

FORT MCCOY UST REMOVAL INVENTORY 03/30/95

BLDG NUMBER	TANK CAPACITY GAL	TANK PRODUCT	TANK CONSTRUCTION INFORMATION	TANK INSTALL DATE	TANK REMOVAL YEAR	CLEAN CLOSURE YES/NO/UNK	DNR SITE ID NUMBER
659	250	FUEL OIL	BARE STEEL	1943	1992	NO	897
1010	500	GASOLINE	UNKNOWN	?	1992	YES	907
1553	3,000	GASOLINE	BARE STEEL	1975	1992	NO	721
1557	340	GASOLINE	BARE STEEL	1964	1992	YES	
1562	500	FUEL OIL	BARE STEEL	1971	1992	NO	906
1565	500	FUEL OIL	FIBERGLASS	1977	1992	NO	905
1656	750	FUEL OIL	BARE STEEL	1972	1992	NO	900
1680	4,000	FUEL OIL	FIBERGLASS	1978	1992	NO	1003
1849	750	FUEL OIL	BARE STEEL	1943	1992	NO	895
1853	750	FUEL OIL	BARE STEEL	1943	1992	YES	896
2197	500	FUEL OIL	UNKNOWN	1977	1992	YES	904
2204	1,000	FUEL OIL	BARE STEEL	1943	1992	YES	
2541	1,000	FUEL OIL	BARE STEEL	1946	1992	YES	892
2569	1,000	FUEL OIL	BARE STEEL	1943	1992	NO	1004
2572	500	FUEL OIL	BARE STEEL	1977	1992	YES	894
2852	1,000	FUEL OIL	BARE STEEL	1961	1992	YES	
5007	550	DIESEL	COATED STEEL?	1985	1992	YES	
5014	?	FUEL OIL	BARE STEEL	1942	1992	NO	354
5030	750	FUEL OIL	BARE STEEL	1943	1992	YES	
5030	750	FUEL OIL	BARE STEEL	1943	1992	NO	909
5040	500	FUEL OIL	BARE STEEL	1943	1992	YES	908
6062	500	DIESEL	COATED STEEL	1976	1992	YES	891
6062	500	DIESEL	COATED STEEL	1976	1992	YES	891
6062	500	DIESEL	COATED STEEL	1976	1992	YES	891
6065	500?	DIESEL	UNKNOWN	1975	1992	YES	
6250	140	DIESEL	UNKNOWN	1976	1992	YES	893
10111	12,000	FUEL OIL	BARE STEEL	1973	1992	YES	903
10137	500	DIESEL	UNKNOWN	?	1992	YES	
242	1,500	UNUSED SOLV	COATED STEEL	1977	1992	YES	
242	5,000	DIESEL	COATED STEEL	1971	1992	YES	
242	5,000	GASOLINE	COATED STEEL	1971	1992	YES	
242	10,000	FUEL OIL	COATED STEEL	1971	1993	YES	
3050	25,000	FUEL OIL	BARE STEEL	1975	1993	NO	837
3050	25,000	FUEL OIL	BARE STEEL	1975	1993	NO	837
3050	10,000	DIESEL FUEL	BARE STEEL	1975	1993	YES	
3050	1,500	FUEL OIL	FIBERGLASS	1976	1993	NO	837
3050	10,000	UNLEADED GA	BARE STEEL	1975	1993	NO	837
3050	7,500	USED ENG OIL	BARE STEEL	1975	1993	NO	837
5050	500	FUEL OIL	BARE STEEL	1943	1993	YES	
2190	12,000	UNLEADED GA	BARE STEEL	1943	1994	NO	1130
2190	1,000	DIESEL FUEL	BARE STEEL	1943	1994	NO	1130
2190	1,000	UNLEADED GA	BARE STEEL	1943	1994	NO	1130
2190	12,000	DIESEL FUEL	BARE STEEL	1943	1994	NO	1130
2190	12,000	UNLEADED GA	BARE STEEL	1943	1994	NO	1130
1553	14,000	UNLEADED GA	BARE STEEL	1965	1994	NO	721

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BLDG NUMBER	TANK CAPACITY GAL	TANK PRODUCT	TANK CONSTRUCTION INFORMATION	TANK INSTALL DATE	REMOVAL YEAR	CLEAN CLOSURE YES/NO/UNK	DNR SITE ID NUMBER
1553	8,000	UNLEADED GA	COATED STEEL	1965	1994	NO	721
2177	1,000	LEADED GAS	BARE STEEL	UNK	1994	YES	

FORT MCCOY UST REMOVAL INVENTORY 03/30/95

BLDG NUMBER	TANK CAPACITY GAL	TANK PRODUCT	TANK CONSTRUCTION INFORMATION	TANK INSTALL DATE	REMOVAL YEAR	CLEAN CLOSURE YES/NO/UNK	DNR SITE ID NUMBER
2114	860	FUEL OIL	BARE STEEL	1947	1978	UNK	
1754	1,500	FUEL OIL	COATED STEEL	1972	1986	UNK	
106	1,500	FUEL OIL	BARE STEEL	1943	1989	YES	
108	750	FUEL OIL	BARE STEEL	1943	1989	YES	
1266	12,000	WASTE OIL	BARE STEEL	1943	1989	NO	298
1266	12,000	WASTE OIL	BARE STEEL	1943	1989	NO	298
1358	12,000	GASOLINE	BARE STEEL	1943	1989	NO	299
1467	12,000	DIESEL	BARE STEEL	1943	1989	NO	300
1467	12,000	DIESEL	BARE STEEL	1943	1989	NO	300
1550	750	FUEL OIL	BARE STEEL	1943	1989	NO	305
1550	750	FUEL OIL	BARE STEEL	1943	1989	NO	305
1554	12,000	FUEL OIL	BARE STEEL	1943	1989	NO	301
1658	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES	
1661	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES	
1668	1,650	FUEL OIL	FIBERGLASS	1977	1989	NO	306
1668	1,650	FUEL OIL	FIBERGLASS	1977	1989	NO	306
1669	12,000	GASOLINE	BARE STEEL	1943	1989	NO	302
1669	12,000	DIESEL	BARE STEEL	1943	1989	NO	302
1857	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES	
1859	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES	
1862	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES	
1879	12,000	GASOLINE	BARE STEEL	1943	1989	NO	303
1879	12,000	GASOLINE	BARE STEEL	1943	1989	NO	303
1938	860	FUEL OIL	BARE STEEL	1951	1989	YES	
2011	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES	304
2013	750	FUEL OIL	?	?	1989	YES	
2110	2,000	GASOLINE	?	?	1989	YES	
2113	4,000	FUEL OIL	BARE STEEL	1947	1989	YES	
2190	4,000	GASOLINE	BARE STEEL	1943	1989	YES	
2190	750	DIESEL	BARE STEEL	1943	1989	YES	
2190	750	DIESEL	BARE STEEL	1943	1989	YES	
2773	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES	
6062	1,000	FUEL OIL	COATED STEEL	1976	1989	YES	
10111	500	FUEL OIL	BARE STEEL	1943	1989	YES	
5014	250	GASOLINE	BARE STEEL	1942	1990	NO	354
457	750	FUEL OIL	BARE STEEL	1943	1991	NO	440
1152	1,500	GASOLINE	BARE STEEL	1970	1991	YES	
1152	1,000	DIESEL	BARE STEEL	1970	1991	NO	1002
1409	4,000	FUEL OIL	FIBERGLASS	1978	1991	YES	
1553	1,000	FUEL OIL	BARE STEEL	1943	1991	NO	721
1669	1,000	SOLVENT	BARE STEEL	1943	1991	YES	
1669	1,000	KEROSENE	BARE STEEL	1943	1991	YES	
2321	12,000	FUEL OIL	BARE STEEL	1943	1991	YES	
2846	1,500	FUEL OIL	BARE STEEL	1958	1991	YES	
105	750	FUEL OIL	BARE STEEL	1943	1992	YES	902

Bldg 5050



DEPARTMENT OF THE ARMY

HEADQUARTERS FORT McCoy  
SPARTA, WISCONSIN 54656-5000



17 February 1994

REPLY TO  
ATTENTION OF

11-22-93

Environmental Management Division

Mr. Tim Baker  
Area Hydrogeologist  
Wisconsin Department of Natural Resources  
910 Hwy 54 East  
Black River Falls, Wisconsin 54615

FEB 24 1994

Dear Mr. Baker:

Enclosed are Site Closure Assessments for seven Fort McCoy underground storage tanks (USTs). Six of these tanks were located adjacent to Building 3050 and one tank was located adjacent to Building 5050. All tanks were removed in November, 1993.

Per your request, narrative and results for the two sites have been separated. Please note that background information pertinent to both sites is contained only in the section which discusses Building 3050.

The report indicates contamination still remains at Building 3050, Excavations II and III. Midwest Environmental Management Company has been retained to perform remedial investigations at both sites. Work plans are being prepared and will be forwarded to your office soon. The investigations are tentatively scheduled for April or May, 1994.

Please direct questions or comments concerning Fort McCoy's UST program to Mr. Kurt Brownell, Fort McCoy Environmental Management Division, tel. (608) 388-4789.

Sincerely,

Alan L. Bailliett  
Chief, Environmental  
Management Division  
Directorate of Engineering

Enclosure

Copy Furnished (w/encl)

Commander, HQ, 36th ARCOM, ATTN: AFRC-AIL-EN, 7402 W. Roosevelt Road, Forest Park, IL 60130-2587

WCR

## SITE ASSESSMENT SUMMARY

### Excavation IV (Tank #7)

Excavation IV was located adjacent to the west side of Building Number 5050 near the northwest corner of the building. This tank removal site included Tank #7, a 550 gallon fuel oil underground storage tank.

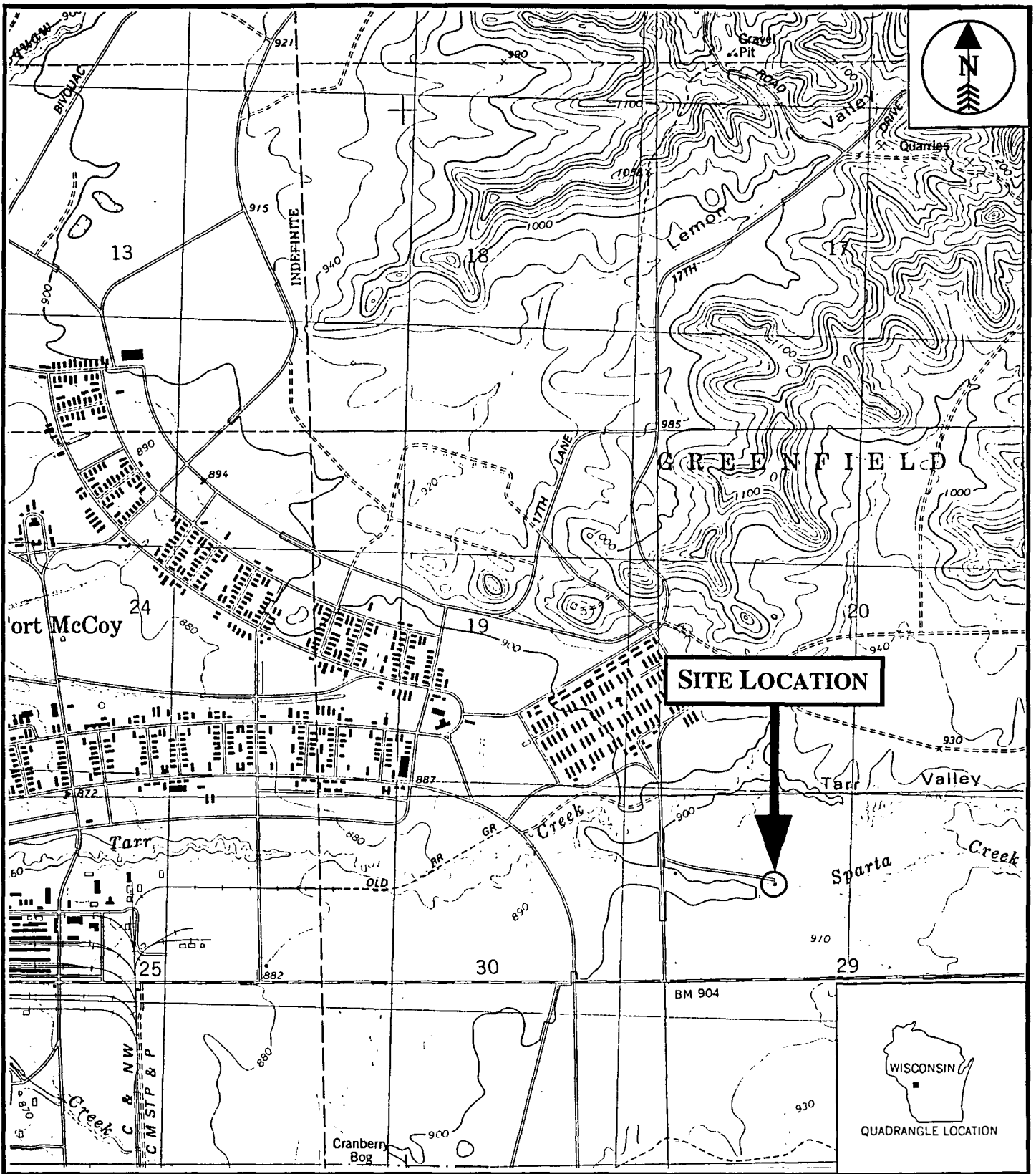
There were no observed hydrocarbon odors or signs of visible hydrocarbon staining in the soil removed from the excavation.

Tank #7 was found to be in deteriorating condition during the visual site assessment inspection. Heavy rust accumulation was observed on the entire surface of the tank. There were no visible indications of rust pits or holes on the surface of the tank.

Excavation IV was measured to be approximately 11 feet in length, 6 feet in width, and 5 feet in depth. Groundwater was not encountered in the excavation during the tank removal operations.

Laboratory analysis results indicated that the soil sample collected from the base in the center of the excavation did not contain a detectable concentration of DRO.

Based upon the laboratory analysis results, the field analysis results, and the visual site assessment inspection, Midwest Environmental Management Company concludes that this site should be recommended for closure.



**Midwest Environmental Management, Co.**

**Fort McCoy Military Base  
Building #5050  
Fort McCoy, Wisconsin**

**FIGURE 2  
Site Location Map**

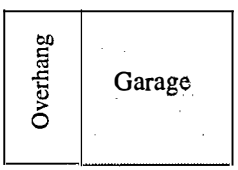
Source: USGS Alderwood Lake, WI 7.5" Quadrangle Map  
Scale: 1" = 2,000' Contour Interval: 20 Feet

Project Number: TK93279 | Date: 12-8-1993 | By: DRE



Wooded Area

Wooded Area



Asphalt Driveway

Sidewalk

Grass

Grass

Vent Pipe  
Area of Excavation

Fort McCoy Building #5050

FM-S43

Fill Pipe

Grass

UST  
550 Gallon Fuel Oil (Tank #7)  
(Removed)

Grass

**Legend**

- Soil Sample Location
- Underground Storage Tank
- Fuel Supply Line

Scale



Sparta Creek Impoundment



Midwest Environmental Management, Co.

Fort McCoy Military Base  
Building #5050  
Fort McCoy, Wisconsin

**FIGURE 6**  
Site Layout Map - Excavation IV  
Tank #7

Project No. TK93279

Date: 12-1-93

By: DE

pipe runs of Tank #4, Tank #5, and Tank #6 were found to contain no detectable concentrations of DRO. The soil sample collected from the contaminated stockpile contained a concentration of 29 ppm DRO.

### **Groundwater**

- **DRO:** Laboratory analysis results indicated that the groundwater sample collected from the base of the excavation of the removed Tanks: #4, #5, and #6 was found to contain 13 ppm DRO.
- **VOC:** The groundwater sample collected from the excavation was found to contain a concentration of nine VOC compounds: p,m-xylene "coelute" (13 ppb), o-xylene (20 ppb), n-propylbenzene (1.3 ppb), 1,3,5-trimethylbenzene (7 ppb), 1,2,4-trimethylbenzene (7.1 ppb), p-isopropyltoluene (13 ppb), ethylbenzene (3.6 ppb), n-butylbenzene (1.3 ppb), naphthalene (5.1 ppb).
- **PAH:** The groundwater sample collected from the base of the excavation was found to contain concentrations of ten PAH compounds: 1-methylnaphth (56 ppb), 2-methylnaphth (11 ppb), acenaphthene (11 ppb), fluorene (12 ppb), phenanthrene (20 ppb), anthracene (1.1 ppb), fluoranthene (8.0 ppb), pyrene (37 ppb), benzo(a)anthracene (2.5 ppb), and chrysene (0.39 ppb).

### Recommendations

Based upon the laboratory analysis results, the field analysis results, and the visual site assessment inspection, Midwest Environmental Management Company concludes that this site warrants further site investigation in order to determine the extent and concentration of the soil and groundwater contamination.

## **7.4 Excavation IV (Tank #7)**

### No Observed Contamination

Three soil samples were collected from the base of the excavation of Tank #7, a 550 gallon fuel oil tank. The soil samples were field screened on site for the presence of volatile and semi-volatile organic compounds. None of the samples screened detected a response. There was no observed hydrocarbon odors or signs of visible hydrocarbon staining in the soil removed from the excavation which would indicate possible contamination.

### Groundwater

Groundwater was not encountered in the excavation during the tank removal operations.

### Analysis of Soil Samples

- **DRO:** One soil sample was submitted for laboratory analysis from the base of the excavation of the removed 550 gallon fuel oil tank. This soil sample was found to contain no detectable concentration of DRO.

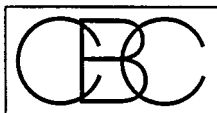
### Recommendations

Based upon the laboratory analysis results, the field analysis results, and the visual site assessment inspection, Midwest Environmental Management Company concludes that this site should be



recommended for closure.

**Excavation IV (Tank #7)**



**ENVIRONMENTAL  
LABORATORIES INC.**

2/08/93

LABORATORY REPORT

PAGE 1

M900 9308273 W31

MIDWEST ENVIRONMENTAL MANAGEMENT CO.  
123 NORTH 4TH STREET SUITE 303  
LA CROSSE ,WI 54602-3143  
ATTN: JASON HERBST

CHAIN OF CUSTODY

SAMPLE 93327-M15358 FM-S23/SET #23/1' BENEATH BOTTOM OF TANK# 7/MIDDLE  
OF EXCAVATION/FID=0.0 PPM/SOIL/TANK #7-550 GALLON  
FUEL OIL/FORT MCCOY/BLDG #5050

DATE COLLECTED 11/22/93 DATE RECEIVED 11/23/93  
PRESERVED: YES TEMPERATURE: ON ICE  
CONT. INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

TEST NAME	RESULT	UNITS	ANALYZED	METHOD	LIMIT
% MOISTURE	5.0	%	11/24/93	SW846 5030	

TEST NAME	WET RESULT	DRY RESULT	UNITS	PERCENT	ANALYZED	METHOD
DRO EXTRACTION - SOIL	COMPLETE				11/29/93	SW846 3540
DIESEL RANGE ORGANICS	<4.0	<4.2	MG/KG		12/02/93	WDNR MOD. DRO
BLANK CONCENTRATION	<4.0	<4.2	MG/KG		12/02/93	WDNR MOD. DRO
DIESEL	N/A		MG/KG		12/02/93	WDNR MOD. DRO
NOT APPLICABLE; NO DIESEL PATTERN MATCH.						

PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT; SOIL SAMPLES WILL BE DISPOSED OF 6 WEEKS AFTER RECEIPT; WASTE SAMPLES (NON-WATER, NON-SOIL) WILL BE RETURNED 6 WEEKS AFTER RECEIPT. N/T = NOT TESTED, N/A = NOT APPLICABLE, N/D = NOT DETECTED.

@ = ELEVATED DETECTION LIMIT DUE TO MATRIX INTERFERENCE. # = ELEVATED DETECTION LIMIT DUE TO SAMPLE CONCENTRATION.  
\$ = ELEVATED DETECTION LIMIT DUE TO SAMPLE QUANTITY. + = ELEVATED DETECTION LIMIT DUE TO EXTRACT VOLUME.

AIHA ACCREDITED

APPROVAL WV gma



# 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.**

**IDENTIFICATION: (Please Print)** Indicate whether closure is for:  Tank System  Tank Only  Piping Only  
1. Site Name \_\_\_\_\_ 2. Owner Name \_\_\_\_\_

Site Street Address (not P.O. Box) \_\_\_\_\_ Owner Street Address \_\_\_\_\_  
 City  Village  Town of: \_\_\_\_\_  City  Village  Town of: \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
 State \_\_\_\_\_ Zip Code \_\_\_\_\_ County \_\_\_\_\_ County \_\_\_\_\_ Telephone No. (include area code) \_\_\_\_\_

Closure Company Name (Print) \_\_\_\_\_ Closure Company Street Address, \_\_\_\_\_  
 Closure Company Telephone No. (include area code) \_\_\_\_\_ Closure Company City, State, Zip Code \_\_\_\_\_

4. Name of Company Performing Closure Assessment \_\_\_\_\_ Assessment Company Street Address, City, State, Zip Code \_\_\_\_\_  
Midwest Environmental Management 123 N 4th St. Suite 303 La Crosse, WI 54601

Telephone # (include area code) \_\_\_\_\_ Certified Assessor Name (Print) \_\_\_\_\_ Assessor Signature \_\_\_\_\_ Assessor Certification No. \_\_\_\_\_  
608) 784-5688 Bernie Scholt Jr. Bernie Scholt Jr. 04627

Tank ID #	Closure	Temp. Closure	Closure In Place	Tank Capacity	Contents *	Closure Assessment
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	550	04	<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
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N
	<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.**

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

**C. CLOSURE BY REMOVAL**

1. Product from piping drained into tank (or other container).	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/>	<input type="checkbox"/>
2. Piping disconnected from tank and removed.	<input checked="" 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 checked="" 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 checked="" 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. <b>NOTE: DROP TUBE SHOULD NOT BE REMOVED IF THE TANK IS TO BE PURGED THROUGH THE USE OF AN EDUCTOR.</b>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/>	<input type="checkbox"/>
6. Vent lines left connected until tanks purged.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/>	<input type="checkbox"/>
7. Tank openings temporarily plugged so vapors exit through vent.	<input checked="" 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 checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/>	<input type="checkbox"/>
9. Tank removed from excavation after PURGING/INERTING; placed on level ground and blocked to prevent movement.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/>	<input type="checkbox"/>
10. Tank cleaned before being removed from site.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/>	<input type="checkbox"/>

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

	Remover Verified	Inspector Verified	NA
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 checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/>	<input type="checkbox"/>

**L. 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) - <u>see Section F.</u> ....	<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"/>

**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 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 checked="" type="checkbox"/> Y <input 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 checked="" 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			

**METHOD OF ACHIEVING 10% LEVEL DESCRIPTION**

Educator Or Diffused Air Blower  
 Educator 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.

**NOTE SPECIFIC PROBLEMS OR NONCOMPLIANCE ISSUES BELOW**

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**H. REMOVER/CLEANER INFORMATION**

Jerry Knudsen                      [Signature]                      00014                      11-22-93  
 Remover Name (print)                      Remover Signature                      Remover Certification No.                      Date Signed

**INSPECTOR INFORMATION**

\_\_\_\_\_  
 Inspector Name (print)                      Inspector Signature                      Inspector Certification No.

\_\_\_\_\_  
 FDID # For Location Where Inspection Performed                      Inspector Telephone Number                      Date Signed