001	750.92	750.92		750.92
8/18/16	Bill	16-688.001	1,757.34	1,757.34		1,757.34
8/23/16	Bill	16-693.001	1,918.00	1,918.00		1,918.00
8/23/16	Bill	16-692.001	1,814.64	1,814.64		1,814.64
8/29/16	Bill	16-694.001	1,814.64	1,814.64		1,814.64
12/8/17	Bill	17-761.001	1,300.50	1,300.50		1,300.50
					Check Amount	9,356.04

1,814.64 o/c

Cash-Operating Acco 16-689.001;16-688.001;16-693.001;16-692.001; 9,356.04

REYNOLDS DRILLING CORPORATION			2/9/18			
Date	Type	Reference	Original Amt.	Balance Due	Discount	Payment
8/18/16	Bill	16-689.001	750.92	750.92		750.92
8/18/16	Bill	16-688.001	1,757.34	1,757.34		1,757.34
8/23/16	Bill	16-693.001	1,918.00	1,918.00		1,918.00
8/23/16	Bill	16-692.001	1,814.64	1,814.64		1,814.64
8/29/16	Bill	16-694.001	1,814.64	1,814.64		1,814.64
12/8/17	Bill	17-761.001	1,300.50	1,300.50		1,300.50
					Check Amount	9,356.04

Cash-Operating Acco 16-689.001;16-688.001;16-693.001;16-692.001; 9,356.04

R1342

Back

CASH ONLY IF ALL CheckLock™ SECURITY FEATURES LISTED ON BACK INDICATE NO TAMPERING OR COPYING

<p><b>MIDWEST ENVIRONMENTAL CONSULTING &amp; REMEDIATION SERVICES, INC.</b>          PHONE: (309) 925-5551          22200 ILLINOIS ROUTE 9 P.O. BOX 614          TREMONT, IL 61568</p>	<p><b>TREMONT COMMUNITY BANK</b>          TREMONT, IL 61568          70-943711</p> <p style="font-size: 24pt; font-weight: bold;">16487</p>
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2/9/18

PAY TO THE ORDER OF REYNOLDS DRILLING CORPORATION \$ 9,356.04

Nine Thousand Three Hundred Fifty-Six and 04/100 DOLLARS

REYNOLDS DRILLING CORPORATION  
 8172 EAST STATE ROUTE 54  
 RIVERTON, ILLINOIS 62561

*Allen Adams*

MEMO 16-689.001;16-688.001;16-693.001;16-692.001;16-6

⑈016487⑈ ⑆071109435⑆ ⑆134 422⑈

© 2014 FINTEC INC. # 872 1-623-43-2310

Details on Back  
IntelliCheck™ Secure Check

Front



Midwest Environmental Consulting &  
 Remediation Services Inc  
 22200 Illinois Route 9  
 P.O. Box 614  
 Tremont, IL 61568-0614

# Invoice

DATE	INVOICE NO.
12/30/16	6652B

BILL TO
MR. JOHN WARSAW POST OFFICE BOX 2302 EAST PEORIA, ILLINOIS 61611

TERMS	PROJECT	SITE LOCATION
NET 31 DAYS		MINIER

ITEM	DATE	QTY.	RATE		AMOUNT
SR. ENV MANAG	11/18/16	1.75	121.49	C.ACTION	212.61
SR. ENV MANAG	11/21/16	0.5	121.49	C.ACTION	60.75
SR. ENV MANAG	11/23/16	1	121.49	C.ACTION	121.49
SR. ENV MANAG	11/25/16	0.75	121.49	CORRECTIVE ACTION	91.12
SR. ENV HYDRO	11/25/16	1	103.26	REIMBURSEMENT	103.26
SR. ENV MANAG	11/28/16	1	121.49	CORRECTIVE ACTION	121.49
SR. ENV MANAG	12/8/16	1	121.49	REPORTS;CAP;BUDGET	121.49
SR. ENV MANAG	12/12/16	1	121.49	REPORTS;CAP;BUDGET	121.49
SR. ENV HYDRO	12/12/16	2	103.26	CAP;BUDGET;REIMB	206.52
SR. ENV MANAG	12/14/16	0.75	121.49	REPORTS;CAP;BUDGET	91.12

THANK YOU!  
 PLEASE CALL WITH ANY QUESTIONS.  
 (309) 925-5551

<b>Total</b>	\$1,251.34
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Midwest Environmental Consulting &  
 Remediation Services Inc  
 22200 Illinois Route 9  
 P.O. Box 614  
 Tremont, IL 61568-0614

# Invoice

DATE	INVOICE NO.
2/3/17	6678B

BILL TO
MR. JOHN WARSAW POST OFFICE BOX 2302 EAST PEORIA, ILLINOIS 61611

TERMS	PROJECT	SITE LOCATION
NET 31 DAYS		MINIER

ITEM	DATE	QTY.	RATE		AMOUNT
SR. ENV MANAG	1/5/17	1	121.49	C.ACTION	121.49
SR. ENV HYDRO	1/5/17	2	103.26	C.ACTION;REIMB	206.52
SR. ENV MANAG	1/6/17	0.5	121.49	C.ACTION	60.75
SR. ENV HYDRO	1/6/17	1.5	103.26	C.ACTION;REIMB	154.89
SR. ENV MANAG	1/9/17	1	121.49	C.ACTION	121.49

THANK YOU!  
 PLEASE CALL WITH ANY QUESTIONS.  
 (309) 925-5551

<b>Total</b>	\$665.14
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Midwest Environmental Consulting &  
Remediation Services Inc  
22200 Illinois Route 9  
P.O. Box 614  
Tremont, IL 61568-0614

# Invoice

DATE	INVOICE NO.
6/9/17	6728B

BILL TO
MR. JOHN WARSAW POST OFFICE BOX 2302 EAST PEORIA, ILLINOIS 61611

ITEM	DATE	QTY.	RATE	TERMS	PROJECT	SITE LOCATION	AMOUNT
				NET 31 DAYS		MINIER	
PROJECT MANAG	4/14/17	2.5	112.34	C.ACTION			280.85
PROJECT MANAG	4/17/17	2	112.34	C.ACTION			224.68
PROJECT MANAG	4/18/17	1	112.34	C.ACTION			112.34
SR. ENV MANAG	4/18/17	1	121.49	C.ACTION			121.49
SR. ENV MANAG	5/1/17	1	121.49	REIMB;C.ACTION			121.49
SR. ENV MANAG	5/2/17	0.75	121.49	REIMB;C.ACTION			91.12
SR. ENV HYDRO	5/12/17	1	115.26	C.ACTION			115.26
SR. ENV MANAG	5/18/17	0.25	121.49	C.ACTION;REPORTS;REIMB			30.37
SR. ENV MANAG	5/19/17	1	121.49	C.ACTION;REPORTS;REIMB			121.49
SR. ENV HYDRO	5/19/17	1.5	115.26	C.ACTION			172.89
SR. ENV HYDRO	5/22/17	2	115.26	C.ACTION			230.52
SR. ENV MANAG	5/23/17	0.75	121.49	C.ACTION;REPORTS;REIMB			91.12
SR. ENV HYDRO	5/23/17	3.5	115.26	C.ACTION			403.41
SR. ENV HYDRO	5/24/17	4	115.26	C.ACTION			461.04
SR. ENV HYDRO	6/1/17	4	115.26	CAP;BUDGET;REIMB			461.04
SR. ENV MANAG	6/1/17	1	121.49	C.ACTION			121.49
SR. ENV HYDRO	6/2/17	1	115.26	CAP;BUDGET;REIMB			115.26
SR. ENV HYDRO	6/5/17	2	115.26	CAP;BUDGET;REIMB			230.52
SR. ENV MANAG	6/5/17	1	121.49	C.ACTION			121.49
SR. ENV HYDRO	6/6/17	1.5	115.26	CAP;BUDGET;REIMB			172.89
SR. ENV MANAG	6/6/17	1.25	121.49	C.ACTION			151.86
SR. ENV HYDRO	6/7/17	2	115.26	CAP;BUDGET;REIMB			230.52
Reimb Group							
	6/21/17		557.20	lab analysis			557.20
				Total Reimbursable Expenses			557.20
			12.00%	Markup			66.86
				Total Reimbursable Expenses			624.06
PID	3/17/17	1	75.00	PHOTOIONIZATION DETECTOR			75.00
ENCORE SAMPLE	3/17/17	5	12.52	5 GRAM ENCORE SAMPLERS			62.60
Reimb Group							
	4/3/17		21,547.80	WARSAW EXCAVATION			21,547.80
				Total Reimbursable Expenses			21,547.80
			12.00%	Markup			2,585.74
<b>Total</b>							

**\$ 2587.74**



STATEMENT

DATE March 31, 20 17

JAYDEE Truck Service Inc.

EAST PEORIA, IL 61611 Telephone (309) 699-8322

005005

Midwest Enviromental Concusulting and  
Remediation Services, Inc.  
P.O. Box 614  
Tremont, IL 61568

REMIT TO  
PO Box 2302, EAST PEORIA, IL 61611

Remediation of Site (Warsaw ITCO)

TERMS	PO	DATE	ITEM	JOB NO.	TONNAGE	AMOUNT	PAY LAST AMOUNT BALANCE
		Mar 2017	Excavator time to remove contaminated soil & Back fill with clean material 18.5 hr X 175.00 @			<del>XXXXXX</del> 2,465.00	
			Trucking to Dispose of Contaminated 15hr X100.00			1,500.00	
			Trucking to deliver clean backfill 10 hr X 100.00			1,000.00	
			Disposal of Contam- inated soil PDC			5,888.96	
			Backfill Material			3,890.96	
							\$ 11,744.92

A FINANCE CHARGE of 1 1/2 % Per Month or 18%  
ANNUAL PERCENTAGE RATE on Accounts 30 Days Past Due

R1348



STATEMENT

DATE March 31, 20 17

**JAYDEE Truck Service Inc.**

EAST PEORIA, IL 61611 Telephone (309) 699-8322

Midwest Enviromental Consulting and  
Remediation Services, Inc.  
P.O. Box 614  
Tremont, IL 61568

REMIT TO  
PO Box 2302, EAST PEORIA, IL 61611

TERMS	DATE	ITEM	PO	JOB NO.	TONNAGE	AMOUNT	PAY LAST AMOUNT BALANCE	
		Demolition of Site (Warsaw ITCO )						
b	2017	Demolish Car Wash Building				3,500.00		
		Dumpster Rental	2		550.00	1,100.00		
		Remove Purification Pump				400.00		
r	2017	Remove concret Foundation & Dis- connect utilities				2,785.88		
		Deconstruct Man - Hole & Remove Inline Pumps				1,017.00		
		Remove pavement from dig area				1,000.00		
		TOTAL Demolition				9,802.88		
						9,769.88	\$21,547.80	

A FINANCE CHARGE of 1 1/2 % Per Month or 18%  
ANNUAL PERCENTAGE RATE on Accounts 30 Days Past Due

R1349

Affidavit

State of: Illinois

County of: Tazewell

I, the undersigned, JAYDEE Truck Service, Inc., being first duly sworn upon my oath, do hereby depose and state as follows:

I am an authorized agent of subcontractor of Midwest Environmental Consulting & Remediation Services, Inc.

The following activity has been completed at the leaking UST site named Warsaw ITCO located at the address Illinois RT 122 in the city/village of Minier in Illinois by persons directly employed by the above-named subcontractor:

Demolition of car wash building and remediation system, excavate, transport and backfill remediation services.

I have personal knowledge of invoice #005005 for the sum of \$21,547.80, and it has been paid in full. I further attest that no discounts, price reduction, give backs, or rebates of any kind were or will be issued to any party regarding the payment on this invoice.

I am aware there are significant penalties for submitted false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

Further affiant sayeth not.

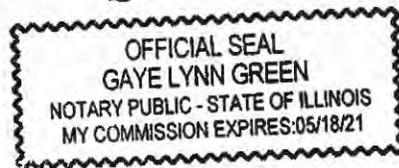
Signature: \_\_\_\_\_

John D. Warsaw  
\_\_\_\_\_ es

Subscribed and sworn to before me the 22nd day of February, 2018.

Gaye Lynn Green  
\_\_\_\_\_  
(Notary Public)

Seal:



**Tazewell County Clerk &  
Recorder**

Sep 26, 2017 1:24:52 PM

**Receipt # 774784**

Payee: JOHN WARSAW

Returned To:  
JOHN WARSAW  
102 BUTTERNUT DR  
MORTON IL 61550-1210

---

ENV DISCL (201700014546)	\$54.25
ENV DISCL	\$45.25
+RHSP FUND	\$9.00

---

**Amount Due: \$54.25**

**Tender Total: \$55.00**  
Cash \$55.00

**CHANGE DUE: \$0.75**

Have a nice day.

Midwest Environmental Consulting &  
Remediation Services Inc  
22200 Illinois Route 9  
P.O. Box 614  
Tremont, IL 61568-0614

# Invoice

DATE	INVOICE NO.
12/29/17	6752B

<b>BILL TO</b>
MR. JOHN WARSAW POST OFFICE BOX 2302 EAST PEORIA, ILLINOIS 61611

ITEM	DATE	QTY.	RATE	TERMS	PROJECT	SITE LOCATION	AMOUNT
				NET 31 DAYS		MINIER	
Reimb Group	6/27/17		15.70				15.70
	7/11/17		506.03				506.03
							521.73
			12.00%				62.61
							584.34
GEOLOGIST III /PS	6/8/17	<del>4</del>	115.26				461.04
GEOLOGIST III /PS	6/14/17	<del>1</del>	115.26				115.26
GEOLOGIST III /PS	6/21/17	<del>2</del>	115.26				230.52
GEOLOGIST III /PS	6/22/17	<del>6</del>	115.26				691.56
GEOLOGIST III /PS	6/23/17	<del>6</del>	115.26				691.56
COPIES	6/23/17	<del>561</del>	0.08				44.88
GEOLOGIST III /PS	7/10/17	<del>0.5</del>	115.26				57.63
SR. PROJ. MGR/AJF	6/8/17	<del>1.5</del>	121.49				182.24
SR. PROJ. MGR/AJF	6/12/17	<del>1</del>	121.49				121.49
SR. PROJ. MGR/AJF	6/13/17	<del>2</del>	121.49				242.98
SR.PROJ.MGR/AMG	6/26/17	<del>2</del>	126.00				252.00
SR.PROJ.MGR/AMG	6/28/17	<del>1</del>	126.00				126.00
GEOLOGIST III /PS	8/4/17	<del>1</del>	111.24				111.24
GEOLOGIST III /PS	8/16/17	<del>0.5</del>	111.24				55.62
PROJECT MANAG/AJF	8/31/17	0.5	112.34				56.17
PROJECT MANAG/AJF	9/1/17	1	112.34				112.34
SR. ACCT. TECH /AJF	9/8/17	<del>0.5</del>	69.00				34.50
SR. PROJ. MGR/AJF	9/14/17	<del>0.5</del>	121.49				60.75
SR. PROJ. MGR/AJF	9/18/17	<del>3</del>	121.49				364.47
GEOLOGIST III /PS	9/26/17	<del>1</del>	111.24				111.24
GEOLOGIST III /PS	9/27/17	<del>1.5</del>	111.24				166.86
GEOLOGIST III /PS	10/26/17	<del>0.75</del>	111.24				83.43
<b>Total</b>							\$4,958.12

THANK YOU!  
PLEASE CALL WITH ANY QUESTIONS.  
(309) 925-5551

-----  
 TREMONT  
 109 W WALNUT ST  
 TREMONT  
 IL  
 61568-9998  
 1678540896  
 06/26/2017 (800)275-8777 4:27 PM  
 -----

Product Description	Sale Qty	Final Price
PM 2-Day (Domestic) (SPRINGFIELD, IL 62794) (Weight:3 Lb 15.10 Oz) (Expected Delivery Day) (Wednesday 06/28/2017) (USPS Tracking #) (9505 5109 7141 7177 0368 28)	1	\$8.50
Insurance (Up to \$50.00 included)	1	\$0.00
PM 2-Day (Domestic) (GALESBURG, IL 61401) (Weight:1 Lb 8.40 Oz) (Expected Delivery Day) (Wednesday 06/28/2017) (USPS Tracking #) (9505 5109 7141 7177 0368 35)	1	\$7.20
Insurance (Up to \$50.00 included)	1	\$0.00

Total \$15.70

Credit Card Remitd \$15.70  
 (Card Name:MasterCard)  
 (Account #:XXXXXXXXXXXX1097)  
 (Approval #:01362G)  
 (Transaction #:804)

*Warsaw*

Includes up to \$50 insurance

\*\*\*\*\*  
 BRIGHTEN SOMEONE'S MAILBOX. Greeting cards available for purchase at select Post Offices.  
 \*\*\*\*\*

Text your tracking number to 28777 (2USPS) to get the latest status. Standard Message and Data rates apply.

# Bruner, Cooper & Zuck

# INC.

Civil Engineers • Structural Engineers • Land Surveyors



PLEASE REMIT TO: Bruner, Cooper & Zuck, Inc.  
188 East Simmons Street  
Galesburg, IL 61401

Midwest Environmental  
Al Greene  
22200 Illinois Route 9  
P O Box 614  
Tremont, IL 61568

Invoice number 27183  
Date 07/06/2017

Project 2011100 Various - Environmental Plan  
Reviews ---- Midwest Environmental

Consulting Services through June 30, 2017

CACR HOWARD WARSAW MINIER, IL

**Professional Services**

Principal I 3.50 hrs. @ \$144.58 /hr. \$506.03

Invoice total \$506.03

**Aging Summary**

Invoice Number	Invoice Date	Outstanding	Current	Over 30	Over 60	Over 90	Over 120
27183	07/06/2017	506.03	506.03				
Total		506.03	506.03	0.00	0.00	0.00	0.00

A FINANCE CHARGE (LATE FEE), computed by a single periodic rate of 1.5% per month which is an ANNUAL PERCENTAGE RATE of 18%, will be added to the TOTAL ACCOUNT BALANCE for accounts over 30 days old. The minimum finance charge is \$5.00.

Approved by:

Keyan J. Cooper  
P.E., P.L.S



23497 RIDGE ROAD  
 EAST PEORIA, IL 61611  
 PHONE (309) 698-8404  
 FAX (309) 698-8431

STATEMENT

WARSAW ITCO  
*C/o Saydee Trucking*  
*P.O. Box 2302*  
*East Peoria, IL 61611*

Date
02/01/2018
Customer No.
000962

INVOICE DATE	INVOICE NUMBER	INVOICE AMOUNT	BALANCE
07/20/2017	020110006403	5,780.00	5,780.00
07/20/2017	020110006404	1,880.00	1,880.00

CURRENT	30 DAYS	60 DAYS	90 DAYS	BALANCE
0.00	0.00	0.00	7,660.00	7,660.00



TAZEWELL COUNTY ASPHALT CO,INC  
 23497 RIDGE ROAD  
 EAST PEORIA, IL 61611  
 Phone:(309)698-8404  
 Fax:(309)698-8431

# INVOICE

DATE	INVOICE NO.
07/20/2017	20110006403

BILL TO
WARSAW ITCO

JOB NUMBER  
 A17078  
 MINIER- JAYDEE

TERMS	DUE DATE
UPON REC	

EPA WORK	
EXCAVATED 64 SQ YDS 3" IN DEPTH SHAPED & COMPACTED BASE INSTALLED 3" OF ASPHALT ON 64 SQ YDS (2 LIFTS)	\$3,200.00
CORRECTIVE ACTION PLAN - WATER RECLAMATION	
EXCAVATED 27 SQ YDS 3" IN DEPTH REMOVED EXISTING DRAIN AND FILLED WITH PEA GRAVEL SHAPED & COMPACTED WITH ADDITIONAL BASE INSTALLED 3" OF ASPHALT (2 LIFTS)	\$2,580.00
	<b>TOTAL: \$5,780.00</b>

*91 sq ft*

	<b>Total</b> 5,780.00
--	-----------------------



=====  
 TREMONT  
 109 W WALNUT ST  
 TREMONT  
 IL  
 61568-9998  
 1678540896  
 10/05/2017 (800)275-8777 10:13 AM  
 =====

Product Description	Sale Qty	Final Price
First-Class Mail Large Envelope (Domestic) (SPRINGFIELD, IL 62794) (Weight:0 Lb 3.60 Oz) (Expected Delivery Day) (Saturday 10/07/2017)	1	\$1.61
PM 2-Day (Domestic) (SPRINGFIELD, IL 62794) (Weight:1 Lb 4.80 Oz) (Expected Delivery Day) (Saturday 10/07/2017) (USPS Tracking #) (9505 5109 7141 7278 0465 35)	1	\$7.20
Insurance (Up to \$50.00 included)	1	\$0.00

*Warrior*

*Star*  
*MC3*

Total \$8.81  
 Credit Card Remitd \$8.81  
 (Card Name:MasterCard)  
 (Account #:XXXXXXXXXX1997)  
 (Approval #:09339G)  
 (Transaction #:187)

Includes up to \$50 insurance

\*\*\*\*\*  
 BRIGHTEN SOMEONE'S MAILBOX. Greeting cards available for purchase at select Post Offices.  
 \*\*\*\*\*

Text your tracking number to 28777 (2USPS) to get the latest status. Standard Message and Data rates may apply. You may also visit USPS.com USPS Tracking or call 1-800-222-1811.

Save this receipt as evidence of insurance. For information on filing an insurance claim go to <https://www.usps.com/help/claims.htm>

## Request for Taxpayer Identification Number and Certification

**Give Form to the  
requester. Do not  
send to the IRS.**

▶ Go to [www.irs.gov/FormW9](http://www.irs.gov/FormW9) for instructions and the latest information.

Print or type.  
See Specific Instructions on page 3.

<b>1</b> Name (as shown on your income tax return). Name is required on this line; do not leave this line blank. <span style="font-size: 1.2em; font-family: cursive;">Howard Warsaw Family Ltd Trust</span>	
<b>2</b> Business name/disregarded entity name, if different from above	
<b>3</b> Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.	<b>4</b> Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):  Exempt payee code (if any) _____  Exemption from FATCA reporting code (if any) _____  <small>(Applies to accounts maintained outside the U.S.)</small>
<input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input checked="" type="checkbox"/> Trust/estate  <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____ <small>Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.</small>  <input type="checkbox"/> Other (see instructions) ▶ _____	
<b>5</b> Address (number, street, and apt. or suite no.) See instructions. <span style="font-size: 1.2em; font-family: cursive;">PO Box 886</span>	<b>Requester's name and address (optional)</b>
<b>6</b> City, state, and ZIP code <span style="font-size: 1.2em; font-family: cursive;">Munier, IL 61759</span>	
<b>7</b> List account number(s) here (optional)	

### Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

**Note:** If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

<b>Social security number</b>								
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td></td> <td></td> </tr> </table>					-	-		
-	-							
or								
<b>Employer identification number</b>								
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; border: 1px solid black; text-align: center;">37</td> <td style="width: 25%; border: 1px solid black; text-align: center;">-6362803</td> <td style="width: 25%; border: 1px solid black; text-align: center;"></td> <td style="width: 25%; border: 1px solid black; text-align: center;"></td> </tr> </table>	37	-6362803						
37	-6362803							

### Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

<b>Sign Here</b>	Signature of U.S. person ▶ <span style="font-size: 1.2em; font-family: cursive;">John D Warsaw</span>	Date ▶ <span style="font-size: 1.2em; font-family: cursive;">22 Feb 2018</span>
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### General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

**Future developments.** For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to [www.irs.gov/FormW9](http://www.irs.gov/FormW9).

### Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

*If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.*



23497 Ridge Road • East Peoria, IL 61611 • (309) 698-8404 • Fax: (309) 698-8431

**Final Waiver of Lien**

**STATE OF ILLINOIS) ss.**

Tazewell County )

3/2/2018

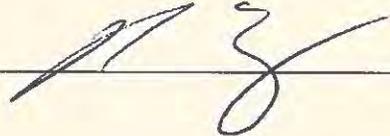
**TO ALL WHOM IT MAY CONCERN:**

**WHEREAS**, we the undersigned Tazewell County Asphalt Co., Inc. had been employed by Warsaw ITCO to furnish Asphalt Paving Work for the building known as Warsaw ITCO Situated on Lot - Minier, IL

in the City of Minier and State of Illinois.

**NOW THEREFORE, KNOW YE**, That we the undersigned, for and in consideration of Five Thousand Seven Hundred and Eighty(5,780.00) Dollars, the receipt whereof is hereby acknowledged, do hereby waive and release any and all lien, or claim, or right of lien on said above described building and premises under "An Act to Revise the Law in Relation to Mechanic's Liens," approved May 18, 1903, in force July 1, 1903, together with all amendments thereto and all the lien laws of the State of Illinois, on account of labor or materials, or both, furnished or which may be furnished by the undersigned to or on account of the for said building or premises.

Given under my hand and seal on this 2nd day of March, 2018

 (SEAL)

**Always Make and Retain an Exact Copy**

\_\_\_\_\_ (SEAL)

~ Specializing In ~  
**ASPHALT PAVING • MAINTENANCE • EXCAVATING • AGGREGATE BASE WORK  
COMMERCIAL & RESIDENTIAL**



TAZEWELL COUNTY ASPHALT CO,INC  
 23497 RIDGE ROAD  
 EAST PEORIA, IL 61611  
 Phone:(309)698-8404  
 Fax:(309)698-8431

# INVOICE

DATE	INVOICE NO.
07/20/2017	20110006403

BILL TO
WARSAW ITCO

JOB NUMBER  
 A17078  
 MINIER- JAYDEE

TERMS	DUE DATE
UPON REC	

<b>EPA WORK</b>	
EXCAVATED 64 SQ YDS 3" IN DEPTH SHAPED & COMPACTED BASE INSTALLED 3" OF ASPHALT ON 64 SQ YDS (2 LIFTS)	\$3,200.00
<b>CORRECTIVE ACTION PLAN - WATER RECLAMATION</b>	
EXCAVATED 27 SQ YDS 3" IN DEPTH REMOVED EXISTING DRAIN AND FILLED WITH PEA GRAVEL SHAPED & COMPACTED WITH ADDITIONAL BASE INSTALLED 3" OF ASPHALT (2 LIFTS)	\$2,580.00
<b>TOTAL:</b>	<b>\$5,780.00</b>

91 sq ft

**PAID**

	<b>Total</b>	5,780.00
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Office of the Illinois  
**State Fire Marshal**  
*"Partnering With the Fire Service to Protect Illinois"*

9890

CERTIFIED MAIL - RECEIPT REQUESTED #7014 1200 0001 0140 9297

September 4, 2015

Warsaw Family Land Trust  
P.O. Box 886  
Minier, IL 61759

In Re: Facility No. 3-005023  
IEMA Incident No. 98-1987  
Warsaw ITCO  
208 Rt. 122 East  
Minier, Tazewell Co., IL

Dear Applicant:

The Reimbursement Eligibility and Deductible Application received on July 13, 2015 for the above referenced occurrence has been reviewed. The following determinations have been made based upon this review.

It has been determined that you are eligible to seek payment of costs in excess of \$10,000. The costs must be in response to the occurrence referenced above and associated with the following tanks:

**Eligible Tanks**

Tank 1 500 gallon Gasoline  
Tank 2 500 gallon Gasoline  
Tank 3 2,000 gallon Gasoline

You must contact the Illinois Environmental Protection Agency to receive a packet of Agency billing forms for submitting your request for payment.

An owner or operator is eligible to access the Underground Storage Tank Fund if the eligibility requirements are satisfied:

1. Neither the owner nor the operator is the United States Government,
2. The tank does not contain fuel which is exempt from the Motor Fuel Tax Law,
3. The costs were incurred as a result of a confirmed release of any of the following substances:

"Fuel", as defined in Section 1.19 of the Motor Fuel Tax Law

Aviation fuel

Heating oil

Kerosene

**RECEIVED**  
SEP 11 2015  
IEPA/BOL

Used oil, which has been refined from crude oil used in a motor vehicle, as defined in Section 1.3 of the Motor Fuel Tax Law.

The owner or operator registered the tank and paid all fees in accordance with the statutory and regulatory requirements of the Gasoline Storage Act.

5. The owner or operator notified the Illinois Emergency Management Agency of a confirmed release, the costs were incurred after the notification and the costs were a result of a release of a substance listed in this Section. Costs of corrective action or indemnification incurred before providing that notification shall not be eligible for payment.
6. The costs have not already been paid to the owner or operator under a private insurance policy, other written agreement, or court order.
7. The costs were associated with "corrective action".

This constitutes the final decision as it relates to your eligibility and deductibility. We reserve the right to change the deductible determination should additional information that would change the determination become available. An underground storage tank owner or operator may appeal the decision to the Illinois Pollution Control Board (Board), pursuant to Section 57.9 (c) (2). An owner or operator who seeks to appeal the decision shall file a petition for a hearing before the Board within 35 days of the date of mailing of the final decision, (35 Illinois Administrative Code 105.504(b)).

For information regarding the filing of an appeal, please contact:

Clerk  
Illinois Pollution Control Board  
State of Illinois Center  
100 West Randolph, Suite 11-500  
Chicago, Illinois 60601  
(312) 814-3620

The following tanks are also listed for this site:

Tank 4 2,500 gallon Diesel Fuel  
Tank 5 2,500 gallon Diesel Fuel  
Tank 6 2,500 gallon Diesel Fuel  
Tank 7 2,500 gallon Gasoline

Your application indicates that there has not been a release from these tanks under this incident number. You may be eligible to seek payment of corrective action costs associated with these tanks if it is determined that there has been a release from one or more of these tanks. Once it is determined that there has been a release from one or more of these tanks you may submit a separate application for an eligibility determination to seek corrective action costs associated with this/these tanks.

If you have any questions, please contact our Office at (217) 785-1020 or (217) 785-5878.

Sincerely,



Deanne Lock  
Administrative Assistant  
Division of Petroleum and Chemical Safety

cc: IEPA

R1363



Illinois Environmental Protection Agency  
 Division of Land Pollution Control  
 LCTS Incident Claim Requests Details

20

Thursday, April 19, 2018

Incident Number 981987

IEPA Number 1790455007

Site Name Warsaw, Howard

Owner Name Warsaw Family Land Trust

Status ELG

EPA/OSFM Approval 9/30/1999

Deductible \$10,000.00

Opt-In Date 6/8/2010

Closure Date

Comments

Request ID	Request Received	Status	Amount Requested	Amount Paid	Voucher Date	Deductible Applied
69111	3/13/2018	ACI	\$30,783.67	\$0.00		\$0.00
68882	12/4/2017	LTR	\$27,099.32	\$18,522.15		\$0.00
68498	6/27/2017	FMU	\$55,247.76	\$25,183.86		\$0.00
66619	9/11/2015	VOP	\$69,682.68	\$135.88	7/14/2016	\$0.00
66618	9/11/2015	VOP	\$13,505.57	\$12,825.04	7/14/2016	\$0.00
65868	4/21/2015	RIE	\$13,505.57	\$0.00		\$0.00
65867	4/21/2015	RIE	\$69,682.68	\$0.00		\$0.00
44752	1/24/2005	VOP	\$11,660.74	\$11,660.74	11/17/2005	\$0.00
41689	2/5/2004	VOP	\$90,603.03	\$88,753.03	7/26/2004	\$0.00
39602	6/12/2003	VOP	\$27,940.40	\$27,940.40	7/29/2003	\$0.00
38550	2/26/2003	VOP	\$32,685.02	\$32,685.02	4/18/2003	\$0.00
34365	10/9/2001	VOP	\$15,356.75	\$15,356.75	1/7/2002	\$0.00
33357	6/6/2001	VOP	\$7,364.60	\$7,364.60	8/28/2001	\$0.00
31189	9/15/2000	VOP	\$21,016.37	\$21,016.37	12/22/2000	\$0.00
30265	3/3/2000	VOP	\$4,495.10	\$4,495.10	7/14/2000	\$0.00
19374	10/15/1999	VOP	\$126,802.81	\$112,209.71	3/17/2000	\$10,000.00
			\$617,432.07	\$378,148.65		\$10,000.00



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

(217) 524-3300

CERTIFIED MAIL #

Howard Warsaw Family Land Trust  
c/o Midwest Environmental Consulting & Remediation Services, Inc.  
P.O. Box 614  
Tremont, IL 61568

Re: LPC #1790455007—Tazewell County  
Minier / Warsaw, Howard  
Warsaw Itco / Rt. 122  
Incident-Claim No.: 981987—68882  
Queue Date: December 4, 2017  
Leaking UST Fiscal File

Dear Sir or Madam:

The Illinois Environmental Protection Agency (Illinois EPA) has completed the review of your application for payment from the Underground Storage Tank (UST) Fund for the above-referenced Leaking UST incident pursuant to Section 57.8(a) of the Environmental Protection Act (415 ILCS 5) (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code) 734.Subpart F.

This information is dated November 30, 2017 and was received by the Illinois EPA on December 4, 2017. Additional was submitted via email on March 23, 2018. This additional information consisted of a Consulting Personnel Costs line item form intended to clarify/replace the Consulting Personnel Costs line item form submitted in the application for payment. The application for payment covers the period from August 20, 2015 to June 21, 2017. The amount requested is \$27,099.32.

On December 4, 2017, the Illinois EPA received your application for payment for this claim. Additional information was received on March 23, 2018. As a result of Illinois EPA's review of this application for payment, a voucher for \$18,552.15 will be prepared for submission to the Comptroller's Office for payment as funds become available based upon the date the Illinois EPA received your complete request for payment of this application for payment. Subsequent applications for payment that have been/are submitted will be processed based upon the date complete subsequent application for payment requests are received by the Illinois EPA. This constitutes the Illinois EPA's final action with regard to the above application(s) for payment.

The deductible amount for this claim is \$10,000, which was previously withheld from your payment(s). Pursuant to Section 57.8(a)(4) of the Act, any deductible, as determined pursuant to the Office of the State Fire Marshal's eligibility and deductibility final determination in accordance with Section 57.9 of the Act, shall be subtracted from any payment invoice paid to an eligible owner or operator.

There are costs from this claim that are not being paid. Listed in Attachment A are the costs that are not being paid and the reasons these costs are not being paid.

An underground storage tank system owner or operator may appeal this decision to the Illinois Pollution Control Board. Appeal rights are attached.

If you have any questions or require further assistance, please contact Brad Dilbaitis of my staff at (217) 785-8378 or Bradley.Dilbaitis@illinois.gov.

Sincerely,

Gregory W. Dunn, Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

GWD:BD\981987-CA3-billreview.dotx

Attachment: Attachment A  
Appeal Rights

c: Warsaw Family Land Trust  
Leaking UST Claims Unit

Attachment A  
Accounting Deductions

Re: LPC #1790455007—Tazewell County  
Minier / Warsaw, Howard  
Warsaw Itco / Rt. 122  
Incident-Claim No.: 981987—68882  
Queue Date: December 4, 2017  
Leaking UST FISCAL FILE

Citations in this attachment are from the Environmental Protection Act (415 ILCS 5) (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code).

Item # Description of Deductions

1. \$4,404.02, deduction for Consulting Personnel Costs, which exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o). In addition, the requested costs exceed those contained in a budget or amended budget approved by the Illinois EPA. The cost included in the application for payment exceeds the approved budget amount and, as such, is ineligible for payment from the Fund pursuant to Section 57.8(a)(1) of the Act and 35 Ill. Adm. Code 734.605(g) and 734.630(m). Furthermore, the request lacks supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Moreover, the request is not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd).

The cumulative Corrective Action Budget was approved for a total of 50 hours for “project oversight, planning, permits, subcontractors,” with 25 hours having been approved in the July 3, 2014 Agency Approval letter and 25 hours having been approved in the June 3, 2015 Agency Approval letter. The application for payment that was received by the Agency on September 11, 2015 was approved for 28.75 hours for the Project Manager for “oversight of field activities, sample collection and preparation, report prep. Reimbursement.” The total amount of remaining approved hours for project oversight, general project planning and arrangements with subcontractors is 21.25, which is approved for the “project oversight from 8/20/15 to 11/1/16, general project planning and arrangements with subcontractors” portion of the request. An additional 14.5 hours is being approved for the “financial review and management” portion of the request. This is approvable because the cumulative Corrective Action Budget still has 35 available hours for “reimbursements, site review, CAP & Budget or CACR & Budget.” The Consulting Personnel Costs also includes a request for 20.5 hours for a Senior Project

Manager to “review CAP & Budget and reimbursements.” This request was approved, leaving 14.5 available hours for “reimbursements, site review, CAP & Budget or CACR & Budget” under the Consulting Personnel Costs line item for the cumulative Corrective Action Budget. These 14.5 available hours for “reimbursements, site review, CAP & Budget or CACR & Budget” were applied to the “financial review and management” portion of the request. The groundwater ordinance and MOU were approved by the Agency July 22, 2015. The Consulting Personnel Costs invoices begin on August 20, 2015, which is one month after the groundwater ordinance with MOU was approved by the Agency. There should not have been any additional costs associated with the groundwater ordinance after July 2015.

2. \$2,126.08, deduction for Consulting Personnel Costs, which exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o). In addition, the requested costs exceed those contained in a budget or amended budget approved by the Illinois EPA. The cost included in the application for payment exceeds the approved budget amount and, as such, is ineligible for payment from the Fund pursuant to Section 57.8(a)(1) of the Act and 35 Ill. Adm. Code 734.605(g) and 734.630(m). Furthermore, the request lacks supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Moreover, the request is not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd).

The Consulting Personnel Costs requests 17.5 hours for a Senior Project Manager to “locate, contact and negotiate with contractors for excavation and disposal activities” at a rate of \$121.49 per hour for a total of \$2,126.08. The application for payment that was submitted June 27, 2017 indicated that the excavation and disposal activities were completed by one company, Jaydee Truck Service. In addition, the costs associated with procuring subcontractors was approved in the 50 total hours for “project oversight, planning, permits, subcontractors.” The September 11, 2015 reimbursement claim approved 28.75 hours for “project oversight, planning, permits, subcontractors.” The current claim approves the difference of 21.25 hours for project oversight, general project planning and arrangements with subcontractors.

3. \$1,366.76, deduction for Consulting Personnel Costs that were not approved in a budget. The overall goal of the financial review must be to assure that costs associated with materials, activities, and services must be reasonable, must be consistent with the associated technical plan, must be incurred in the performance of corrective action activities, must not be used for corrective action activities in excess of those necessary to meet the minimum requirements of the Act and regulations, and must not exceed the maximum payment amounts set forth in 35 Ill. Adm. Code 734.Subpart H. Such costs

are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.510(b) and 35 Ill. Adm. Code 734.605(a). In addition, the request exceeds the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o). Furthermore, the request is not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd).

Pursuant to 35 Ill. Adm. Code 734.605(a), costs for which payment is sought must be approved in a budget, provided, however, that no budget must be required for early action activities conducted pursuant to 35 Ill. Adm. Code 734.Subpart B other than free product removal activities conducted more than 45 days after confirmation of the presence of free product. The Consulting Personnel Costs requests 11.25 hours for a Senior Project Manager for "Project Management including financial and regulatory aspects of the excavation project" at a rate of \$121.49 per hour for a total of \$1,366.76. This request was not approved in a budget. The request is, therefore, ineligible for payment.

4. \$58.95, deduction for costs associated with any corrective action activities, services, or materials that exceed the maximum payment amounts set forth in Subpart H, Appendix D, and/or Appendix E of 35 Ill. Adm. Code 734. The Project Manager rate for the costs associated with the TACO study has been reduced to \$112.64 per hour. The costs exceed the maximum payment amounts set forth in Subpart H, Appendix D, and/or Appendix E of 35 Ill. Adm. Code 734. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(zz). In addition, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they are not reasonable.
5. \$591.36, deduction for Consulting Personnel Costs associated with field costs for a Project Manager that exceed those contained in a budget or amended budget approved by the Illinois EPA. The cost included in the application for payment exceeds the approved budget amount and, as such, is ineligible for payment from the Fund pursuant to Section 57.8(a)(1) of the Act and 35 Ill. Adm. Code 734.605(g) and 734.630(m).

The Consulting Personnel Costs requests a total of 32 hours for a Project Manager for the oversight of the demolition activities, excavation, soil sampling, backfill oversight, etc. and post excavation in-office activities at a rate of \$112.34 per hour. These costs were approved in the January 12, 2017 Corrective Action Budget approval letter (40 hours for a Geologist IV) at a rate of \$93.86 per hour. The 32 requested hours are approved at a rate of \$93.86 per hour for a total of \$3,003.52

## Appeal Rights

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board pursuant to Sections 40 and 57.7(c)(4) of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the filing of an appeal, please contact:

Clerk of the Board  
Illinois Pollution Control Board  
James R. Thompson Center  
100 West Randolph, Suite 11-500  
Chicago, IL 60601  
312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency  
Division of Legal Counsel  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276  
217/782-5544

**TITLE XVI PAYMENT SUMMARY**

Reviewer: Brad Dilbaitis Queue Date: 3/13/18 Initial Review Date: 6/1/18  
Subject to Program: 734  
LPC # & County: 1790455007 - Tazewell County PM: Dilbaitis  
Site Name: Minier - Warsaw, Howard  
LUST Incident--Claim # 981987 - 69111 Billing Period: 11/24/14 to 2/28/18  
Early Action: \_\_\_\_\_ Site Class.: \_\_\_\_\_ Low Priority: \_\_\_\_\_ High Priority: \_\_\_\_\_  
Free Product: \_\_\_\_\_ Site Invest.: \_\_\_\_\_ Corrective Action: xx

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**Amount requested for Corrective Action:** 30,783.67  
**SUB TOTAL:** \$30,783.67  
**Less: STANDARD DEDUCTIBLE:** met

**Less: DEDUCTIONS:**

Paving Costs deduction - lack of supporting documentation, not approved in a budget	(1,880.00)
Paving Costs deduction -not approved in a budget	(5,780.00)
Well Abandonment Costs deduction - exceeds max rate and rate approved in the bdt	(27.55)
Consulting Personnel Costs deduction - Sr. PM exceeds amount appr in bud for task	(2,347.07)
Consulting Personnel Costs deduction - Sr. PM exceeds amount appr in bud for task	(8,028.36)
Consulting Personnel Costs deduction - no Geologist III hours approved in budget(s)	(2,247.57)
Consultant's Materials Costs deduction-copies not approved in a budget,lack sup doc	(44.88)
Handling Charges deduction - math error, violates 734.635	(693.03)
Handling Charges adjusted for having no or inadequate proof of payment	(172.66)
Handling Charges deduction for previous deductions made on costs requesting hndlng	(21.84)

SUMMARY DATE: 6/1/18  
NFR DATE: \_\_\_\_\_  
OPT-IN DATE: \_\_\_\_\_ Total Amount Due: \$9,540.71

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Payee: John Warsaw Facility: Warsaw, Howard  
Attention: c/o Midwest Environmental Consulting & Remediation Services, Inc. Address: Warsaw Itco / Rt. 122  
Address: P.O. Box 614 City/State: Minier, IL  
City/St./Zip: Tremont, IL 61568 County: Tazewell

**R1371**



**TITLE XVI**

TO: Greg Dunn  
FROM: Brad Dilbaitis

Initial Review Date: 6/1/18  
Project Manager: Dilbaitis  
Subject to Program: 734

LPC # & County: 1790455007 - Tazewell County  
Site City & Name: Minier - Warsaw, Howard  
Site Address: Warsaw Itco/ Rt. 122  
LUST Incident-Claim # 981987 - 69111  
Queue Date: 3/13/2018  
LUST / FISCAL FILE

*The above referenced facility's consultants/contractors submission regarding invoices and billings has been reviewed.*

The consultant/contractor in this billing package is: Midwest Environmental Consulting & Remediation Services, Inc.

Queue Date: 3/13/18 120 Day Date: 7/11/18  
Revised 120 Day Date: \_\_\_\_\_

IEMA: 8/11/98 52 Days After IEMA: 10/2/98  
OSFM: \_\_\_\_\_ Date of 45 Day Report: \_\_\_\_\_  
F.P. Discovered: \_\_\_\_\_ 45 Days After Free Product was Discovered: \_\_\_\_\_  
E.A. Ext Date: \_\_\_\_\_ Date of Site Class. Comp. Report: \_\_\_\_\_  
NFR Date: \_\_\_\_\_ Date of Site Invest. Comp. Report: \_\_\_\_\_  
Opt-In Date: \_\_\_\_\_ Or Stage of Site Invest. work being billed: \_\_\_\_\_  
Opt-In as New Owner: \_\_\_\_\_

# of Eligible Tanks: 3 Tank Size: (2) 500g and (1) 2,000g gasoline USTs  
Tank Pull: \_\_\_\_\_ Planned: \_\_\_\_\_ Not Planned: \_\_\_\_\_

The **Billing Period** for this claim covers: 11/24/14 to 2/28/18

The **Amount Requested** in this billing package is: \$30,783.67

The **Budget Amount Approved** for this site is: \$79,435.26

The **Deductible Applied** to this billing package is: met

Early Action: \_\_\_\_\_ Site Class.: \_\_\_\_\_ Low Priority: \_\_\_\_\_ High Priority: \_\_\_\_\_  
Free Product: \_\_\_\_\_ Site Invest.: \_\_\_\_\_ Corrective Action: xx

**MANDATORY DOCUMENTS:**

- xx 1. Payment Certification Form.
- xx 2. Owner/Operator & Professional Engineer/Geologist Billing Certification Form.
- xx 3. Private Insurance Coverage Questionnaire & Affidavit Forms.
- xx 4. Federal Taxpayer Identification Number &/or W-9 Form(s):
- xx 5. Copy of OSFM Eligibility / Deductibility Letter.
- xx 6. Women / Minority Business Enterprise Form.

*The costs have been deemed reasonable based upon established standards, practices and procedures with the following exceptions:*

**see attached notes**

*This review does not take into consideration the following issues: 1) The legitimacy or validity of the site remediation activities; 2) Whether or not plans for corrective action were submitted or approved by the Agency pursuant to Sections 22.18b(d)(4)(E) and 22.18b(d)(4)(F) of the Environmental Protection Act; 3) If there are any reports, technical data, or information in support of this claim.*

The Paving Costs requests 120 square feet of asphalt at 3” thickness at a rate of \$63.83 per Square foot for a total of \$7,660.00. There is one invoice included in the application for payment to document the cost of the asphalt. The invoice from Tazewell County Asphalt Co., Inc. (invoice 20110006403) indicates that a total of 91 square yards (819 square feet) of asphalt were installed at the site for a total of \$5,780.00. Deducting \$1,880.00—lack of supporting documentation, not approved in a budget, exceeds minimum requirements, unreasonable

The Paving Costs requests 120 square feet of asphalt at 3” thickness at a rate of \$63.83 per square foot for a total of \$7,660.00. There is one invoice included in the application for payment to document the cost of the asphalt. The invoice from Tazewell County Asphalt Co., Inc. (invoice 20110006403) indicates that a total of 91 square yards (819 square feet) of asphalt were installed at the site for a total of \$5,780.00, or approximately \$7.06 per foot. No Paving Costs have ever been requested or approved in a budget. Deducting the requested \$5,780.00—not approved in a budget, lack of supporting documentation, exceeds minimum requirements, unreasonable

The Well Abandonment Costs requests a total of 72.5 feet for monitoring well abandonment at a rate of \$12.90 per foot for a total of \$935.25. This amount exceeds the applicable Subpart H rate and the \$12.52 per square foot rate approved in the corresponding budget, exceeds minimum requirements, unreasonable. Deducting \$27.55.

The Consulting Personnel Costs requests 42.73 hours for a Senior Project Manager for “site closure, final paperwork and Project Management” at a rate of \$103.25 per hour for a total of \$4,412.07. The Corrective Action Budget that was received by the Illinois EPA on June 27, 2017 included a request for 20 hours for a Senior Project Manager for “site closure, final paperwork and Project Management,” which was approved on September 12, 2017. In addition, the request for 42.73 hours is not supported by the documentation included. This request for the Senior Project Manager to complete these tasks is approved for 20 hours at the requested rate of \$103.25 per hour for a total of \$2,065.00—deducting \$2,347.07—exceeds amount approved in the budget, lack of supporting documentation, exceeds minimum requirements, unreasonable

The Consulting Personnel Costs requests 68.47 hours for a Senior Project Manager for “final reimbursement and documentation of closure” at a rate of \$121.49 per hour for a total of \$8,318.41. The Corrective Action Budget that was received by the Illinois EPA on June 27, 2017 included a request for 5 hours for a Senior Administrative Assistant for “final reimbursement and documentation of closure” at a rate of \$58.01 per hour, which was approved on September 12, 2017. In addition, the request for 68.47 hours is not supported by the documentation included. This request for the Senior Project Manager for “final reimbursement and documentation of closure” is approved for 5 hours at a rate of \$58.01 per hour—deducting a

total of \$8,028.36—exceeds amount approved in the budget, lack of supporting documentation, exceeds minimum requirements, task/title

The claim requests 6.5 hours for a Senior Professional Geologist for “PE review of budget and reimbursements” at a rate of \$133.64 per hour for a total of \$868.66. The cumulative Corrective Action Budget is approved for a total of 16 hours for the Senior Professional Geologist for these tasks. The budget received 10-28-16 approved 6 hours for this task at a rate of \$137.67 per hour. Will approve this request.

The claim requests 3.5 hours for a Professional Engineer for “PE cert and Review of CACR” at a rate of \$144.58 per hour for a total of \$506.03. The budget received 10-28-16 approved 4 hours for this task at a rate of \$162.70 per hour. Will approve this request.

The claim requests 3 hours for a Project Manager for “TACO” at a rate of \$109.32 per hour for a total of \$327.96. This request appears approvable. There were 4 available hours remaining in the Corrective Action Budget for various tasks including TACO (see notes for the last claim).

The Consulting Personnel Costs requests 19.5 hours for a Geologist III for “CAP & Budget 2015” at a rate of \$115.26 per hour for a total of \$2,247.57. The Corrective Action Plan and Budget that were submitted and approved in 2015 were submitted on May 15, 2015 and were approved on June 3, 2015. The Corrective Action Budget received by the Illinois EPA on May 15, 2015, or any other Corrective Action Budget, did not include any Consulting Personnel Costs requests for a Geologist III. In addition, the Corrective Action Budget included a 50-hour request for a Project Manager that included the plan preparation.—deducting the requested \$2,247.57—lack of supporting documentation, not approved in a budget, exceeds minimum requirements, unreasonable

The Consultant's Materials Costs requests 561 copies at a rate of \$0.08 per copy for a total of \$44.88. No copy costs were ever submitted or approved in a Corrective Action Budget. In addition, there is no documentation included to support the reasonableness of the requested rate.—deducting the requested \$44.88—not approved in a budget, lack of supporting documentation, unreasonable

The Handling Charges were calculated incorrectly in the application for payment. The application for payment requested Handling Charges of \$3,279.09 associated with a total of \$27,325.75 for subcontractor/field costs. When calculated correctly, the Handling Charges total \$2,586.06—deducting \$693.03—math error, violates 734.635

The Handling Charges do not include the proof of payment for Professional Engineer review and inadequate proof of payment for the Analytical Costs for Prairie Analytical—deducting \$172.66

The Handling Charges need to be adjusted for previous deductions made to Drilling Costs (\$240.00) and the Paving, Demo & Well Abandonment Costs (\$33.00)



Approved LUST Budget/Billing Tracking Summary

Project Manager: Dilbaitis

LUST Incident #: 981987  
 LUST Site City & Name: Minier - Warsaw, Howard

Phase of Work being billed for: SI FP xxxxxxxxxxxxxxxxxxxx CA

**APPROVED BUDGET AMOUNTS:**

Budget Line Items	Approved Costs	Amendment #1	Amendment #2	Amendment #3	Amendment #4	Amendment #5	Approved Cumulative
Date of Approved Budget	7/3/14	6/3/15	1/12/17	9/12/17			
Drilling & Monitoring Well Costs:	2,264.40	1,530.90	0.00	0.00			\$3,795.30
Analysis Costs:	2,908.56	969.44	695.87	0.00			\$4,573.87
Remediation & Disposal Costs:	1,191.08	0.00	19,274.00	0.00			\$20,465.08
UST Removal & Abandonment Costs:	0.00	0.00	0.00	0.00			\$0.00
Paving, Demo. & Well Aband. Costs:	0.00	0.00	10,000.00	907.70			\$10,907.70
Consulting Fees:							\$0.00
Consulting Personnel Costs:	9,481.11	10,217.13	15,510.71	3,522.56			\$38,731.51
Consulting Materials Costs:	185.90	185.90	388.00	202.00			\$961.80
Handling Charges:							
<b>Totals</b>	<b>\$16,031.05</b>	<b>\$12,903.37</b>	<b>\$45,868.58</b>	<b>\$4,632.26</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$79,435.26</b>

**AMOUNTS PER CLAIM APPLIED TO APPROVED BUDGET LINES:**

Billing Line Items	Billing #1	Billing #2	Billing #3	Billing #4	Billing #5	Billing #6	Billing Cumulative
Date of Billing	9/11/15	6/27/17	12/4/17	3/13/18			
Drilling & Monitoring Well Costs:	1,509.60	1,814.64	0.00	0.00			\$3,324.24
Analysis Costs:	1,779.84	1,521.51	0.00	0.00			\$3,301.35
Remediation & Disposal Costs:	0.00	11,744.92	0.00	0.00			\$11,744.92
UST Removal & Abandonment Costs:	0.00	0.00	0.00	0.00			\$0.00
Paving, Demo. & Well Aband. Costs:	0.00	9,769.88	0.00	907.70			\$10,677.58
Consulting Fees:							\$0.00
Consulting Personnel Costs:	9,380.50	0.00	18,552.15	6,139.03			\$34,071.68
Consulting Materials Costs:	155.10	234.91	0.00	102.42			\$492.43
Handling Charges:	0.00	98.00	0.00	2,391.56			\$2,489.56
<b>Totals</b>	<b>12,825.04</b>	<b>25,183.86</b>	<b>18,552.15</b>	<b>9,540.71</b>	<b>0.00</b>	<b>0.00</b>	<b>66,101.76</b>

**BILLING TO BUDGET DIFFERENTIALS:**

Budget/Billing Line Items	Line Item Differences
Drilling & Monitoring Well Costs:	\$471.06
Analysis Costs:	\$1,272.52
Remediation & Disposal Costs:	\$8,720.16
UST Removal & Abandonment Costs:	\$0.00
Paving, Demo. & Well Aband. Costs:	\$230.12
Consulting Fees:	\$0.00
Consulting Personnel Costs:	\$4,659.83
Consulting Materials Costs:	\$469.37
Handling Charges:	
<b>Totals</b>	<b>R1379</b>





# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

217/524-3300

CERTIFIED MAIL #

JUN 12 2018

7014 2120 0002 3283 7466

John Warsaw  
c/o Midwest Environmental Consulting & Remediation Services, Inc.  
P.O. Box 614  
Tremont, IL 61568

Re: LPC #1790455007—Tazewell County  
Minier / Warsaw, Howard  
Warsaw Itco. / Rt. 122  
Incident-Claim No.: 981987—69111  
Queue Date: March 13, 2018  
Leaking UST Fiscal File

Dear Mr. Warsaw:

The Illinois Environmental Protection Agency (Illinois EPA) has completed the review of your application for payment from the Underground Storage Tank (UST) Fund for the above-referenced Leaking UST incident pursuant to Section 57.8(a) of the Environmental Protection Act (415 ILCS 5) (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code) 734.Subpart F.

This information is dated February 12, 2018 and was received by the Illinois EPA on March 13, 2018. The application for payment covers the period from November 24, 2014 to February 28, 2018. The amount requested is \$30,783.67.

On March 13, 2018, the Illinois EPA received your application for payment for this claim. As a result of Illinois EPA's review of this application for payment, a voucher for \$9,540.71 will be prepared for submission to the Comptroller's Office for payment as funds become available based upon the date the Illinois EPA received your complete request for payment of this application for payment. Subsequent applications for payment that have been/are submitted will be processed based upon the date complete subsequent application for payment requests are received by the Illinois EPA. This constitutes the Illinois EPA's final action with regard to the above application(s) for payment.

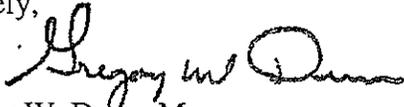
The deductible amount of \$10,000 was withheld from your payment. Pursuant to Section 57.8(a)(4) of the Act, any deductible, as determined pursuant to the Office of the State Fire Marshal's eligibility and deductibility final determination in accordance with Section 57.9 of the Act, shall be subtracted from any payment invoice paid to an eligible owner or operator.

There are costs from this claim that are not being paid. Listed in Attachment A are the costs that are not being paid and the reasons these costs are not being paid.

An underground storage tank system owner or operator may appeal this decision to the Illinois Pollution Control Board. Appeal rights are attached.

If you have any questions or require further assistance, please contact Brad Dilbaitis of my staff at (217) 785-8378 or Bradley.Dilbaitis@illinois.gov.

Sincerely,



Gregory W. Dunn, Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

GWD:BD 

Attachment: Attachment A  
Appeal Rights

c: John Warsaw  
Leaking UST Claims Unit

Attachment A  
Accounting Deductions

Re: LPC #1790455007—Tazewell County  
Minier / Warsaw, Howard  
Warsaw Itco. / Rt. 122  
Incident-Claim No.: 981987—69111  
Queue Date: March 13, 2018  
Leaking UST FISCAL FILE

Citations in this attachment are from the Environmental Protection Act (415 ILCS 5) (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code).

Item # Description of Deductions

1. \$7,660.00, deduction Paving Costs that were not approved in a budget. The overall goal of the financial review must be to assure that costs associated with materials, activities, and services must be reasonable, must be consistent with the associated technical plan, must be incurred in the performance of corrective action activities, must not be used for corrective action activities in excess of those necessary to meet the minimum requirements of the Act and regulations, and must not exceed the maximum payment amounts set forth in 35 Ill. Adm. Code 734.Subpart H. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.510(b) and 35 Ill. Adm. Code 734.605(a). In addition, the costs lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Furthermore, the costs exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o). Moreover, the costs are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd).

The Paving Costs requests 120 square feet of asphalt at 3" thickness at a rate of \$63.83 per Square foot for a total of \$7,660.00. There is one invoice included in the application for payment to document the cost of the asphalt. The invoice from Tazewell County Asphalt Co., Inc. (invoice 20110006403) indicates that a total of 91 square yards (819 square feet) of asphalt were installed at the site for a total cost of \$5,780.00.

In addition, Pursuant to 35 Ill. Adm. Code 734.605(a), costs for which payment is sought must be approved in a budget, provided, however, that no budget must be required for early action activities conducted pursuant to 35 Ill. Adm. Code 734.Subpart B other than free product removal activities conducted more than 45 days after confirmation of the presence of free product. The Paving Costs were not approved in a budget and are therefore ineligible for payment.

2. \$27.55, deduction for Well Abandonment Costs that exceed those contained in a budget or amended budget approved by the Illinois EPA. The cost included in the application for payment exceeds the approved budget amount and, as such, is ineligible for payment from the Fund pursuant to Section 57.8(a)(1) of the Act and 35 Ill. Adm. Code 734.605(g) and 734.630(m). Costs associated with any corrective action activities, services, or materials that exceed the maximum payment amounts set forth in Subpart H, Appendix D, and/or Appendix E of 35 Ill. Adm. Code 734 are not eligible for payment. The monitoring well abandonment rate has been reduced to \$12.52 per foot. The costs exceed the maximum payment amounts set forth in Subpart H, Appendix D, and/or Appendix E of 35 Ill. Adm. Code 734. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(zz). In addition, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they are not reasonable.

The Well Abandonment Costs requests a total of 72.5 feet for monitoring well abandonment at a rate of \$12.90 per foot for a total of \$935.25. This amount exceeds the applicable Subpart H rate and the \$12.52 per square foot rate approved in the corresponding budget.

3. \$2,347.07, deduction for Consulting Personnel Costs that exceed those contained in a budget or amended budget approved by the Illinois EPA. The cost included in the application for payment exceeds the approved budget amount and, as such, is ineligible for payment from the Fund pursuant to Section 57.8(a)(1) of the Act and 35 Ill. Adm. Code 734.605(g) and 734.630(m). In addition, the costs lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Furthermore, the costs exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o). Moreover, the costs are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd).

The Consulting Personnel Costs requests 42.73 hours for a Senior Project Manager for “site closure, final paperwork and Project Management” at a rate of \$103.25 per hour for a total of \$4,412.07. The Corrective Action Budget that was received by the Illinois EPA on June 27, 2017 included a request for 20 hours for a Senior Project Manager for “site closure, final paperwork and Project Management,” which was approved on September 12, 2017. In addition, the request for 42.73 hours is not supported by the documentation included. This request for the Senior Project Manager to complete these tasks is approved for 20 hours at the requested rate of \$103.25 per hour for a total of \$2,065.00.

4. \$8,028.36, deduction for Consulting Personnel Costs that exceed those contained in a budget or amended budget approved by the Illinois EPA. The cost included in the application for payment exceeds the approved budget amount and, as such, is ineligible for payment from the Fund pursuant to Section 57.8(a)(1) of the Act and 35 Ill. Adm. Code 734.605(g) and 734.630(m). In addition, the costs lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Furthermore, the costs exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o). Moreover, pursuant to Section 734.850(b) personnel costs must not exceed the amounts set forth in Appendix E and the personnel costs must be based on the work performed, regardless the title of the person performing the work. The costs exceed the maximum payment amounts set forth in Subpart H, Appendix D, and/or Appendix E of 35 Ill. Adm. Code 734. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(zz). In addition, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they are not reasonable and 35 Ill. Adm. Code 734.630(dd).

The Consulting Personnel Costs requests 68.47 hours for a Senior Project Manager for “final reimbursement and documentation of closure” at a rate of \$121.49 per hour for a total of \$8,318.41. The Corrective Action Budget that was received by the Illinois EPA on June 27, 2017 included a request for 5 hours for a Senior Administrative Assistant for “final reimbursement and documentation of closure” at a rate of \$58.01 per hour, which was approved on September 12, 2017. In addition, the request for 68.47 hours is not supported by the documentation included. This request for the Senior Project Manager for “final reimbursement and documentation of closure” is approved for 5 hours at a rate of \$58.01 per hour

5. \$2,247.57, deduction for Consulting Personnel Costs, which lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. In addition, the costs were not approved in a budget. The overall goal of the financial review must be to assure that costs associated with materials, activities, and services must be reasonable, must be consistent with the associated technical plan, must be incurred in the performance of corrective action activities, must not be used for corrective action activities in excess of those necessary to meet the minimum requirements of the Act and regulations, and must not exceed the maximum payment amounts set forth in 35 Ill. Adm. Code 734.Subpart H. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.510(b) and 35 Ill. Adm. Code 734.605(a). Furthermore, the costs exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o). Moreover, the costs are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd).

The Consulting Personnel Costs requests 19.5 hours for a Geologist III for "CAP & Budget 2015" at a rate of \$115.26 per hour for a total of \$2,247.57. The Corrective Action Plan and Budget that were submitted and approved in 2015 were submitted on May 15, 2015 and were approved on June 3, 2015. Neither the Corrective Action Budget received by the Illinois EPA on May 15, 2015, nor any other Corrective Action Budget, included any Consulting Personnel Costs for a Geologist III.

Pursuant to 35 Ill. Adm. Code 734.605(a), costs for which payment is sought must be approved in a budget, provided, however, that no budget must be required for early action activities conducted pursuant to 35 Ill. Adm. Code 734.Subpart B other than free product removal activities conducted more than 45 days after confirmation of the presence of free product. The Consulting Personnel Costs associated with a Geologist III were not approved in a budget and are, therefore, ineligible for payment.

6. \$44.88, deduction for Consultant's Materials Costs associated with copy charges that were not approved in a budget. The overall goal of the financial review must be to assure that costs associated with materials, activities, and services must be reasonable, must be consistent with the associated technical plan, must be incurred in the performance of corrective action activities, must not be used for corrective action activities in excess of those necessary to meet the minimum requirements of the Act

and regulations, and must not exceed the maximum payment amounts set forth in 35 Ill. Adm. Code 734.Subpart H. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.510(b) and 35 Ill. Adm. Code 734.605(a).

Pursuant to 35 Ill. Adm. Code 734.605(a), costs for which payment is sought must be approved in a budget, provided, however, that no budget must be required for early action activities conducted pursuant to 35 Ill. Adm. Code 734.Subpart B other than free product removal activities conducted more than 45 days after confirmation of the presence of free product. The Consultant's Materials Costs associated with copies were not approved in a budget and are, therefore, ineligible for payment.

7. \$693.03, deduction for Handling Charges, which violates 35 Ill. Adm. Code 734.635. Costs associated with activities that violate any provision of the Act or Illinois Pollution Control Board, Office of the State Fire Marshal, or Illinois EPA regulations are ineligible for payment from the Fund pursuant to Section 57.6(a) of the Act and 35 Ill. Adm. Code 734.630(i).

The Handling Charges were not determined in accordance with 35 Ill. Adm. Code 734.635.

8. \$172.66, deduction for handling charges for subcontractor costs when the contractor has not submitted proof of payment for subcontractor costs. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630 (ii). In addition, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they are not reasonable.

The application for payment does not include adequate proof of payment for Professional Engineer review or for the Analytical Costs.

9. \$21.84, adjustment in the handling charges due to the deduction(s) of ineligible costs. Such costs are ineligible for payment from the Fund pursuant to Section 57.1(a) of the Act and 35 Ill. Adm. Code 734.635.

The Handling Charges need to be adjusted for previous deductions made to Drilling Costs (\$240.00) and the Paving, Demolition & Well Abandonment Costs (\$33.00).

BD

## Appeal Rights

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board pursuant to Sections 40 and 57.7(c)(4) of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the filing of an appeal, please contact:

Clerk of the Board  
Illinois Pollution Control Board  
James R. Thompson Center  
100 West Randolph, Suite 11-500  
Chicago, IL 60601  
312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency  
Division of Legal Counsel  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276  
217/782-5544

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*LCU #24*

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<p>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</p> <p>■ Print your name and address on the reverse so that we can return the card to you.</p> <p>■ Attach this card to the back of the mailpiece, or on the front if space permits.</p> <p>1. Article Addressed to:</p> <p style="text-align: center;">Warsaw Family Land Trust            c/o Midwest Environmental Consulting &amp; Remediation Services, Inc.            P. O. Box 614            Tremont, IL 61568</p> <p>2. Article Number:  <i>(Transfer from service label)</i> 7014 2120 0002 3283 7466</p>	<p>A. Signature            X <i>Allen Green</i> <input type="checkbox"/> Agent  <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) <i>Allen Green</i> C. Date of Delivery</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes            If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>

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