COOPER ENGINEERING COMPANY, INC.
100 West Orchard Beach Lane
RICE LAKE, WISCONSIN 54868

Telephone (715) 234-7008
FAX (715) 234-1025

LETTER OF TRANSMITTAL

09-55-295724

DATE	JOB NO.
February 7, 1994	

ATTENTION: Mark Janowiak SW3

RE: Weather Shield Mfg.
Ladysmith, Wisconsin

TO DNR
P.O. Box 7921
Madison, WI 53707

WE ARE SENDING YOU XX Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO.	DESCRIPTION
1			Phase I Tank Closure Assessment

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

XX For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS

COPY TO _____ SIGNED: Robert L. Anderson

PRODUCT 239-2 NEBS Inc., Groton, Mass. 01471. To Order PHONE TOLL FREE 1-800-225-6380

If enclosures are not as noted, kindly notify us at once.

09-55-295724

RECEIVED
FEB 9 1994
EMERG & REMEDIAL RESPONSE SECTION
BUR OF SOLID & HAZRD WASTE

PHASE I TANK CLOSURE ASSESSMENT
WEATHER SHIELD MFG., INC.
ADAMS AVENUE EAST
LADYSMITH, WISCONSIN 54848

JANUARY 1994

Prepared by:

Cooper Engineering Company, Inc.
310 W. South Street
Rice Lake, WI 54868

Phone: (715) 234-7008
FAX: (715) 234-1025

br:Weather1.Rpt
ES93289

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Appendix B. Site Photographs
Appendix C. Tank Inventory Forms SBD-7437 and SBD-8951
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PHASE I TANK CLOSURE ASSESSMENT
WEATHER SHIELD MFG.
ADAMS AVENUE EAST
LADYSMITH, WISCONSIN 54848

INTRODUCTION

Cooper Engineering Company, Inc., was retained by Weather Shield Manufacturing, to perform a Phase I Site Assessment at the Weather Shield plant located at Adams Avenue East, as indicated on Figures 1, 2, and 3. A discussion of the field work and analytical results developed during the Phase I portion of this investigation are presented in the following narrative.

SUMMARY

On December 21, 1993, one 500 gallon underground storage tank (UST) containing leaded gasoline was excavated and removed from site at Weather Shield Mfg. plant in Ladysmith, Wisconsin.

The tank excavation was performed by B & D Services-Excavating, 1969 Country Aire Drive, Rice Lake, Wisconsin, (715) 234-6222. Bruce Willers of B & D Services Excavating is certified with the State of Wisconsin (certification #02816) as a Remover/Cleaner.

Site assessor services were performed by Cooper Engineering Company, Inc., 310 West South Street, Rice Lake, Wisconsin, (715) 234-7008. Robert G. Anderson is certified with the State of Wisconsin as a Site Assessor (certification #03031).

B & D Services performed the cutting open, cleaning, and removal of the tank.

The tank was lifted from the excavation after being chained to the bucket of the back-hoe and was placed next to the excavation. The tank remained upright throughout the removal process. The tank was set along side the excavation and blocked so as not to roll.

Once the cutting and cleaning process was complete the tank was chained inside a B & D Services-Excavating one-ton truck and transported to B & D Services-Excavating shop area in Rice Lake, Wisconsin. The tank is to be recycled for scrap metal (see Appendix D).

Results from soil samples analyzed show no detectable hydrocarbons (<10 parts per million GRO) from beneath either end of the UST.

GRANT

T.34N. - R.6W.

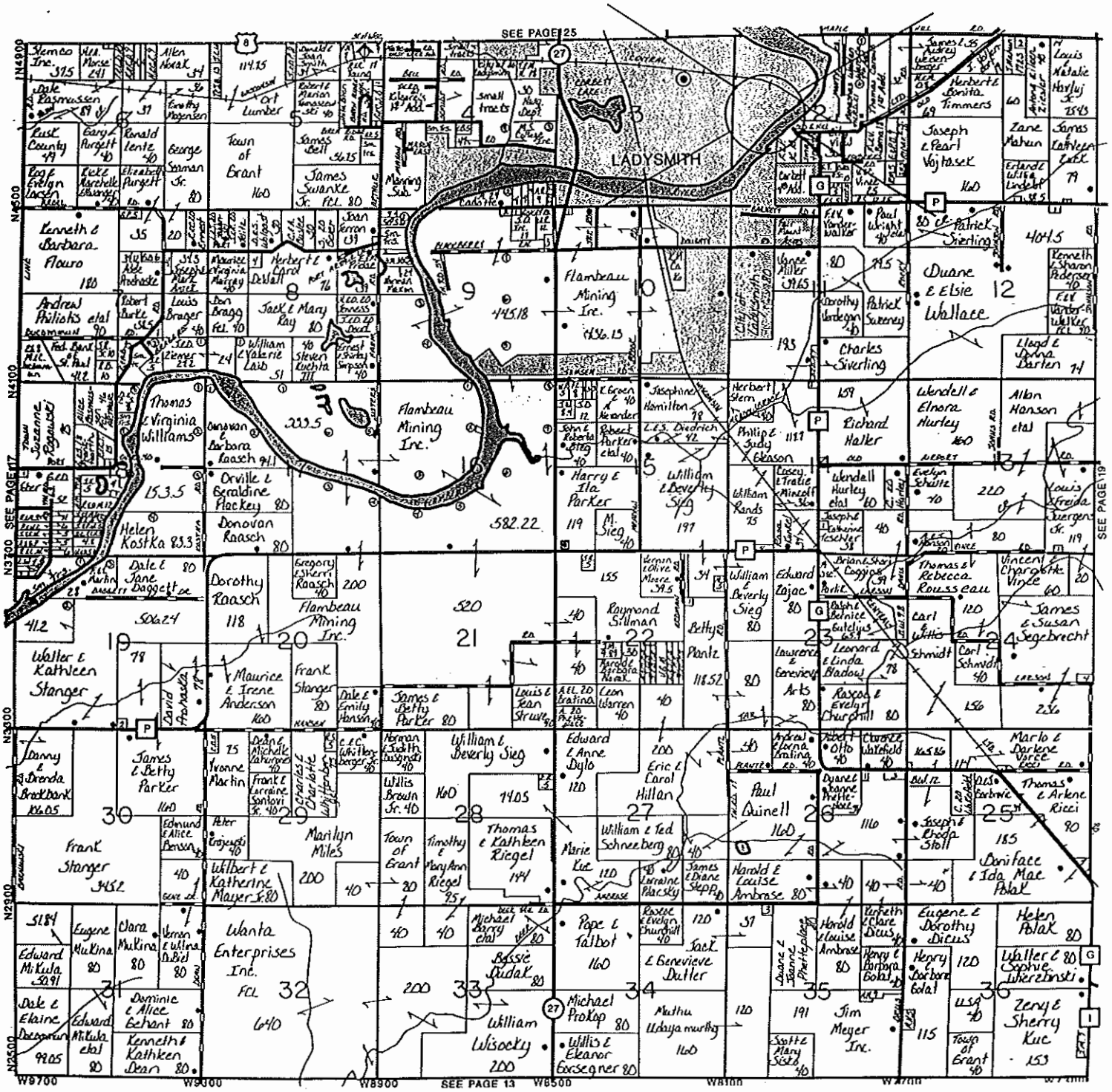

FIGURE 1.

PROJECT LOCATION
Plat Book

CITY MAP

LADYSMITH

POSTAL ZIP CODE 54848

BRUCE	54819	INGRAM	54535
CONRATH	54731	RICE LAKE	54868
GLEN FLORA	54526	TONY	54563
HOLCOMBE	54745	WEYERHAUSER	54895

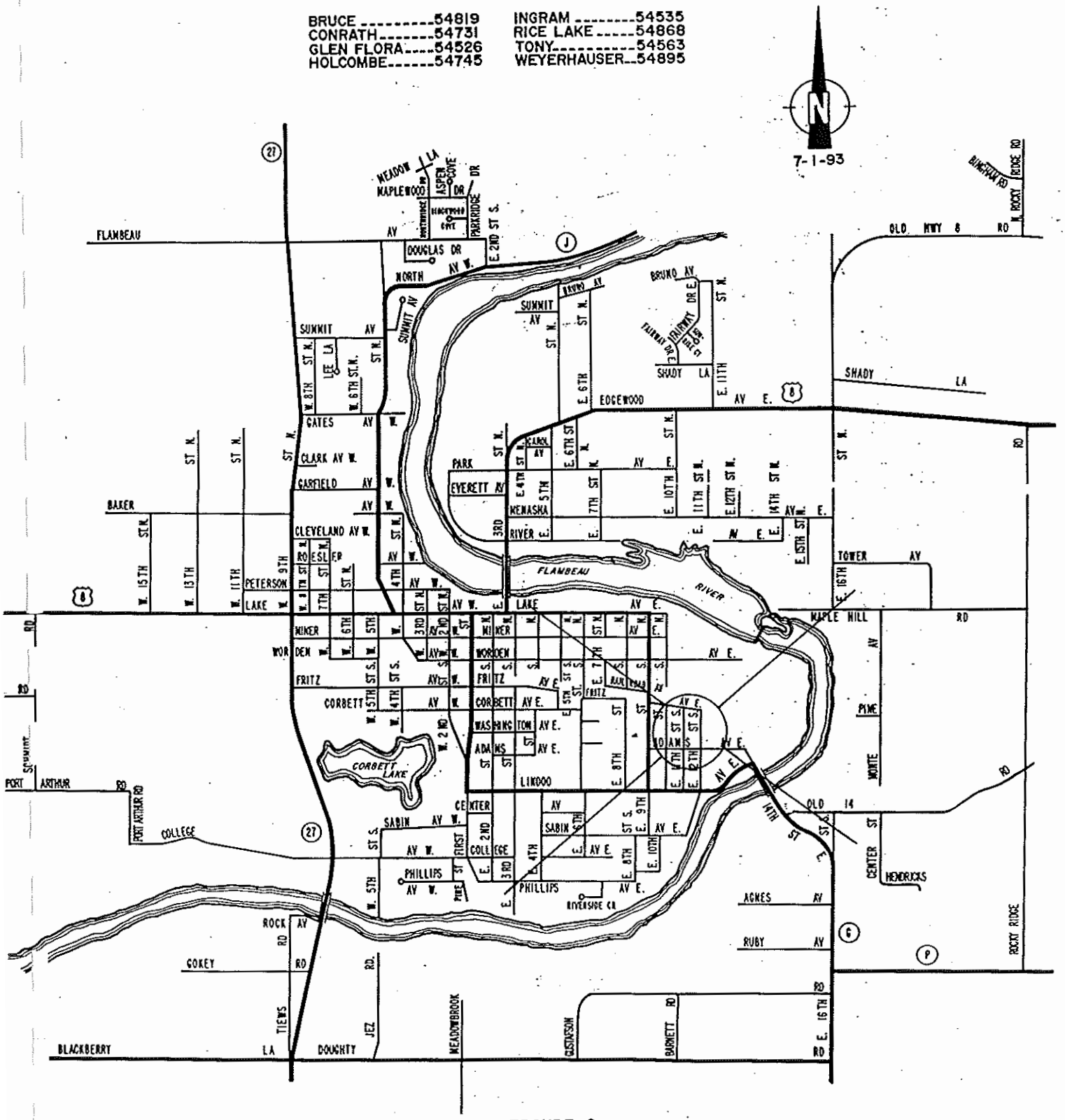

FIGURE 2

PROJECT LOCATION
City Map

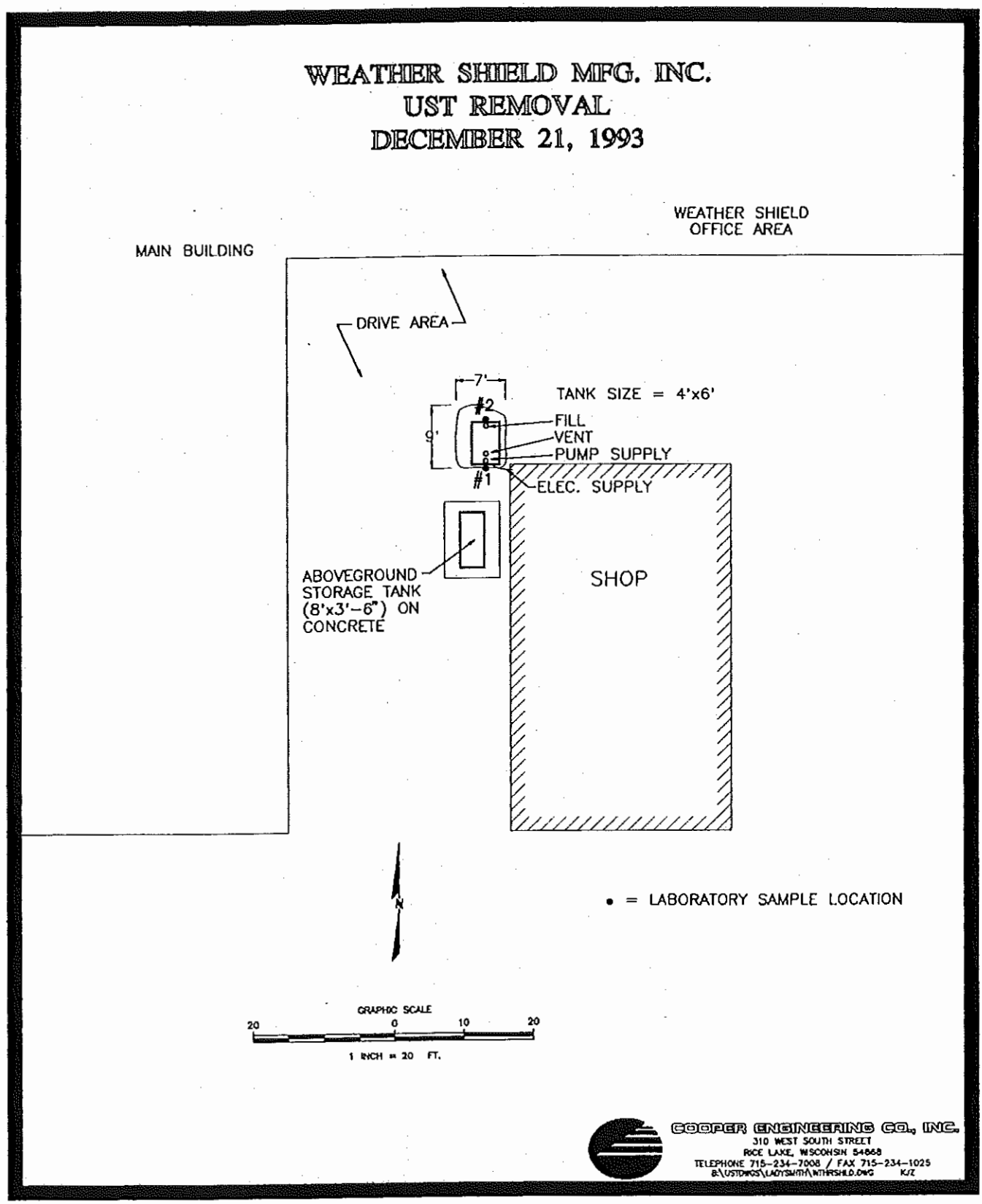

FIGURE 3

SITE SKETCH

BACKGROUND INFORMATION

The following information has been collected about the UST removed from Weather Shield Manufacturing plant (see Figures 1, 2, and 3).

Tank Owner: Weather Shield Manufacturing
Adams Avenue East
Ladysmith, WI 54848
(715) 532-5581

Contact Person/Site: Mr. Mike Larson
Weather Shield MFG.
Adams Avenue East
Ladysmith, WI 54848
(715) 532-5581

Site Assessor: Robert G. Anderson (03031)
Cooper Engineering Co., Inc.
310 W. South Street
Rice Lake, WI 54868
(715) 234-7008

SPECIFIC TANK CHARACTERISTICS	
Capacity (gallons)	500
Contents	leaded gasoline
Tank Construction	coated steel
Piping Construction	bare steel
Date Installed	1/1/80
Installer	Weather Shield
Date tank last used	12/6/93
Legal Site Description: SE 1/4, NW1/4, Section 2, T34N, R 6 W	

Following excavation, the tank was loaded onto a B & D Services Excavating one-ton truck, chained down and transported off site to B & D Services' shop for recycling (see Tank Disposal Documentation Appendix D).

The cutting open and cleaning of the tank took place on the ground at the site prior to the tank being transported off site.

SITE

Information provided about the site shows this property is an operating manufacturing plant for windows and doors. Weather Shield has owned and manufactured windows and doors at this site for the past 20 years. Prior to Weather Shield, Great Lakes Mill Work made windows and doors at this plant. The excavation site is located to the south of the main office and to the west of the shop (see Figure 3).

The day of the excavation it was cloudy, with a sight breeze, and approximately 25° F. There was no precipitation on the day of excavation or on the previous day.

Information provided by the owners and a walk-over of the site suggest no other underground storage tanks remain at this site. The excavated tank had not been repaired or tested for leaks according to Mr. Mike Larson.

Upon arrival, a visual overview of the site showed no obvious contamination such as surface staining or stressed vegetation.

B & D Services Excavating filled out the Checklist for Underground Storage Tank Closure (SBD-8951) while Cooper Engineering Company, Inc., filled out the Tank Inventory Form (SBD-7437) and acted as the neutral third party during the tank removal (see Appendix C).

John Andersen & Darrel Christy, both DILHR representatives and Fire Prevention Coordinators, were informed of the intent for tank removal 15 days prior to the tank excavation. DILHR did not have a representative on site.

EXCAVATION AND DISPOSAL

The subject tank was abandoned by removal on December 21, 1993, in accordance with current State of Wisconsin Department of Natural Resources guidelines. Site photographs documenting the removal are presented in Appendix B.

Prior to the tank being excavated, CO_2 was used to make the atmosphere inside the tank inert. Making the tank inert means the displacement of the atmosphere inside the tank by a noncombustible gas (such as CO_2) to such an extent that the resulting atmosphere is noncombustible.

Soils at the site were light brown, coarse to medium sand. Typical description of these soils is: poorly - graded gravels, gravel - sand mixtures, little or no fines, (GP) as per Unified Soil Classification System.

Once the tank was exposed and made inert, B & D Services Excavating hooked a chain to the pick hooks on the tank and lifted it from the excavation. The tank remained upright at all times.

B & D Services Excavating cleaned the tank on site with less than one gallon of floor dry type absorbent. The absorbent was disposed of as normal solid waste.

Typical cleaning procedures include swabbing the inside of each tank with an absorbent material (such as floor dry), scooping the material out of the tank with a non-sparking device (plastic shovel as an example), and, with large quantities, containerizing the absorbent material in a D.O.T. approved 55 gallon drum. Less than one gallon of absorbent is not considered a large quantity.

No sludge was found in the removed tank. Approximately 20 gallons of re-usable fuel was collected and left at the site. Weather Shield plans to use this fuel at the site (see Appendix E).

OBSERVATIONS AND RESULTS

The fill and vent pipes were located directly above the 500 gallon UST. B & D Services Excavating disconnected the piping from the tank once it was exposed.

Visual inspection of the tank and piping showed no obvious locations of leaks or blisters.

Total depth of the excavation was 6'-7" below grade. Groundwater or freestanding water was not encountered anytime throughout the excavation process.

No headspace analysis was performed at the site for background information. Laboratory analysis results are more conclusive than a Photoionization Detector, thus less likely to give a potential false hope to clients.

Once laboratory samples were collected and the tank was safely secured on site, the excavated soil was pushed back into the excavation. Additional clean fill soil (pit run, provided by B & D Services) was used to level the excavation.

The site would remain this way at least until the results were returned from samples sent to SERCO Laboratories (WDNR# 999446690).

Laboratory analysis (see Table 1) from samples collected below the ends of the tank show no detectable hydrocarbons (<10 parts per million).

TABLE 1
DURING EXCAVATION SITE SAMPLES

Sample No.	Date	Total Solids %	GRO mg/kg	Location & Depth BG = Below Grade
1	12/21/93	95.8	<10	S. end of tank, 71/2'BG
2	12/21/93	94.8	<10	N. end of tank, 8' BG

< means "not detectable at this level" mg/kg=ppm

SOIL SAMPLING PROCEDURES

Soil samples at the Weather Shield Mfg. plant site, were collected from beneath each end of the tank. Each sample was collected using a disposable syringe with the end cut off, which had been weighed prior to the sampling and also while containing a representative sample.

Weighing of the sample syringe, and then weighing the syringe with the representative sample, allows the sampler to collect approximately 25 grams of soil needed for each sample with minimal disturbance of the soil.

Samples from beneath the tank were carefully placed into 60 ml glass containers, which were pre-weighed by the laboratory, two per sample location and one dry weight. sample was also collected from each sample location.

All samples were field preserved by chilling in a cooler with ice and with the addition of methanol to the sample. Pre-measured quantities of methanol are provided by the laboratory and added to the sample in the field.

Laboratory samples were submitted with chain of custody documentation to SERCO Laboratories, 1931 West County Road C2, St. Paul, MN 55113, for GRO (Gasoline Range Organic) analysis. The laboratory is certified and uses Wisconsin Department of Natural Resources approved methods for GRO analysis.

CONCLUSIONS AND RECOMMENDATIONS

Evaluation of available data suggests there is no significant soil contamination associated with the subject tank.

We recommend that this site be granted clean closure status by the Department of Natural Resources.

STANDARD OF CARE

This report has been specifically prepared for the Weather Shield Mfg. plant, Ladysmith, Wisconsin, with specific application to Phase I Underground Storage Tank Closure for property located at the Weather Shield Mfg. plant, Adams Avenue East, Ladysmith, Wisconsin. This document has been prepared in accordance with the care and skill generally exercised by reputable professionals, under similar circumstances, in this or similar localities. No other warranty, either expressed or implied, is made as to the professional advice presented herein.

REPORT PREPARATION

This report has been developed by Cooper Engineering Company, Inc., and was prepared and reviewed by the following:

Robert G. Anderson
State of Wisconsin Certified Site Assessor #03031
Project Manager

Bruce Markgren, P.E.
Vice President

APPENDICES

APPENDIX A - Laboratory Results and Chain of Custody

APPENDIX B - Site Photographs

APPENDIX C - Tank Inventory Forms SBD-7437 and SBD-8951

APPENDIX D - Tank Disposal Documentation

APPENDIX E - Re-Usable Product

APPENDIX A

Laboratory Results and Chain of Custody

SERCO Laboratories
31 West County Road C2. St. Paul. Minnesota 55113 Phone (612) 636-7173 FAX (612) 636-7178

COPY

RECEIVED JAN 10 1994

LABORATORY ANALYSIS REPORT NO: 34827
01/07/94

Cooper Engineering
310 W. South Street
Rice Lake, WI 54868

Attn: Bob Anderson

DATE COLLECTED: 12/21/93
DATE RECEIVED: 12/22/93
COLLECTED BY : CLIENT
DELIVERED BY : CLIENT
SAMPLE TYPE : SOIL

CLIENT'S ID: Weather shield of Ladysmith

SERCO SAMPLE NO:	169573	169583	169593	169603
SAMPLE DESCRIPTION:	1 S. End of Tank	2 N. End of Tank	Methanol Trip Blank	Detect Limits Not Dry Weight
ANALYSIS:				
Gasoline Range Organics, C6-C10, dry weight, mg/kg	<10	<10	-	10
Analytical Method for MOD GRO	MOD GRO	MOD GRO	MOD GRO	-
Date of Analysis for MOD GRO	12/29/93	12/29/93	01/04/94	-
Total Solids, percent	95.8	94.8	-	-
Gasoline Range Organics, C6-C10, ug/L	-	-	<100	-

Samples received on ice.

< means "not detected at this level". 1 mg = 1000 ug.

MEMBER

SERCO Laboratories

1931 West County Road C2. St. Paul. Minnesota 55113 Phone (612) 636-7173 FAX (612) 636-7178

The analytical results in this report pertain only to the items tested. All analyses were performed using EPA or state approved methodologies. Samples that may be of an environmentally hazardous nature may be returned to you. Other samples will be stored for 30 days from the date of this report, then disposed of by SERCO Laboratories. Please contact me if other arrangements are needed. This report may not be reproduced, except in its entirety, without prior written approval from SERCO Laboratories.

Report submitted by,

Diane J. Anderson

Diane J. Anderson
Project Manager

MEMBER

CERA LABORATORIES

State of Wisconsin
Department of Natural Resources

CHAIN OF CUSTODY RECORD
LUST PROGRAM
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)	Title/Work Station/Company	Telephone Number (include area code)
Robert G. Anderson	Cooper Engineering Co. Inc	715-234-7008
Property Owner	**Property Address**	**Telephone Number (include area code)**
Weather Shield of Ladysmith	Adams Ave. East, Ladysmith, WI 54848	715-532-5581

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

Relinquished By (Signature)	Date/Time	Received By (Signature)
Robert G. Anderson	12-21-93 / 2:16 p.m.	
Relinquished By (Signature)	Date/Time	Received By (Signature)
Relinquished By (Signature)	Date/Time	Received for Laboratory By (Signature)
	12/22/93 11:30am	D. Dellwell

Sample Condition on Receipt by Laboratory
LABORATORY USE ONLY

Temperature of temperature blank: 4 °C

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[1]	Date Collected	Time Collected	Sample Type[2]	Sample Device[3]	Preserv. Type	Field Screening	Description	Analysis Type	Lab ID Number	No./Type of Containers	Cracked /Broken	Improperly Sealed	Good Condition	Other Comments
1	12-21-93	9:31	Soil	Syringe	ICE & Methanol		S. end of Tank	GRO	169573	2 GLD 1 Onfet			✓	
2	12-21-93	9:50	Soil	Syringe	ICE & Methanol		N. end of Tank	GRO	169583	↓			✓	
														Meth. TD also received DD 12/22/93

[1] Sample description must clearly correlate the sample ID to the sampling location shown on a map.
[2] Specify groundwater, surface water, soil, leachate, sludge, etc.
[3] Type of sampling device; split spoon, hand auger, metal spatula, soil syringe, etc.

DEPARTMENT USE/OPTIONAL FOR SOIL SAMPLERS

Disposition of unused portion of sample

Laboratory should: ☐ Dispose ☐ Retain for ____ days ☐ Return ☐ Other

DEPARTMENT USE ONLY

Split samples: Offered? ☐ Yes ☐ No (Check one)

Accepted? ☐ Yes ☐ No (Check one)

Weathershield tank removal

Number	Sample Location	Depth (Below Grade)	Soil Type	Moisture	Date	Time	Odor	Field	Lab	Analysis
1	South end of Tank	7½'	Gravely-Sand		12-21-93	9:31	NO	NO	X	GRO
2	Below North end of Tank	8'	" "		"	9:50	NO	NO	X	GRO

APPENDIX B

Site Photographs

Weather Shield
Tank Removal Site

Exposed Tank & Pipes

Tank Removal

Tank Blocked on Site

Making Tank Inert

Tank Ready for Cleaning

APPENDIX C

Tank Inventory Forms SBD-7437 and SBD-8951

Wisconsin Department of Industry, Labor and Human Relations

UNDERGROUND PETROLEUM PRODUCT TANK INVENTORY

Information Required By Sec. 101.142, Wis. Stats.

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

For Office Use Only:
Tank ID #

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 If yes, are you correcting/updating information only? ☒ Yes ☐ No

This registration applies to a tank that is (check one):
1A. ☐ In Use or 1B. ☐ Newly Installed
2. ☐ Abandoned With Product
3. ☐ Abandoned No Product (empty) or With Water
4. ☒ Closed - Tank Removed
6. ☐ Closed - Filled With Inert Material
7. ☐ Out of Service - Provide Date: _____
8. ☐ Changed Ownership (Indicate new owner below)

Fire Department Providing Fire Coverage Where Tank Located: Ladysmith

A. IDENTIFICATION: (Please Print)

1. Tank Site Name: Weather Shield of Ladysmith
Site Address: Adams Avenue East
Site Telephone No.: (715)532-5581
☒ City: Ladysmith ☐ Village ☐ Town of:
State: WI Zip Code: 54848 County: Rusk

2. Owner Name (mail sent here unless indicated otherwise in #3 below): Weather Shield, Mike Larson, Representative
Owner Mailing Address (mail sent here unless indicated otherwise in #3): Adams Ave. East
☒ City: Ladysmith ☐ Village ☐ Town of:
State: WI Zip Code: 54848 County: Rusk

3. Alternate Mailing Name If Different Than #2:
Alternate Mailing Street Address If Different From #2:
☐ City ☐ Village ☐ Town of:
State: Zip Code: County:

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

TYPE OF USER (check one):
1. ☐ Gas Station 2. ☐ Bulk Storage 3. ☐ Utility 4. ☐ Mercantile
5. ☒ Industrial 6. ☐ Government 7. ☐ School 8. ☐ Residential
☐ Agricultural 10. ☐ Other (specify): _____

TANK CONSTRUCTION:
1. ☒ Bare Steel 2. ☐ Cathodically Protected and Coated Steel (A. ☐ Sacrificial Anodes or B. ☐ Impressed Current)
3. ☐ Coated Steel 4. ☐ Fiberglass 5. ☐ Other (specify): _____
6. ☐ Relined - Date _____ 7. ☐ Steel - Fiberglass Reinforced Plastic Composite 9. ☐ 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)

B. PIPING CONSTRUCTION
1. ☒ Bare Steel 2. ☐ Cathodically Protected and Coated or Wrapped Steel (A. ☐ Sacrificial Anodes or B. ☐ Impressed Current) 3. ☐ Coated Steel
4. ☐ Fiberglass 5. ☐ Other (specify): _____ 9. ☐ 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

C. TANK CONTENTS
1. ☐ Diesel 2. ☐ Leaded 3. ☒ Unleaded 4. ☐ Fuel Oil
5. ☐ Gasohol 6. ☐ Other 7. ☐ Empty 8. ☐ Sand/Gravel/Slurry
9. ☐ Unknown 10. ☐ Premix 11. ☐ Waste Oil 12. ☐ Propane
13. ☐ Chemical * _____ _____ _____ 14. ☐ Kerosene 15. ☐ Aviation

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

If Tank Closed, Give Date (mo/day/yr): December 21, 1993
Has a site assessment been completed? (see reverse side for details) ☐ Yes ☒ No In Progress

If installation of a new tank is being reported, indicate who performed the installation inspection:
1. ☐ Fire Department 2. ☐ DILHR 3. ☐ Other (identify) _____

Name of Owner or Operator (please print): Weather Shield, Mike Larson, Representative
Indicate Whether: ☐ Owner or ☒ Operator

Signature of Owner or Operator: M. Larson Representative
Date Signed: X 12/01/93

SBD-7437 (R. 04/92) IMPORTANT: Complete as many items on this form as possible. Failure to provide sufficient information may cause you to fall under additional regulations

Wisconsin Department of Industry, Labor and Human Relations

Complete one form for each site closure.

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

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

1. Site Name: Weather Shield of Ladysmith	2. Owner Name:
Site Street Address (not P.O. Box): Adams Ave. East	Owner Street Address:
☒ City ☐ Village ☐ Town of: Ladysmith	☐ City ☐ Village ☐ Town of: State: Zip Code:
State: Wisconsin; Zip Code: 54848; County: Rusk	County: Telephone No. (include area code): (715) 532-5581
3. Closure Company Name (Print): B&D Services Excavating	Closure Company Street Address: 1960 Country Aire Drive
Closure Company Telephone No. (include area code): 715 1234-6222	Closure Company City, State, Zip Code: Rice Lake, WI 54868
4. Name of Company Performing Closure Assessment: Cooper Engineering Co. Inc.	Assessment Company Street Address, City, State, Zip Code: 310 West South Street, Rice Lake, WI 54868
Telephone # (include area code): 715 1234-7008; Certified Assessor Name (Print): Robert G. Anderson	Assessor Signature: Robert G. Anderson; Assessor Certification No.: 03031

	Tank ID #	Closure	Temp. Closure	Closure In Place	Tank Capacity	Contents *	Closure Assessment
		☒	☐	☐	500	03	☒ Y ☐ N
2.		☐	☐	☐			☐ Y ☐ N
		☐	☐	☐			☐ Y ☐ N
4.		☐	☐	☐			☐ Y ☐ N
5		☐	☐	☐			☐ Y ☐ N
		☐	☐	☐			☐ Y ☐ 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.

	Remover Verified	Inspector Verified	NA
B. TEMPORARILY OUT OF SERVICE			
Written inspector approval of temporary closure obtained, which is effective until (provide date) _____	☐ Y ☐ N	☐	☒
1. Product Removed			
a. Product lines drained into tank (or other container) and resulting liquid removed, AND	☐ Y ☐ N	☐	☒
b. All product removed to bottom of suction line, OR	☐ Y ☐ N	☐	☒
c. All product removed to within 1" of bottom.	☐ Y ☐ N	☐	☒
2. Fill pipe, gauge pipe, tank truck vapor recovery fittings, and vapor return lines capped.	☐ Y ☐ N	☐	☒
3. All product lines at the islands or pumps located elsewhere are removed and capped, OR	☐ Y ☐ N	☐	☒
4. Dispensers/pumps left in place but locked and power disconnected.	☐ Y ☐ N	☐	☒
5. Vent lines left open.	☐ Y ☐ N	☐	☒
6. Inventory form filed indicating temporary closure.	☐ Y ☐ N	☐	☒
C. CLOSURE BY REMOVAL			
1. Product from piping drained into tank (or other container).	☒ Y ☐ N	☐	☐
2. Piping disconnected from tank and removed.	☒ Y ☐ N	☐	☐
3. All liquid and residue removed from tank using explosion proof pumps or hand pumps.	☒ Y ☐ N	☐	☐
4. All pump motors and suction hoses bonded to tank or otherwise grounded.	☒ Y ☐ N	☐	☐
5. Fill pipes, gauge pipes, vapor recovery connections, submersible pumps and other fixtures removed. **NOTE: DROP TUBE SHOULD NOT BE REMOVED IF THE TANK IS TO BE PURGED THROUGH THE USE OF AN EDUCTOR.**	☒ Y ☐ N	☐	☐
6. Vent lines left connected until tanks purged.	☒ Y ☐ N	☐	☐
7. Tank openings temporarily plugged so vapors exit through vent.	☒ Y ☐ N	☐	☐
8. Tank atmosphere reduced to 10% of the lower flammable range (LEL) - see Section F.	☒ Y ☐ N	☐	☐
9. Tank removed from excavation after **PURGING/INERTING**; placed on level ground and blocked to prevent movement.	☒ Y ☐ N	☐	☐
10. Tank cleaned before being removed being removed from site.	☒ Y ☐ N	☐	☐

- CONTINUE ON NEXT PAGE -

C. CLOSURE BY REMOVAL (continued)

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

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).			
2. Piping disconnected from tank and removed.	☐ Y ☐ N	☐	☐
3. All liquid and residue removed from tank using explosion proof pumps or hand pumps.	☐ Y ☐ N	☐	☐
4. All pump motors and suction hoses bonded to tank or otherwise grounded.	☐ Y ☐ N	☐	☐
5. Fill pipes, gauge pipes, vapor recovery connections, submersible pumps and other fixtures removed.	☐ Y ☐ N	☐	☐
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.			
6. Vent lines left connected until tanks purged.	☐ Y ☐ N	☐	☐
7. Tank openings temporarily plugged so vapors exit through vent.	☐ Y ☐ N	☐	☐
8. Tank atmosphere reduced to 10% of the lower flammable range (LEL) - see Section F.	☐ Y ☐ N	☐	☐
9. Tank properly cleaned to remove all sludge and residue.	☐ Y ☐ N	☐	☐
10. Solid inert material (sand, cyclone boiler slag, pea gravel recommended) introduced and tank filled.	☐ Y ☐ N	☐	☐
11. Vent line disconnected or removed.	☐ Y ☐ N	☐	☐
12. Inventory form filed by owner with Safety and Buildings Division indicating closure in place.	☐ Y ☐ N	☐	☐

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.	☒ Y ☐ N	☐	☐
2. Do points of obvious contamination exist?	☐ Y ☒ N	☐	☐
3. Are there strong odors in the soils?	☐ Y ☒ N	☐	☐
4. Was a field screening instrument used to pre-screen soil sample locations?	☐ Y ☒ N	☐	☐
5. Was a closure assessment omitted because of obvious contamination?	☐ Y ☒ N	☐	☐
6. Was the DNR notified of suspected or obvious contamination?	☐ Y ☒ N	☐	☐

Agency, office and person contacted: _____

7. Contamination suspected because of: ☐ Odor ☐ Soil Staining ☐ Free Product ☐ Sheen On Groundwater ☐ 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

Bruce Willers	[signature]	02 216	12/21/96
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

OWNER

APPENDIX D

Tank Disposal Documentation

Cooper Engineering Company, Inc.

CONSULTING ENGINEER

Note: Address Change
310 WEST SOUTH STREET
RICE LAKE, WI 54868
Ph: 715/234-7008
Fax: 715/234-1025

UST CHAIN OF CUSTODY FORM

PROJECT NAME Weathershield tank removal DATE 12-21-93

LOCATION Weathershield Company, Ladysmith, WI 54848 CEC REP 127

TRANSPORTER'S NAME B & D Services Excavating, Rice Lake, WI 54868
(Trucker)

LICENSE

RELINQUISHED BY Weathershield/ M. DeLaun DATE 12-21-93

TIME 9:00 A.M.

RECEIVED BY B & D Services/ DATE 12-21-93
(Name)

B & D Services Excavating
(Salvage Company Name)

TANK SIZE 500 Gallon PRODUCT Gasoline

CONSTRUCTION Bare Steel

COMMENTS: Bruce Willers of B & D Services will excavate and remove the underground storage tank. B & D Services will also transport the tank off site by chaining the tank inside a B & D Services dump truck. B & D Services will also scrap and recycle the tank.

RETURN COMPLETED FORM TO COOPER ENGINEERING

APPENDIX E

Re-usable Product

B & D Services
Route 6
Rice Lake, Wisconsin 54868
(715) 234-6222
Mobile 458-9194

Bruce Willers, Owner

12/25/93

R.E. GAS IN TANK

the following GAS WAS left on site for USE IN the FORKLIFT. the volume WAS 23-25 gallons.

BWD

All Weather Protection - Always!

WEATHER SHIELD MFG., INC. MEDFORD, WIS.

Weather Shield Mfg., Inc.

LADYSMITH DIVISION
P.O. Box 432 Ladysmith, WI 54848
Phone (715) 532-5581

RECEIVED
JAN 27

January 25, 1994

Bob Anderson
Cooper Engineering Co.
310 West South Street
Rice Lake, WI 54868-2899

Bob:

The 20 gallons of gas left over after the tank removal were used in towmotors at this premises.

Michael Larson
Maintenance Supervisor

jl