

9-16-94



1000 gal Benzene  
Unknown Solvent  
NFA 2-9-95  
Bm-95

RECEIVED  
MAY 15 1994  
EMERG & REMEDIAL RESPONSE SECTION  
DEPT OF HEALTH & HAZARDOUS WASTE



Assesment



George E. Meyer  
Secretary

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

101 South Webster Street  
Box 7921  
Madison, Wisconsin 53707  
TELEPHONE 608-266-2621  
TELEFAX 608-267-3579  
TDD 608-267-6897

February 9, 1995

David Tice  
Fisher-Hamilton Scientific  
PO Box 137  
Two Rivers WI 54241

SUBJECT: Underground Storage Tank Closure Assessment for Fisher-Hamilton  
Scientific, 1316 18th St., Two Rivers, WI 54241

Dear Mr. Tice:


The Department has reviewed the additional closure assessment documentation for the 1000 gallon Benzene underground storage tank system that was removed from the above-referenced property on September 16, 1994. The purpose of this letter is to inform you that no further action is required at this time.

I have reviewed the additional documentation and determined that the assessment complies with the applicable closure guidance and contains no evidence of a release above current action or cleanup guidelines. Based on the information available, the Department is not requiring any further investigation or other action at this time. However, if additional information in the future indicates that further investigation or cleanup is warranted, the Department will require that appropriate action be taken at that time.

You should note that this letter does not constitute Department "certification" under s. 144.765 (2) (a) 3, Stats., as created by 1993 Wisconsin Act 453 (May 12, 1994). Persons who meet the definition of "purchaser" in s. 144.765 (1) (c) must receive Department pre-approval prior to conducting a site investigation in order to be eligible for the liability exemption under s. 144.765, Stats. If you are interested in obtaining the protection of limited liability under s. 144.765, Stats., please contact Mark Giesfeldt at (608) 267-7562 or Darsi Foss at (608) 267-6713, at the above address for more information.

Removing underground storage tanks helps protect Wisconsin's citizens and environment from the hazards posed by petroleum contamination. The Department appreciates your cooperation in this matter. If you have any questions about this letter, please call me at (608) 264-8597.

Sincerely,

  
William J. LeFevre, Waste Management Specialist  
Tank Response Unit  
Bureau of Solid & Hazardous Waste Management

cc: DNR Lake Michigan District  
Terry Freudenrich - Superior Haz Waste Group, PO Box 1249, Sheboygan, WI 53082-1249





January 20, 1995

William J. LeFevre  
Waste Management Specialist  
Tank Response Unit, WDNR  
101 South Webster Street, Box 7921  
Madison, Wisconsin 53707



RE: Re-Assessment for Tank Closure  
Fisher-Hamilton Scientific, Two Rivers

Dear Mr. LeFevre:

In response to directives received from the WDNR (23 Nov 94) the following actions have been taken and are now being reported:

Mr. Terry Freudenrich of Superior Services informed the agency, phone calls to William LeFevre, of the scheduled re-sampling of soils in late December '94 and summarized the sampling activities upon their completion in early January '95.

The samples were taken on either end of the now removed underground tank at a depth greater than the original tank removal excavation. The soil sampled was undistributed native alluvial sand. Sampling was done in the presence of Bill Lantz a registered State of Wisconsin, Professional Engineer. Terry Freudenrich was the site assessor, IHLR Certification 00859. Sampling location drawings attached.

The collected samples were transferred under chain-of-custody to En Chem, Inc. where analyses (PVOC) were performed and reported. Chain-of-Custody and Lab Reports attached.

Upon receipt of lab results, the test portals were closed using a lean cement/bentonite slurry with an bituminous concrete cap.

It is the recommendation of Superior Services, that the referenced tank be granted closure. This recommendation is based on the following pertinent facts:

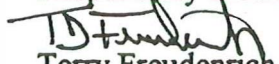
The site is in an industrial-use zone,

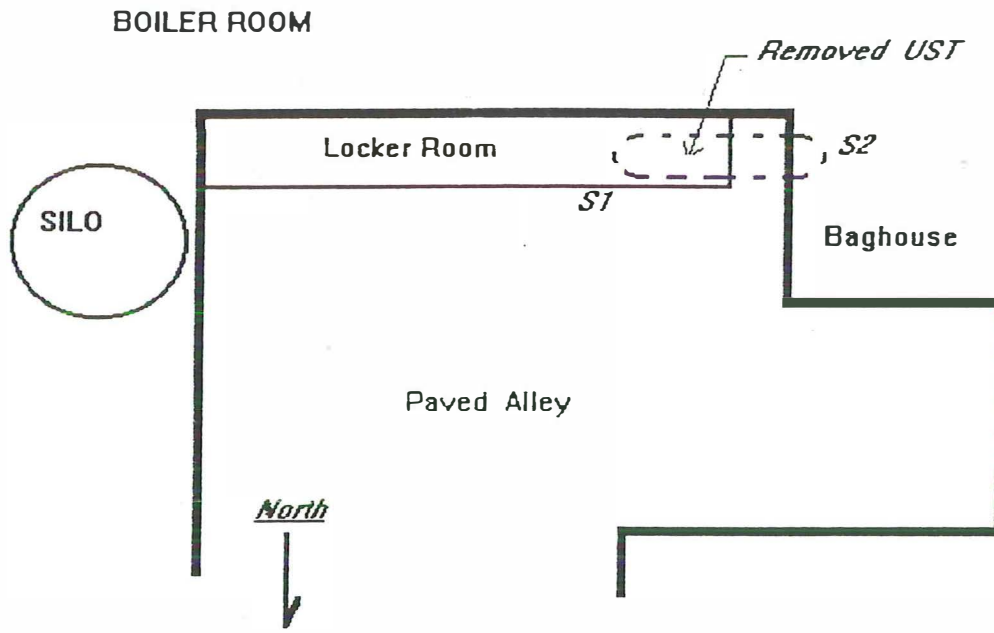
The tank was removed and no visual contamination was noted, and

Re-sampling of soils has occurred and the analyses reports no detect on Benzene.

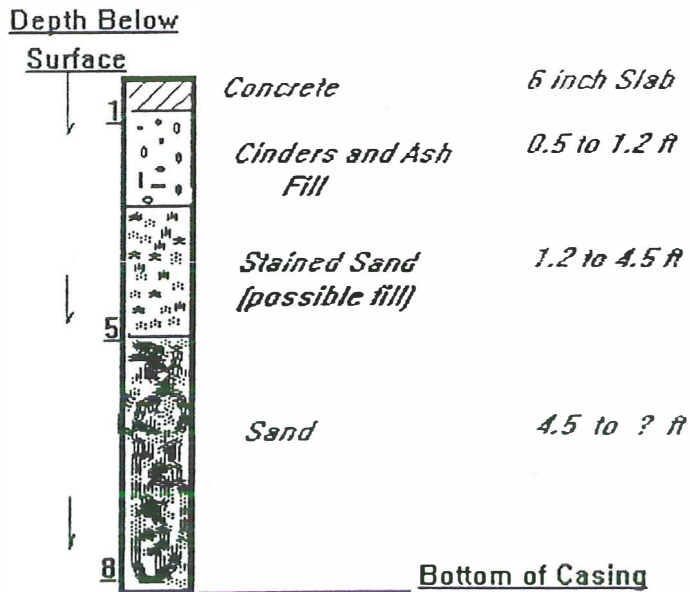
In the event that the Agency requires additional information or clarification regarding the site or actions taken, please contact the undersigned at your convenience.

Respectfully submitted,

  
Terry Freudenrich  
(414) 458-6030



Soil Profile @ Sample Portals



Sampled between 8 to 10 ft



*JDH*

Note: Use of this form is voluntary but is requested by the Department pursuant to ch. NR 149, NR 500-540, NR 158 and NR 419, Wis. Adm. Code. Personally identifiable information will be used for no other purpose.

Sample Collector(s) <b>WILLIAM LANTZ</b>	Title/Work Station/Company <b>AGENDA INTERNATIONAL INC.</b>	Telephone Number (include area code) <b>414-451-9141</b>
Property Owner <b>FISCHER - HAMILTON</b>	Property Address	Telephone Number (include area code)

I hereby certify that I received, properly handled and disposed of these samples as noted below:

Relinquished By (Signature) <i>William Lantz</i>	Date/Time <b>1/5/95</b>	Received By (Signature) <i>Bernie Kempen</i>	Date/Time <b>1/5/95</b>
Relinquished By (Signature)	Date/Time	Received By (Signature)	Date/Time
Relinquished By (Signature) <i>Bernie Kempen</i>	Date/Time <b>1/5/95</b>	Received for EN CHEM by (Signature) <i>Gloria Dopteter</i>	Date/Time <b>3:15 pm</b>

LABORATORY USE ONLY

Temperature of temperature blank **Ro 2**

If samples were received on ice and there was ice remaining, you may report the temperature as 'received on ice'. If all of the ice was melted, the temperature of the melt may be substituted for a temperature blank.

Field ID Number	Date Collected	Time Collected	Sample Type	Device	Preserv. Type	Field Screening	Location/Description (see footnote 2)	Analysis Type	Lab ID Number	Sample Condition				
										no/type of Containers	Cracked /broken	Inprop. Sealed	Good Cond.	Other Comments
SS-H1	1/3/95	2:00 pm	SOIL		NONE		OUTSIDE BORING SAMPLE	2	132136	1-502 2-202				
SS-H2	1/3/95	2:15 pm	SOIL		NONE		INSIDE BORING SAMPLE	2	132137					

FOOTNOTES

- specify groundwater, surface water, soil, leachate, sludge, etc.
- sample description must clearly correlate the sample ID to the sampling location.

- ANALYSIS CODES
- |         |                   |                  |                     |
|---------|-------------------|------------------|---------------------|
| 1. GRO  | 5. DRO            | 9. Free Liquids  | 13. BETX            |
| 2. PVOC | 6. PAH            | 10. pH           | 14. Protocol D1-GRO |
| 3. Lead | 7. Flashpoint     | 11. TCLP-Benzene | 15. Protocol D1-DRO |
| 4. 8021 | 8. Percent Solids | 12. TCLP-Lead    | 16. 8260            |

BILLING ADDRESS:

**HABARDOUS WASTE HANDLING, INC.**  
**SUPERIOR SERVICES**  
P.O. Box 500  
PORT WASHINGTON, WI 53074  
(PROJ. MGR - TERRY FRENDRICH)

DEPARTMENT USE ONLY

Split samples: Offered?  yes  no (Check one)  
Accepted?  yes  no (Check one)

Accepted By: \_\_\_\_\_

Proj # 9501030



...chemistry for the environment

1795 Industrial  
Green Bay, WI 54303  
414-469-3827  
800-7-ENVIRO  
FAX: 414-469-3827

Lab Certification No. 405132750  
Location : FISCHER-HAMILTON  
Your Sample ID: SS-H2  
Sample Desc. : INSIDE BORING SAMPLE  
Sample Matrix : SOIL Date Collected: 01/03/1995  
En Chem Proj# : 9501030 Date Received : 01/05/1995  
En Chem Lab # : 132137 Date Reported : 01/10/1995

Report to: AGENDA INTERNATIONAL ENVIRONMENTAL ENGIN  
465 HILL STREET  
KOHLER, WI 53044

Bill to: SUPERIOR HAZARDOUS WASTE GROUP, INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analysis By
TOTSOLID	Total Solids	94	Percent				EPA 160.3	01/06/1995	NJS
PVOC-S	Benzene	ND	ug/kg	1.1	SW846 5030	01/06/1995	SW846 8260	01/06/1995	JJB
	Ethyl Benzene	ND	ug/kg	1.1					
	Methyl-tert-butyl ether	ND	ug/kg	1.1					
	Toluene	ND	ug/kg	1.1					
	1,2,4-trimethylbenzene	ND	ug/kg	1.1					
	1,3,5-trimethylbenzene	ND	ug/kg	1.1					
	Xylenes, m + p	ND	ug/kg	1.1					
	Xylene, o	ND	ug/kg	1.1					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

These results have been reviewed and their authenticity verified by:

*Nate Melby*



Printed on Recycled Paper



...chemistry for the environment

1795 Industrial Drive  
Green Bay, WI 54302  
414-469-2436  
800-7-ENCHEM  
FAX: 414-469-8827

Lab Certification No. 405132750  
Location : FISCHER-HAMILTON  
Your Sample ID: SS-H1  
Sample Desc. : OUTSIDE BORING SAMPLE  
Sample Matrix : SOIL Date Collected: 01/03/1995  
En Chem Proj# : 9501030 Date Received : 01/05/1995  
En Chem Lab # : 132136 Date Reported : 01/10/1995

Report to: AGENDA INTERNATIONAL ENVIRONMENTAL ENGIN  
465 HILL STREET  
KOHLER, WI 53044

Bill to: SUPERIOR HAZARDOUS WASTE GROUP, INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyze By
TOTSOLID	Total Solids	97	Percent				EPA 160.3	01/06/1995	NJS
PVOC-S	Benzene	ND	ug/kg	1.0	SW846 5030	01/06/1995	SW846 8260	01/06/1995	JJB
	Ethyl Benzene	ND	ug/kg	1.0					
	Methyl-tert-butyl ether	ND	ug/kg	1.0					
	Toluene	1.4	ug/kg	1.0					
	1,2,4-trimethylbenzene	3.4	ug/kg	1.0					
	1,3,5-trimethylbenzene	1.0	ug/kg	1.0					
	Xylenes, m + p	4.7	ug/kg	1.0					
	Xylene, o	1.8	ug/kg	1.0					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

These results have been reviewed and their authenticity verified by:



# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue  
Morton Grove, Illinois 60053-3209  
708/967-6666  
FAX: 708/967-6735

Analytical Services  
Consulting  
NPDES  
Pretreatment

Sanitary District Testing  
Storm Water  
User Charge

## FAX TRANSMISSION NOTICE



(608) 267-2768

Date: 11/18/94  
Time: \_\_\_\_\_

To: Mr. Bill Lefevre  
Company: WDNR  
Sender: Bill Stebbins

You should receive 5 pages, including this notice. If you do not receive all pages, please call the sender immediately. This transmission includes:

Comments: Please call if you have any questions. Thanks Bill

Our FAX Number is: (708) 967-6735

**THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY, BY TELEPHONE AND RETURN THE ORIGINAL MESSAGE TO US AT THE ABOVE ADDRESS VIA THE U.S. POSTAL SERVICE. THANK YOU.**



Fisher - Hamilton Scientific

11/18 12:00 (708) 967-6666

Bill Sheehan @ Environmental Monitoring & Technologies Inc  
probably: Transferred to cooler in Encore sampler.

Received 9/19/94 Analysed same day

COC - glass containers leaked

- encore systems analyse

- ① Samples received in glass jars and ENCORE samplers
  - ② glass jars leaked Method - ENCORE samples were analysed.
  - ③ Encore Samples Received @ 20°C
  - ④ Encore Samples Received 9-19-94  
(this is a correction of information on Lab report)
  - ⑤ Encore samplers transferred to cooler upon receipt by EMT LAB.
- (e) further documentation of Lab Receipt date will be faxed.

---

11/18 13:00 Superior Haz Wst. Group (414) 284-9101

Karen Koehler message

13:10 Karen returns call "Oh, That tank"

STU Kuehl

Dianne Bob Gribitzer

Jim Kuester

} 1800-688-4005

50%  
of Benjamin  
lost in 2 hrs on ice

11/18 Leon? → Terry Friedrich @ Superior  
usually send dip samples / two methods of collection  
afford to resample!!!  
Jim Kuester will call me.

11/21/94 11:10 Terry Friedrich (he called me)  
- Ship directly to Ernst but not next day so ice melt  
- Agree with letter from Ernst.  
- would like to do sampling in one spot (Denied)  
- will sample w/ hand auger at both bulkheads  
outside on border of original excavation to retrieve  
soil.  
- Expects letter.

12/16/94 11:45 msg to Terry

12/16/94 15:30 msg from Terry -

planning on collecting samples  
next week weather permitting

12/23/94 msg from Terry.

1/5/95 Talked w Terry: samples collected?  
in the lab. Report as soon as results.

# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue  
Morton Grove, Illinois 60053-3203  
708-967-6666  
FAX: 708-967-6735

Laboratory Services  
Mobile Laboratory Services  
Source Emissions  
Waste Characterization (RCRA)

Wastewater Compliance Monitoring  
• Pretreatment  
• User Charge

November 18, 1994



Mr. Bill LeFevre  
Wisconsin-DNR  
Tank Response Unit

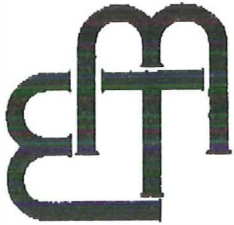
Dear Mr. LeFevre:

Pursuant to our telephone conversation earlier today, I am submitting the following information concerning two soil samples submitted to Environmental Monitoring & Technologies (EMT) for PVOC analysis by Mr. Terry Freudenrich of Superior Environmental. Please refer to the following cooler receipt form which was completed by our Log-in Technician, Mr. Mark Steuer, upon sample receipt.

The two soil samples in question were collected by Superior Environmental on September 16, 1994 and shipped to EMT via courier. Several deficiencies were noted upon arrival. **First the ice used to cool the samples during shipment had melted and the samples were received in our laboratory at 20°C.** Also for each sample, Superior Environmental submitted two 4oz. glass jars filled with soil and preserved with methanol, and one Enchem sampler which was filled with soil (not preserved in methanol) and sealed. Although the soil samples in the glass jars had been preserved with methanol in the field, it was noted that **the glass jars were not sealed properly and some of the methanol had leaked from each jar.** It was determined that these samples could not be properly analyzed. **The samples submitted in the Enchem samplers were properly sealed and intact. But were not properly cooled.**

Mr. Freudenrich was notified regarding the integrity of the samples upon receipt. In our discussion, it was determined that the DNR might reject this analytical data, but that EMT should go ahead and perform PVOC analysis on the soil samples enclosed within the Enchem Samplers.

Mr. Bill LeFevre  
Wisconsin DNR.  
Page 2



Upon receipt, the samples were logged into our LIMS system and placed in our sample log-in cooler. The cooler is maintained at 4°C. Analysis was performed for PVOC's later the same day, September 19, 1994. The report was sent to our client on September 21, 1994

Please contact me at (708) 967-6666 if you have any questions, or if you require additional information.

Sincerely

  
Bill Sheahan

COOLER RECEIPT FORM

LIMS #: 94593-94594

Number of Coolers: 1

Projects: Fisher Hamilton Scientific, Inc

USE OTHER SIDE OF THIS FORM TO NOTE DETAILS CONCERNING CHECK-IN PROBLEMS.

- A. PRELIMINARY EXAMINATION PHASE: Date cooler was opened: 19 Sept 1994  
By (print): Bill Skinn (sign) \_\_\_\_\_
- 1. Did cooler come with a shipping slip (airbill, etc.)? Yes  
If YES, enter carrier name & airbill number here: Fed Ex 2772 363941
- 2. Were custody seals on outside of cooler? . . . . . Yes  No   
How Many & Where: \_\_\_\_\_, seal date: \_\_\_\_\_, seal name: \_\_\_\_\_
- 3. Were custody seals unbroken and intact at the date and time of arrival? . . . . . Yes  No
- 4. Did you screen samples for radioactivity using a Geiger Counter . . . . . Yes  No
- 5. Were custody papers sealed in a plastic bag & taped inside to the lid? . . . . . Yes  No
- 6. Were custody papers filled out properly (ink, signed, etc.)? . . . . . Yes  No
- 7. Did you sign custody papers in the appropriate place? . . . . . Yes  No
- 8. Was project identifiable from custody papers? If YES, enter project name at the top of this form.  No
- 9. If required, was enough ice used? . . . . . type of ice: \_\_\_\_\_ Yes  No
- 10. Have designated person initial here to acknowledge receipt of cooler: BSK (date): 19 Sept
- 11. Describe type of packing in cooler: \_\_\_\_\_
- 12. Were all bottles sealed in separate plastic bags? . . . . . Yes  No
- 13. Did all bottles arrive unbroken and were labels in good condition? . . . . . Yes  No
- 14. Were all bottle labels complete (ID, date, time, signature, preservatives, etc.)? . . . . . Yes  No
- 15. Did all bottle labels agree with custody papers? . . . . . Yes  No
- 16. Were correct containers used for the tests indicated? . . . . . Yes  No
- 17. Were correct preservatives added to samples? . . . . . Yes  No
- 18. Was a sufficient amount of sample sent for tests indicated? . . . . . Yes  No
- 19. Were bubbles absent in VOA samples? If NO, list by sample #: \_\_\_\_\_ Yes  No
- 20. Was the project manager called and status discussed? If YES, give details on the back of this form.  No
- 21. Who was called? Bill by whom? Logan (date): 19 Sept 1994

005/005



State of Wisconsin  
Department of Natural Resources

CHAIN OF CUSTODY RECORD  
LUST PROGRAM  
Based on Form 4400-151 Rev. 4-93

Note: Use of this form is voluntary but is requested by the Department pursuant to ch. NR 149, NR 500-540, NR 158 and NR 419, Wis. Adm. Code. Personally identifiable information will be used for no other purpose.

Sample Collector(s) <b>Jim Kuester</b>	Title/Work Station/Company <b>Field Supervisor Superior HWGI</b>	Telephone Number (include area code) <b>(414) 458-6030</b>
Property Owner <b>Fisher Hamilton Scientific</b>	Property Address <b>1316 18thst Two Rivers WI</b>	Telephone Number (include area code) <b>(414) 794-6326</b>

I hereby certify that I received, properly handled and disposed of these samples as noted below:

Relinquished By (Signature) <i>Jim Kuester</i>	Date/Time <b>9-16-94 1500</b>	Received By (Signature)
Relinquished By (Signature)	Date/Time	Received By (Signature)
Relinquished By (Signature)	Date/Time	Received for EN CHEM by (Signature)

LABORATORY USE ONLY

Temperature of temperature blank  
If samples were received on ice and there was ice remaining, you may report the temperature as received on ice. If all of the ice was melted, the temperature of the melt may be substituted for a temperature blank.

Field ID Number	Date Collected	Time Collected	Sample		Preserv. Type	Field Screening	Location/Description (see footnote 2)	Analysis Type	Lab. ID Number	Sample Condition				
			Type	Device						no/type of Containers	Cracked/Broken	Incap. Sealed	Good Cond.	Other Comments
N-1151	9-16-94	1215	Soil Sand	enChem Sampler	Methanol		Soil from North end of tank	<del>AVOC-8240</del> AVOC-8240	941543	2/4 Steel	NO	YES	NO	Leaked Methanol
S-1024	9-16-94	1230	Soil Sand	enChem Sampler	Methanol		Soil from South end of Tank	<del>AVOC-8240</del> AVOC-8240	941544	2/4 Steel	NO	YES	NO	Leaked Methanol

FOOTNOTES  
1. specify groundwater, surface water, soil, leachate, sludge, etc.  
2. sample description must clearly correlate the sample ID to the sampling location.

ANALYSIS CODES			
1. GRO	5. DRO	9. Free Liquids	13. BETX
2. PVOC	6. PAH	10. pH	14. Protocol D1-GRD
3. Lead	7. Flashpoint	11. TCLP-Benzene	15. Protocol D1-DRO
4. 8021	8. Percent Solids	12. TCLP-Lead	16. 8260

BILLING ADDRESS:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DEPARTMENT USE ONLY

Split samples:      Offered?       yes       no      (Check one)  
                                 Accepted?       yes       no      (Check one)

Accepted By: \_\_\_\_\_

EMT

0708 867 5418

15:48

11/18/94



George E. Meyer  
Secretary

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

101 South Webster Street  
Box 7921  
Madison, Wisconsin 53707  
TELEPHONE 608-266-2621  
TELEFAX 608-267-3579  
TDD 608-267-6897

November 23, 1994

David Tice  
Fisher-Hamilton Scientific  
PO Box 137  
Two Rivers, WI 54241

SUBJECT: Underground Storage Tank Closure Assessment for Fisher-Hamilton Scientific, 1316 18th St., Two Rivers, WI 54241

Dear Mr. Tice:

The Department has reviewed the closure assessment documentation for the state and federally regulated underground benzene storage tank system that was removed from the above-referenced property on September 16, 1994. The purpose of this letter is to inform you that the closure status of "unknown" has been assigned to this site, and new soil samples need to be collected and analyzed before the review can be completed.

On November 15, 1994 the Department received the closure documentation for the site. The documentation indicated that the soil samples were not preserved with ice, and had reached a temperature of 20 degrees celsius by the time they were received by the analytical laboratory, Environmental Monitoring and Technologies, Inc.

According to the applicable guidance, Site Assessments for Underground Storage Tanks Technical Guidance (PUBL-SW-175 93, September 1992) and Leaking Underground Storage Tank (LUST) and Petroleum Analytical and Quality Assurance Guidance (PUBL-SW-130 93, July 1993), all samples must be cooled to 4 degrees celsius immediately after sampling and kept cool until they arrive at the laboratory.

In order to resolve this situation it is necessary to collect samples in accordance with current Department guidance. The samples should be collected and analyzed in accordance with the following considerations:

1. The samples may be collected using test pits or soil borings. If borings are used, use hammer samplers to collect undisturbed samples.
2. The samples should be collected from below the maximum extent of the original excavation to avoid dilution of the soil sample by the excavation backfill materials.
3. A site assessor certified under ILHR 10 should conduct the additional sampling.
4. Soil samples should be analyzed for the appropriate parameter (in this case PVOC) in accordance with the Site Assessments for Underground Storage Tanks Technical Guidance (PUBL-SW-175 93, September 1992) and Leaking Underground Storage



Tank (LUST) and Petroleum Analytical and Quality Assurance Guidance (PUBL-SW-130 93, July 1993). Your contractor should have copies of this and other guidance.

The additional sampling must be properly documented. At a minimum you must provide the following:

1. An accurate site map showing the locations of the soil samples in relationship to the other structures on the site (building, driveways) and the former locations of the tanks, pumps, and piping;
2. Copies of the lab results and sample chain-of-custody;
3. A narrative describing the following the date and time the samples were conducted, the name, address, and phone number of the firm conducting the borings, the name of the person collecting the samples, soil types encountered and any other relevant information; and
4. If borings are used to collect the samples, copies of the soil boring logs and borehole abandonment forms completed in accordance with NR 141, Wis. Admin. Code.

In summary, the purpose of the closure assessment is to determine whether the tank leaked in service and a proper closure assessment is required by state and federal law. I am unable to determine whether a release has occurred at the above site based on the information you have provided so far. The closure assessment requirement is implemented by the Department in cooperation with the Department of Industry, Labor, and Human Relations (DILHR) and the United States Environmental Protection Agency (USEPA).

Please conduct the additional sampling within 45 days and supply the additional information within 75 days of your receipt of this letter. Send the boring log and sample results to my attention at the above address. Please provide me with 15 days advance notice prior to initiating the collection of additional samples. If you have any questions regarding this letter please call me at (608) 264-8597.

Sincerely,



William J. LeFevre, Waste Management Specialist  
Tank Response Unit  
Bureau of Solid and Hazardous Waste Management

cc: Terry Freudenrich - Superior Hazardous Waste Group, Inc.  
Case file





A SUPERIOR COMPANY

November 7, 1994

TANK RESPONSE UNIT - SW/3  
DEPARTMENT OF NATURAL RESOURCES  
P.O. BOX 7921  
MADISON, WISCONSIN 54707



**RE: Site Assessment & Tank Closure Report; Superior Project #28902**

Enclosed for your records is your copy of the Site Assessment and Tank Closure Report for the underground storage tank removal at Fisher-Hamilton Scientific, 1316 18th Street, Two Rivers, Wisconsin.

A copy of this report has been sent to the required individuals in accordance with DILHR and DNR regulations. After reviewing the closure report, please issue a closure letter for Mr. Tice's records.

If you have any questions as to the contents of this letter or the report, please feel free to contact me at 414/284-9101.

Sincerely,

SUPERIOR HAZARDOUS WASTE GROUP, INC.

Karen F. Koehler  
Technical Support

Enc

**THE HOME TEAM ADVANTAGE**

P.O. BOX 500 PORT WASHINGTON, WI 53074 TEL: (414) 284-9101 (800) 932-6216 FAX: (414) 284-9208  
MILWAUKEE • SHEBOYGAN • PORT WASHINGTON

Printed on Recycled Paper

**Site Assessment  
and  
Tank Closure Report**

**Underground Storage Tank Removal at the**

**Fisher-Hamilton Scientific**  
1316 18th Street  
Two Rivers, Wisconsin 54241

**September 16, 1994**

**Prepared for:**

**David Tice**

**Prepared by:**

**Superior Hazardous Waste Group, Inc.**  
222 East Main Street  
Port Washington, Wisconsin 53074



**Superior Project Number: 28902**

**October 20, 1994**

Handwritten signature of Terry Freudenrich in black ink.

**Terry Freudenrich**  
Project Manager

Handwritten signature of Karen F. Koehler in black ink.

**Karen F. Koehler**  
Technical Support

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Appendix 3: Photographs of Tank Removal Activities	
Appendix 4: DILHR Petroleum Product Tank Inventory Form	
Appendix 5: Checklist for Underground Tank Closure	
Appendix 6: Chain of Custody	
Appendix 7: Analytical Results	
Appendix 8: Certificate of Destruction	

Superior Project Number: 28902

## **EXECUTIVE SUMMARY**

The site where the 1,000 gallon solvent tank was removed is located at 1316 18th Street, Two Rivers, Wisconsin. The site lies in the Southwest 1/4 of the Northeast 1/4 of Section 1, Range 24 East, Township 19 North in Manitowoc County.

The property is owned by Fisher-Hamilton Scientific. Mr. David Tice can be reached at (414) 794-6326.

Analytical results show detection levels below the quantitation levels acceptable for closure of the 1,000 gallon solvent tank. Superior Hazardous Waste Group, Inc. recommends that a clean closure be granted for the 1,000 gallon solvent storage tank located at 1316 18th Street, Two Rivers, Wisconsin.

Superior Project Number: 28902

## TECHNICAL REPORT

### SCOPE OF WORK

Superior Hazardous Waste Group, Inc. supplied personnel and equipment to perform the following services:

- Break up concrete overburden to expose the tank.
- Ventilate tank space. Test air and re-ventilate the tank space, if necessary.
- Excavate around the tank to facilitate the removal.
- Piping had been removed previous to Superior being on site.
- Secure tank and remove.
- Cut up tank on-site and prepare for off site disposal at Gus Holman Company.
- Fisher Hamilton will backfill excavation.
- Collect soil samples that are representative of the site as per Wisconsin Department of Natural Resources Site Assessments for Underground Storage Tanks Technical Guidance (PBUL-SW-175-92).
- Compile the necessary data to complete the site assessment and tank closure report for Mr. David Tice.

### TOPOGRAPHY AND SOILS

According to the United States Department of Agriculture Soil Conservation Service Soil Survey of Calumet and Manitowoc Counties, issued February 1980, the soils at this site consist of Oakville loamy fine sand, 2 to 6 percent slopes. This soil is gently sloping and well drained. It is on side slopes of beach ridges and lake plains.

Typically, the surface layer is dark brown loamy fine sand about 9 inches thick. The subsoil is about 29 inches thick. The upper part of the subsoil is strong brown, friable fine sand, and the lower part is yellowish brown, loose fine sand. The substratum to a depth of 60 inches is white loose fine sand.

Superior Project Number: 28902

## FIELD ACTIVITIES

Superior field personnel were on-site September 16, 1994, to perform the tank removal and site assessment. Jim Kuester was Superior's certified remover/cleaner and site assessor {Certification #05976}. Weather conditions consisted of partly cloudy skies at the time of tank removal, with an outside air temperature of 67° Fahrenheit. The location of the tank and the adjacent surroundings can be found in Appendices 1 and 2.

Appendix 3 contains photographs of the tank removal activities. The concrete was removed over the tank, piping had been removed a number of years prior to tank removal. The tank was empty of liquids, the tank had not been used for a minimum of 25 years.

Superior field personnel started to excavate the solvent tank. The concrete over the tank was 8 inches thick then yellow sand to a depth of 8 feet. The tank was vented and checked for explosive atmosphere.

Depth to the top of the tank was two feet. Dimensions of the excavation were 15 feet X 8 feet X 8 feet in depth. After the tank was removed from the excavation, it was inspected and found to be in poor condition. Dimensions of the tank were 9 feet 9 inches X 3 feet 2 inches in diameter. Associated piping had been removed a number of years prior to the removal of the tank.

Since the best available information suggests the tank was used to store solvents (benzene) soil samples were collected and analyzed as per pre-approved agreement with WDNR Lake Michigan District. It is important to note that excavation and sampling (to a depth of three (3) feet below the base of the removed tank) observed fill soil at the work site. The fill was a mix of non-cohesive soils. Chain of Custody can be found in Appendix 6. Laboratory results are found in Appendix 7. The excavation was not backfilled per David Tice's directions. Fisher-Hamilton will fill excavation and reconstruct concrete floor.

Appendix 4 contains the DILHR Underground Petroleum Product Tank Inventory forms for the solvent tank. Appendix 5 contains the DILHR Checklist for Underground Tank Closure.

## SAMPLING PROCEDURES

Superior Hazardous Waste Group, Inc. technicians followed DILHR and WDNR soil sampling specifications. All samples were analyzed for PVOC Method 8240 by Environmental Monitoring and Technologies, Inc, a WDNR certified laboratory. Results from the laboratory showed detection limits below the quantitation limits.

ENCHEM, Inc. provided all soil sampling equipment. Sampling devices were stainless steel

Superior Project Number: 28902

samplers which have been approved by the WDNR as an alternate sampling method for UST sampling.

*Encore well*  
Samples were placed in pre-tared jars and preserved with methanol then shipped in an iced cooler to Environmental Monitoring and Technologies, Inc. for analysis. Samples were handled in accordance with EPA protocol regarding chain-of-custody procedures. A copy of the chain-of-custody is included in Appendix 6. Locations where the laboratory samples were collected are noted on the site map found in Appendix 2.

## ANALYTICAL RESULTS

Analytical results are described in Table 1. PVOC 8240 method was performed on these samples. Laboratory analysis data can be found in Appendix 7.

**TABLE 1**  
Laboratory Results from Soil Samples Collected  
at 1316 18th Street, Two Rivers, Wisconsin

SAMPLE ID	SAMPLE #	ANALYSIS	COMPOUND	RESULTS
N-1151	1	PVOC-8240	Methyl-tertbutyl ether	< 1.0 ppb
N-1151	1	PVOC-8240	Benzene	< 0.5 ppb
N-1151	1	PVOC-8240	Toluene	< 0.5 ppb
N-1151	1	PVOC-8240	Ethylbenzene	< 0.6 ppb
N-1151	1	PVOC-8240	Xylene	< 0.6 ppb
N-1151	1	PVOC-8240	1,3,4-trimethylbenzene	< 0.6 ppb
N-1151	1	PVOC-8240	1,2,4-trimethylbenzene	< 0.6 ppb
S-1024	2	PVOC-8240	Methyl-tertbutyl ether	< 1.0 ppb
S-1024	2	PVOC-8240	Benzene	< 0.5 ppb
S-1024	2	PVOC-8240	Toluene	< 0.5 ppb
S-1024	2	PVOC-8240	Ethylbenzene	< 0.6 ppb
S-1024	2	PVOC-8240	Xylene	< 0.6 ppb
S-1024	2	PVOC-8240	1,3,4-trimethylbenzene	< 0.6 ppb
S-1024	2	PVOC-8240	1,2,4-trimethylbenzene	< 0.6 ppb

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## **CONCLUSIONS**

Analytical results show detection levels below the quantitation levels acceptable for closure of the 1,000 gallon solvent tank.

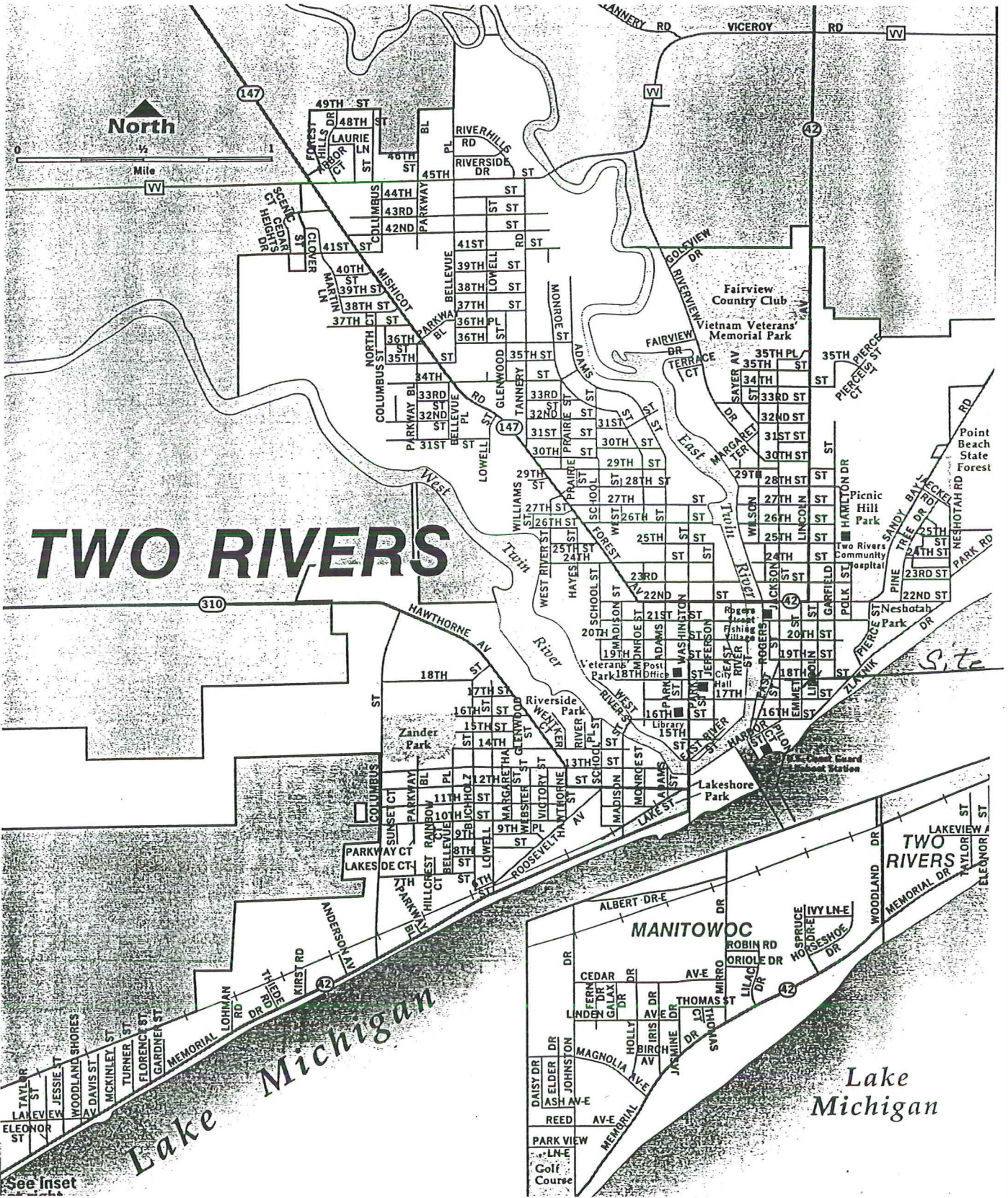
## **RECOMMENDATIONS**

Superior Hazardous Waste Group, Inc. recommends that a clean closure be granted for the 1,000 gallon solvent underground storage tank located at 1316 18th Street, Two Rivers, Wisconsin.



**Appendix 1**

Area Community Map



# TWO RIVERS

North

Mile

0 1/2 1

310

42

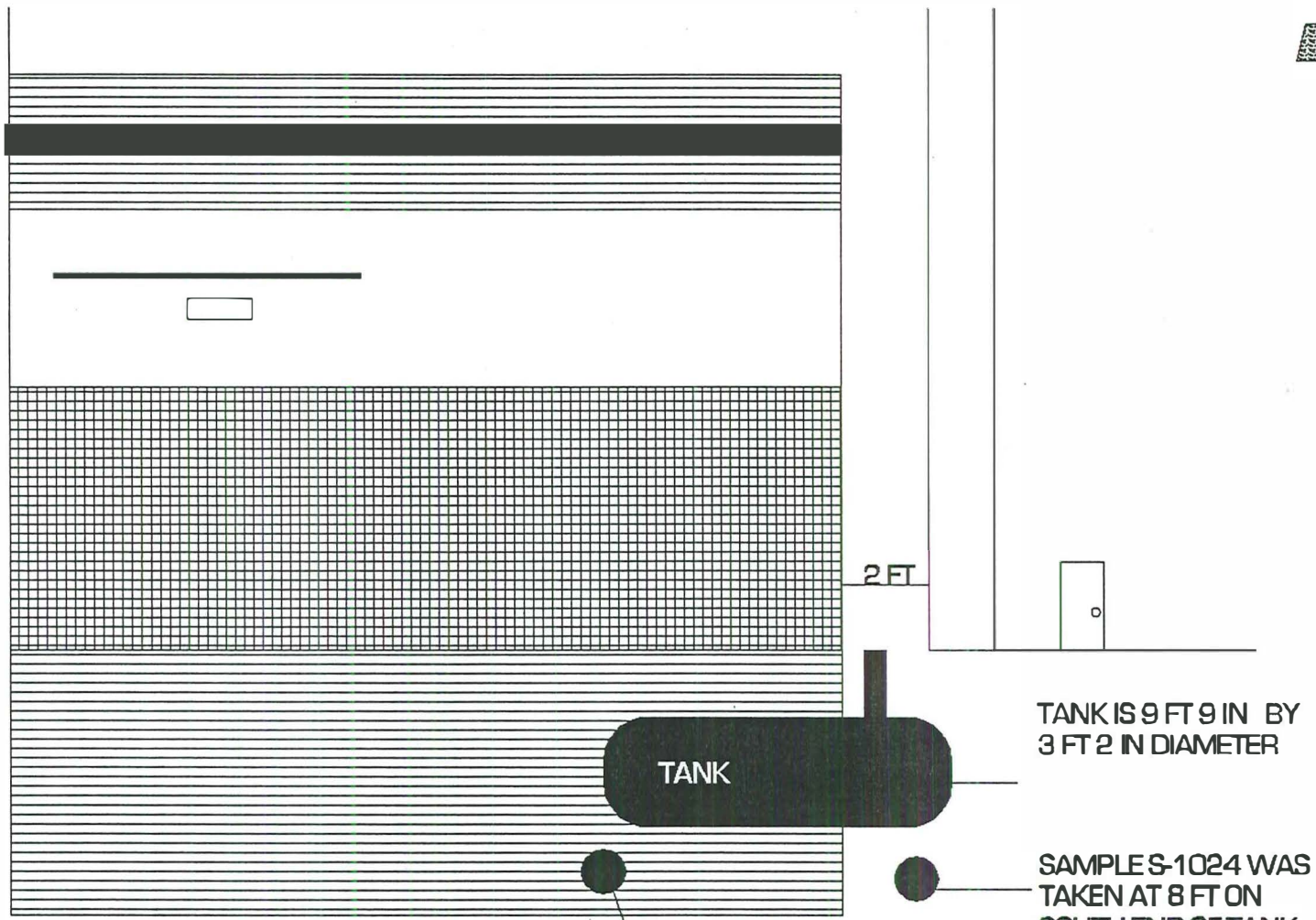
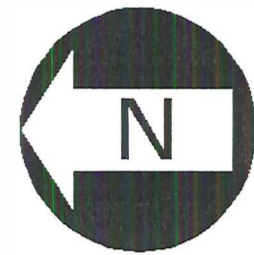
Lake Michigan

Lake Michigan

See Inset

**Appendix 2**

Site Map



TANK IS 9 FT 9 IN BY  
3 FT 2 IN DIAMETER

SAMPLE S-1024 WAS  
TAKEN AT 8 FT ON  
SOUTH END OF TANK

SAMPLE N-1151 WAS  
TAKEN AT 8 FT ON  
NORTH END OF TANK

CONCRETE OVER AREA  
TANK WAS LOCATED  
UNDERNEATH WALLS

THE EXCAVATION AREA WAS 8 FT  
ACROSS BY 15 FT LONG

*Tank  
Lays east  
& west*

PROJECT # 28902
FISCHER - HAMILTON SCIENTIFIC 1316 18TH STREET TWO RIVERS, WI 54241
DRAWING IS NOT TO SCALE C.A.D. BY LEILA CAMPBELL

**Appendix 3**

Photographs of Tank Removal Activities

Superior Project Number: 28902



28902  
Cement in front of  
walls

Customer Fisher-Hamilton Scientific Project # 28902 Date September 16, 1994  
Photo # 1 - 2 Description Site prior to excavation & Cement in front of wall

Superior Project Number: 28902



**Customer** Fisher-Hamilton Scientific **Project #** 28902 **Date** September 16, 1994  
**Photo #** 3 - 4 **Description** Start of excavation & Tank in excavation

Superior Project Number: 28902



**Customer** Fisher-Hamilton Scientific **Project #** 28902 **Date** September 16, 1994  
**Photo #** 5 **Description** Tank removal from excavation



**Appendix 4**

**DILHR Underground Petroleum Product  
Tank Inventory Form**

**SBD-7437**

**UNDERGROUND  
PETROLEUM PRODUCT  
TANK INVENTORY**

Send Completed Form To:  
Safety & Buildings Division  
P.O. Box 7969  
Madison, WI 53707  
Telephone (608) 267-5280

For Office Use Only:  
Tank ID #

Information Required By Sec. 101.142, Wis. Stats.

Underground tanks in Wisconsin that have stored or currently store petroleum or regulated substances must be registered. Please see the reverse side for additional information on this program. An underground storage tank is defined as any tank with at least 10 percent of its total volume (included piping) located below ground level. A separate form is needed for each tank. Send each completed form to the agency designated in the top right corner. Have you previously registered this tank by submitting a form?  YES  NO ~~Yes~~ Are you correcting/updating information only?  Yes  No

This registration applies to a tank that is (check one):

1A. <input type="checkbox"/> In Use or	1B. <input type="checkbox"/> Newly Installed	4. <input checked="" type="checkbox"/> Closed - Tank Removed	8. <input type="checkbox"/> Changed Ownership
2. <input type="checkbox"/> Abandoned With Product	6. <input type="checkbox"/> Closed - Filled With Inert Material	(Indicate new owner below)	
3. <input type="checkbox"/> Abandoned No Product (empty) or With Water	7. <input type="checkbox"/> Out of Service - Provide Date: _____	Fire Department Providing Fire Coverage Where Tank Located: <b>Two Rivers</b>	

**A. IDENTIFICATION: (Please Print)**

1. Tank Site Name **FISHER HAMILTON SCIENTIFIC** Site Address **17th STREET PO Box 137** Site Telephone No. **(793) 3084**

City **TWO RIVERS**  Village  Town of: State **WISC** Zip Code **54241** County **MANITOWOC**

2. Owner Name (mail sent here unless indicated otherwise in #3 below) **SAME** Owner Mailing Address (mail sent here unless indicated otherwise in #3) **SAME**

City  Village  Town of: State Zip Code County

3. Alternate Mailing Name If Different Than #2 **SAME** Alternate Mailing Street Address If Different From #2 **SAME**

City  Village  Town of: State Zip Code County

4. Tank Age (date installed, if known: or years old) **+ 25 yrs** 5. Tank Capacity (gallons) **500** 6. Tank Manufacturer's Name (if known)

**TYPE OF USER (check one)**

1. <input type="checkbox"/> Gas Station	2. <input type="checkbox"/> Bulk Storage	3. <input type="checkbox"/> Utility	4. <input type="checkbox"/> Mercantile
5. <input checked="" type="checkbox"/> Industrial	6. <input type="checkbox"/> Government	7. <input type="checkbox"/> School	8. <input type="checkbox"/> Residential
9. <input type="checkbox"/> Agricultural	10. <input type="checkbox"/> Other (specify): _____		

**TANK CONSTRUCTION:**

1. <input checked="" type="checkbox"/> Bare Steel	2. <input type="checkbox"/> Cathodically Protected and Coated Steel (A. <input type="checkbox"/> Sacrificial Anodes or B. <input type="checkbox"/> Impressed Current)
3. <input type="checkbox"/> Coated Steel	4. <input type="checkbox"/> Fiberglass
6. <input type="checkbox"/> Relined - Date _____	7. <input type="checkbox"/> Steel - Fiberglass Reinforced Plastic Composite
	9. <input type="checkbox"/> Unknown

Approval: 1.  Nat'l Std. 2.  UL 3.  Other: \_\_\_\_\_ Is Tank Double Walled?  Yes  No

Overfill Protection Provided?  Yes  No If yes, identify type: \_\_\_\_\_ Spill Containment?  Yes  No

Tank leak detection method: 1.  Automatic tank gauging 2.  Vapor monitoring 3.  Groundwater monitoring 4.  Inventory control and tightness testing 5.  Interstitial monitoring 6.  Not required at present 7.  Manual Tank Gauging (only for tanks of 1,000 gallons or less)

**PIPING CONSTRUCTION**

1. <input checked="" type="checkbox"/> Bare Steel	2. <input type="checkbox"/> Cathodically Protected and Coated or Wrapped Steel (A. <input type="checkbox"/> Sacrificial Anodes or B. <input type="checkbox"/> Impressed Current)	3. <input type="checkbox"/> Coated Steel
4. <input type="checkbox"/> Fiberglass	5. <input type="checkbox"/> Other (specify): _____	9. <input type="checkbox"/> Unknown

Piping System Type: 1.  Pressurized piping with: A.  auto shutoff; B.  alarm; or C.  flow restrictor 2.  Suction piping with check valve at tank 3.  Suction piping with check valve at pump and inspectable

Piping leak detection method: used if pressurized or check valve at tank: 1.  Vapor monitoring 2.  Interstitial monitoring 3.  Groundwater monitoring 4.  Tightness testing 5.  Line Leak Detector 6.  Not Required

Approval: 1.  Nat'l Std. 2.  UL 3.  Other: \_\_\_\_\_ Double Walled:  Yes  No

**E. TANK CONTENTS**

1. <input type="checkbox"/> Diesel	2. <input type="checkbox"/> Leaded	3. <input type="checkbox"/> Unleaded	4. <input type="checkbox"/> Fuel Oil
5. <input type="checkbox"/> Gasohol	6. <input type="checkbox"/> Other	7. <input type="checkbox"/> Empty	8. <input type="checkbox"/> Sand/Gravel/Slurry
9. <input type="checkbox"/> Unknown	10. <input type="checkbox"/> Premix	11. <input type="checkbox"/> Waste Oil	12. <input type="checkbox"/> Propane
13. <input checked="" type="checkbox"/> Chemical * <b>SOLVENT inc. Benzene</b>	14. <input type="checkbox"/> Kerosene	15. <input type="checkbox"/> Aviation	

\* If # 13 is checked, indicate the chemical name(s) or number(s) of the chemical or waste.

Tank Closed, Give Date (mo/day/yr): **Sept - 16 - 94** Has a site assessment been completed? (see reverse side for details)  Yes  No

Installation of a new tank is being reported, indicate who performed the installation inspection: **N/A**

1. <input type="checkbox"/> Fire Department	2. <input type="checkbox"/> DILHR	3. <input type="checkbox"/> Other (identify) _____
---	-----------------------------------	--

Name of Owner or Operator (please print): **FISHER HAMILTON SCIENTIFIC DAVID TICE** Indicate Whether:  Owner or  Operator

Signature of Owner or Operator: *David Tice* Date Signed: **9-16-94**

**Appendix 5**

Checklist for Underground Tank Closure

SBD-8951

# CHECKLIST FOR UNDERGROUND TANK CLOSURE

**RETURN COMPLETED CHECKLIST TO:**  
Safety & Buildings Division  
Fire Prevention & Underground  
Storage Tank Section  
P. O. Box 7969, Madison, WI 53707

**Complete one form for  
each site closure.**

**A. IDENTIFICATION: (Please Print)** Indicate whether closure is for:  Tank System  Tank Only  Piping Only

1. Site Name <b>Fisher Hamilton Scientific</b>		2. Owner Name <b>Same</b>	
Site Street Address (not P.O. Box) <b>1316 18th St</b>		Owner Street Address	
<input checked="" type="checkbox"/> City	<input type="checkbox"/> Village	<input type="checkbox"/> Town of:	State
<b>Two Rivers</b>			
State <b>WI</b>	Zip Code <b>54241</b>	County <b>Manitowoc</b>	Telephone No. (include area code) ( )
3. Closure Company Name (Print) <b>Superior Haz Waste Group</b>		Closure Company Street Address, <b>PO Box 500 222 East Main St Port Washington WI</b>	
Closure Company Telephone No. (include area code) <b>(414) 284-9101</b>		Closure Company City, State, Zip Code <b>Port Washington WI 59074</b>	
4. Name of Company Performing Closure Assessment <b>Superior Haz Waste Group</b>		Assessment Company Street Address, City, State, Zip Code <b>Same</b>	
Telephone # (include area code) <b>(414) 284-9101</b>	Certified Assessor Name (Print) <b>Jim Kuester</b>	Assessor Signature <i>Jim Kuester</i>	Assessor Certification No. <b>05976</b>

Tank ID #	Closure	Temp. Closure	Closure In Place	Tank Capacity	Contents *	Closure Assessment
1. <b>255681</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>1,000 gal</b>	<b>Solvent</b>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N

\* Indicate which product by numeric code: 01-Diesel; 02-Leaded; 03-Unleaded; 04-Fuel Oil; 05-Gasohol; 06-Other; 09-Unknown; 10-Premix; 11-Waste oil; 13-Chemical (indicate the chemical name(s) or numbers(s)); 14-Kerosene; 15-Aviation.

Written notification was provided to the local agent 15 days in advance of closure date.  Y  N  NA  
 All local permits were obtained before beginning closure.  Y  N  NA

**Check applicable box at right in response to all statements in Sections B - E.**

**B. TEMPORARILY OUT OF SERVICE**

**Remover** **Inspector** **NA**  
**Verified** **Verified**

- Written inspector approval of temporary closure obtained, which is effective until (provide date) \_\_\_\_\_  Y  N  NA
1. Product Removed  Y  N  NA
    - a. Product lines drained into tank (or other container) and resulting liquid removed, AND  Y  N  NA
    - b. All product removed to bottom of suction line, OR  Y  N  NA
    - c. All product removed to within 1" of bottom.  Y  N  NA
  2. Fill pipe, gauge pipe, tank truck vapor recovery fittings, and vapor return lines capped.  Y  N  NA
  3. All product lines at the islands or pumps located elsewhere are removed and capped, OR  Y  N  NA
  4. Dispensers/pumps left in place but locked and power disconnected.  Y  N  NA
  5. Vent lines left open.  Y  N  NA
  6. Inventory form filed indicating temporary closure.  Y  N  NA

**C. CLOSURE BY REMOVAL**

1. Product from piping drained into tank (or other container).  Y  N  NA
2. Piping disconnected from tank and removed.  Y  N  NA
3. All liquid and residue removed from tank using explosion proof pumps or hand pumps.  Y  N  NA
4. All pump motors and suction hoses bonded to tank or otherwise grounded.  Y  N  NA
5. Fill pipes, gauge pipes, vapor recovery connections, submersible pumps and other fixtures removed.  Y  N  NA
- NOTE: DROP TUBE SHOULD NOT BE REMOVED IF THE TANK IS TO BE PURGED THROUGH THE USE OF AN EDUCTOR.**
6. Vent lines left connected until tanks purged.  Y  N  NA
7. Tank openings temporarily plugged so vapors exit through vent.  Y  N  NA
8. Tank atmosphere reduced to 10% of the lower flammable range (LEL) - see Section F.  Y  N  NA
9. Tank removed from excavation after **PURGING/INERTING**; placed on level ground and blocked to prevent movement.  Y  N  NA
10. Tank cleaned before being removed from site.  Y  N  NA

**C. CLOSURE BY REMOVAL (continued)**

- |  | <u>Remover<br/>Verified</u>                                      | <u>Inspector<br/>Verified</u> | <u>NA</u>                |
|--|--|-------------------------------|--------------------------|
| 11. Tank labeled in 2" high letters after removal but before being moved from site. ....   | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/>      | <input type="checkbox"/> |
| <b>NOTE: COMPLETE TANK LABELING SHOULD INCLUDE WARNING AGAINST REUSE; FORMER CONTENTS; VAPOR STATE; VAPOR FREEING TREATMENT; DATE.</b> |  |                               |                          |
| 12. Tank vent hole (1/8 th " in uppermost part of tank) installed prior to moving the tank from site. ....                             | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/>      | <input type="checkbox"/> |
| 13. Inventory form filed by owner with Safety and Buildings Division indicating closure by removal. ....                               | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/>      | <input type="checkbox"/> |
| 14. Site security is provided while the excavation is open. ....   | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N | <input type="checkbox"/>      | <input type="checkbox"/> |

**D. CLOSURE IN PLACE**

**NOTE: CLOSURES IN PLACE ARE ONLY ALLOWED WITH THE PRIOR WRITTEN APPROVAL OF THE DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS OR LOCAL AGENT.**

- |  |   |                          |                          |
|--|---|--------------------------|--------------------------|
| 1. Product from piping drained into tank (or other container).   | <input type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Piping disconnected from tank and removed. ....   | <input type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. All liquid and residue removed from tank using explosion proof pumps or hand pumps. ....  | <input type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. All pump motors and suction hoses bonded to tank or otherwise grounded. ....  | <input type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Fill pipes, gauge pipes, vapor recovery connections, submersible pumps and other fixtures removed.                                      | <input type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>NOTE: DROP TUBE SHOULD NOT BE REMOVED IF THE TANK IS TO BE PURGED THROUGH THE USE OF AN EDUCTOR - EDUCTOR OUTPUT 12 FT ABOVE GRADE.</b> |   |                          |                          |
| 6. Vent lines left connected until tanks purged. ....  | <input type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Tank openings temporarily plugged so vapors exit through vent. ....   | <input type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Tank atmosphere reduced to 10% of the lower flammable range (LEL) - see Section F. ....   | <input type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Tank properly cleaned to remove all sludge and residue. ....  | <input type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Solid inert material (sand, cyclone boiler slag, pea gravel recommended) introduced and tank filled.                                   | <input type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Vent line disconnected or removed. ....  | <input type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Inventory form filed by owner with Safety and Buildings Division indicating closure in place. ....                                     | <input type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/> | <input type="checkbox"/> |

**E. CLOSURE ASSESSMENTS**

**NOTE: DETERMINE IF A CLOSURE ASSESSMENT IS REQUIRED BY REFERRING TO ILHR 10.**

- |  |   |                          |                          |
|--|---|--------------------------|--------------------------|
| 1. Individual conducting the assessment has a closure assessment plan (written) which is used as the basis for their work on the site. ....  | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N            | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Do points of obvious contamination exist? ....  | <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Are there strong odors in the soils? ....   | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N            | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Was a field screening instrument used to pre-screen soil sample locations? ....   | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N            | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Was a closure assessment omitted because of obvious contamination? ....   | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N            | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Was the DNR notified of suspected or obvious contamination? ....  | <input type="checkbox"/> Y <input type="checkbox"/> N                       | <input type="checkbox"/> | <input type="checkbox"/> |
| Agency, office and person contacted: _____   |   |                          |                          |
| 7. Contamination suspected because of: <input type="checkbox"/> Odor <input type="checkbox"/> Soil Staining <input type="checkbox"/> Free Product <input type="checkbox"/> Sheen On Groundwater <input type="checkbox"/> Field Instrument Test |   |                          |                          |

**F. METHOD OF ACHIEVING 10% LEVEL DESCRIPTION**

- Educator Or Diffused Air Blower  
Eductor driven by compressed air, bonded and drop tube left in place; vapors discharged minimum of 12 feet above ground.  
Diffused air blower bonded and drop tube removed. Air pressure not exceeding 5 psig.
- Dry Ice  
Dry ice introduced at 1.5 pounds per 100 gallons of tank capacity. Dry ice crushed and distributed over the greatest possible tank area. Dry ice evaporated before proceeding.
- Inert Gas (CO/2 or N/2) **NOTE: INERT GASSES PRODUCE AN OXYGEN DEFICIENT ATMOSPHERE. THE TANK MAY NOT BE ENTERED IN THIS STATE WITHOUT SPECIAL EQUIPMENT**  
Gas introduced through a single opening at a point near the bottom of the tank at the end of the tank opposite the vent.  
Gas introduced under low pressure not to exceed 5 psig to reduce static electricity. Gas introducing device grounded.
- Tank atmosphere monitored for flammable or combustible vapor levels.  
Calibrate combustible gas indicator. Drop tube removed prior to checking atmosphere. Tank space monitored at bottom, middle and upper portion of tank. Readings of 10% or less of the lower flammable range (LEL) obtained before removing tank from ground.

**G. NOTE SPECIFIC PROBLEMS OR NONCOMPLIANCE ISSUES BELOW**

**H. REMOVER/CLEANER INFORMATION**

<i>Jim Kuester</i>	<i>Jim Kuester</i>	<i>05976</i>	<i>9-16-94</i>
Remover Name (print)	Remover Signature	Remover Certification No.	Date Signed

**I. INSPECTOR INFORMATION**

Inspector Name (print)	Inspector Signature	Inspector Certification No.
FDID # For Location Where Inspection Performed	Inspector Telephone Number	Date Signed

**Appendix 6**  
Chain of Custody



Note: Use of this form is voluntary but is requested by the Department pursuant to ch. NR 149, NR 500-540, NR 158 and NR 419, Wis. Adm. Code. Personally identifiable information will be used for no other purpose.

Sample Collector(s) <b>Jim Kuester</b>	Title/Work Station/Company <b>Field Supervisor Superior HWGT</b>	Telephone Number (include area code) <b>(414) 458-6030</b>
Property Owner <b>Fisher Hamilton Scientific</b>	Property Address <b>1316 18th St Two Rivers WI</b>	Telephone Number (include area code) <b>(414) 794-6326</b>

I hereby certify that I received, properly handled and disposed of these samples as noted below:

Relinquished By (Signature) <i>Jim Kuester</i>	Date/Time <b>9-16-94 1500</b>	Received By (Signature)
Relinquished By (Signature)	Date/Time	Received By (Signature)
Relinquished By (Signature)	Date/Time	Received for EN CHEM by (Signature)

LABORATORY USE ONLY

Temperature of temperature blank  
If samples were received on ice and there was ice remaining, you may report the temperature as 'received on ice'. If all of the ice was melted, the temperature of the melt may be substituted for a temperature blank.

Field ID Number	Date Collected	Time Collected	Sample		Preserv. Type	Field Screening	Location/Description (see footnote 2)	Analysis Type	Lab ID Number	Sample Condition				
			Type 1	Device						no/type of Containers	Cracked/broken	Improp. Sealed	Good Cond.	Other Comments
N-1151	9-16-94	1215	Soil Sand	enchem Sampler	Methanol		Soil from North end of Tank	<del>GRO</del> PVOC-8240	94593	2/4 Steel	NO	yes	NO	Leaked Methanol
S-1024	9-16-94	1230	Soil Sand	enchem Sampler	Methanol		Soil from South end of Tank	<del>GRO</del> PVOC-8240	94594	2/4 Steel	NO	yes	NO	Leaked Methanol

FOOTNOTES  
1. specify groundwater, surface water, soil, leachate, sludge, etc.  
2. sample description must clearly correlate the sample ID to the sampling location.

- ANALYSIS CODES
- |         |                   |                  |                     |
|---------|-------------------|------------------|---------------------|
| 1. GRO  | 5. DRO            | 9. Free Liquids  | 13. BETX            |
| 2. PVOC | 6. PAH            | 10. pH           | 14. Protocol D1-GRO |
| 3. Lead | 7. Flashpoint     | 11. TCLP-Benzene | 15. Protocol D1-DRO |
| 4. 8021 | 8. Percent Solids | 12. TCLP-Lead    | 16. 8260            |

BILLING ADDRESS:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DEPARTMENT USE ONLY

Split samples:      Offered?       yes       no      (Check one)  
                                 Accepted?       yes       no      (Check one)

Accepted By: \_\_\_\_\_

**Appendix 7**  
Laboratory Results





# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue  
Morton Grove, Illinois 60053-3203  
708/967-6666  
FAX: 708/967-6735

## LABORATORY REPORT

105341

Superior Environmental Services  
2905 Paint Avenue, P.O. Box 1249  
Sheboygan, WI 53082-1249

Report Date: 9/21/94  
Sample Received 20°C: 9/16/94

Project Name: Fisher Hamilton Scientific  
Sample Description: Soil, S-1024, South End Of Tank  
Sample No.: 94594

Compound Purgeables	Concentration Found IN		Method Detection Limit (MDL) ug/k (ppb)	Quantitation Limit ug/k (ppb)
	Sample (ppb)	Blank (ppb)		
1. Methyl-tertbutyl ether	<1.0	<1.0	1.0	10
2. Benzene	<0.5	<0.5	0.5	5
3. Toluene	<0.5	<0.5	0.5	5
4. Ethylbenzene	<0.6	<0.6	0.6	5
5. Xylenes	<0.6	<0.6	0.6	5
6. 1,3,5-trimethylbenzene	<0.6	<0.6	0.6	5
7. 1,2,4-trimethylbenzene	<0.6	<0.6	0.6	5

Samples not maintained at 4°C.

Wisconsin Certified Laboratory #999888890.

Samples received in En Chem Sampler

All results expressed as ppb unless otherwise indicated.

Methods performed according to SW-846, "Test methods for Evaluating Solid Waste".

The contents of this report apply only to the sample analyzed. No duplication of this report is allowed except in its entirety.

*Leah E. Zehner*

LABORATORY DIRECTOR



# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue  
Morton Grove, Illinois 60053-3203  
708/967-6666  
FAX: 708/967-6735

## LABORATORY REPORT

105342

Superior Environmental Services  
2905 Paint Avenue, P.O. Box 1249  
Sheboygan, WI 53082-1249

Report Date: 9/21/94  
Sample Received 20°C: 9/16/94

*error in date*

Project Name: Fisher Hamilton Scientific  
Sample Description: Soil, N-1151, North End Of Tank  
Sample No.: 94593

Compound Purgeables	Concentration Found IN		Method Detection Limit (MDL) ug/k (ppb)	Quantitation Limit ug/k (ppb)
	Sample (ppb)	Blank (ppb)		
1. Methyl-tertbutyl ether	<1.0	<1.0	1.0	10
2. Benzene	<0.5	<0.5	0.5	5
3. Toluene	<0.5	<0.5	0.5	5
4. Ethylbenzene	<0.6	<0.6	0.6	5
5. Xylenes	<0.6	<0.6	0.6	5
6. 1,3,5-trimethylbenzene	<0.6	<0.6	0.6	5
7. 1,2,4-trimethylbenzene	<0.6	<0.6	0.6	5

Samples not maintained at 4°C.

Wisconsin Certified Laboratory #99988890.

Samples received in En Chem Sampler

All results expressed as ppb unless otherwise indicated.

Methods performed according to SW-846, "Test methods for Evaluating Solid Waste".

The contents of this report apply only to the sample analyzed. No duplication of this report is allowed except in its entirety.

*Leah E. Zehner*

LABORATORY DIRECTOR

**Appendix 8**

Certificate of Destruction

CERTIFICATE OF DESTRUCTION

Date: 9-16-94

Scrapping/Disposal Company:  
Gus Holman Co.

Site of Destruction:  
3313 N 21st Sheboygan  
WI 53081

Tank Removal Contractor:  
Superior Haz Waste

Tank Identification:

Tank No.: 255681

Size: 1,000 gal

Location: Company Fisher Hamilton Scientific

Address 1316 18th St

City/State Two Rivers WI

Destruction Date: 9-16-94

I certify that the above described tank has been rendered unusable for the storage of any fluids, and all removed fluids, sludges, and the tanks were disposed of in accordance with all applicable local, state and federal regulations.

By Jim Kuester

Field Supervisor  
Title