

March 24, 2023  
File No. 25222265.00

Mr. Bruce LeRoy  
Wisconsin Department of Natural Resources  
1027 W. St. Paul Ave.  
Milwaukee, WI 53233

Subject: Monitoring Well Abandonment Documentation  
Boundary Road Landfill  
Menomonee Falls, Wisconsin  
License #0011  
EPA ID #WID058735994

Dear Mr. LeRoy:

On behalf of Waste Management of Wisconsin, Inc. (WMWI), SCS Engineers (SCS) is submitting the enclosed documentation for the abandonment of three monitoring wells located at the WMWI Boundary Road Landfill.

The wells were abandoned as proposed in the Plan of Operation for the Orchard Ridge Recycling and Disposal Facility (RDF) Eastern Expansion, Southern Unit, which was approved by the Wisconsin Department of Natural Resources (WDNR) on December 15, 2022.

The three monitoring wells (P101, TW2R, and TW3R) were abandoned because they were located within the area affected by the first phase of the Boundary Road Landfill waste exhumation project, which is being performed in conjunction with construction of the Orchard Ridge East Expansion, Southern Unit.

In accordance with Wisconsin Administrative Code NR 507.04(2), SCS provided a professional geologist or qualified technician directly supervised by a professional geologist to observe the abandonment of the wells. The abandonment complied with NR 507.08. The monitoring well abandonment forms are included in **Attachment A**. Details of the abandonment are presented below.

The well casings and protective covers were removed from the wells prior to abandonment. In addition, dedicated well tubing and the associated dedicated pump were removed from P101 prior to abandonment.

Each monitoring well was overdrilled utilizing a roto-sonic track rig equipped with a water rotary drill bit. The bit had a welded steel extension rod designed to keep the drill bit centered within the 2-inch PVC riser pipe and screen, preventing deviation from the original borehole. PVC fragments were observed in the drill cuttings for each well overdrill, indicating that the wells were properly overdrilled according to plan. For all wells, the total well depth was reached or exceeded during overdrilling.

Once the final depth of each overdrill was reached, the drill crew pumped bentonite-cement grout to the bottom of the hole using the water rotary drill stem. The drill stem was then retracted in sections, with grout pumped as each section was withdrawn to displace the groundwater and seal the well



Mr. BJ LeRoy  
March 24, 2023  
Page 2

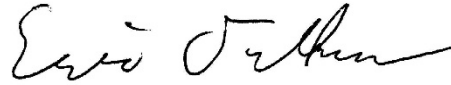
bore from the bottom up. Grout reached the surface and was circulated within the borehole at each former well location.

If you have any questions about the enclosed documentation, please contact Eric Oelkers at 608-444-3934 or eoelkers@scsengineers.com.

Sincerely,



Aaron C. Lofberg  
Staff Professional  
SCS Engineers




Eric Oelkers, PG  
Senior Project Manager / Hydrogeologist  
SCS Engineers

ACL/jsn/EO/SCC

cc: David Buser, WDNR  
Alicia Zewicki, WDNR  
Ann Bekta, WDNR  
Larry Buechel, WMWI  
Dan Roche, WMWI  
Brett Coogan, WMWI  
Greg Konsionowski, WMWI

Encl. Attachment A – Boundary Road Landfill Monitoring Well Abandonment Forms

I:\25222265.00\Deliverables\221128 BRL November 2022 Well Abandonment Documentation\230323\_BRL Well Abandonment Letter.docx



Attachment A  
Boundary Road Landfill  
Monitoring Well Abandonment Forms

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

**Verification Only of Fill and Seal**

**Route to DNR Bureau:**

Drinking Water     
  Watershed/Wastewater     
  Remediation/Redevelopment  
 Waste Management     
  Other: \_\_\_\_\_

1. Well Location Information				2. Facility / Owner Information			
County <b>Waukesha</b>		WI Unique Well # of Removed Well		Hicap #		Facility Name <b>Boundary Road Landfill</b>	
Latitude / Longitude (see instructions) _____ N _____ W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM		Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001		Facility ID (FID or PWS) <b>268152390</b>	
¼ / ¼ or Gov't Lot #		Section <b>1</b>		Township <b>8 N</b>		License/Permit/Monitoring # <b>License #0011</b>	
Well Street Address <b>W124 N8925, Boundary Rd</b>		Well ZIP Code <b>53051</b>		Original Well Owner <b>Waste Management of Wisconsin, Inc.</b>		Present Well Owner <b>Waste Management of Wisconsin, Inc.</b>	
Well City, Village or Town <b>Menomonee Falls</b>		Subdivision Name		Mailing Address of Present Owner <b>W124 N8925 Boundary Road</b>		City of Present Owner <b>Menomonee Falls</b>	
Well ZIP Code <b>53051</b>		Lot #		State <b>WI</b>		ZIP Code <b>53051</b>	

3. Filled & Sealed Well / Drillhole / Borehole Information		4. Pump, Liner, Screen, Casing & Sealing Material			
Reason for Removal from Service <b>Landfill Expansion</b>		WI Unique Well # of Replacement Well		Pump and piping removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input checked="" type="checkbox"/> Monitoring Well		Original Construction Date (mm/dd/yyyy) <b>10/02/1991</b>		Liner(s) removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input type="checkbox"/> Water Well		If a Well Construction Report is available, please attach.		Liner(s) perforated? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input type="checkbox"/> Borehole / Drillhole		Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug		Screen removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		Casing left in place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		Was casing cut off below surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Total Well Depth From Ground Surface (ft.) <b>82</b>		Casing Diameter (in.) <b>2</b>		Did sealing material rise to surface? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Lower Drillhole Diameter (in.) <b>8.5</b>		Casing Depth (ft.) <b>72</b>		Did material settle after 24 hours? If yes, was hole retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Was well annular space grouted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		Depth to Water (feet) <b>17.25</b>		If bentonite chips were used, were they hydrated with water from a known safe source? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

5. Material Used to Fill Well / Drillhole			
From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	90	80 gallons	

**6. Comments**

P101, overdrilled and grouted well, DNR Well ID Number: 069

7. Supervision of Work			DNR Use Only	
Name of Person or Firm Doing Filling & Sealing <b>Horizon Construction &amp; Exploration</b>	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) <b>11/16/2022</b>	Date Received	Noted By
Street or Route <b>764 Tower Drive</b>	Telephone Number <b>(262 ) 692-3348</b>	Comments		
City <b>Fredonia</b>	State <b>WI</b>	ZIP Code <b>53021</b>	Signature of Person Doing Work <i>Caron Helling</i>	Date Signed <b>11/22/2022</b>

Facility/Project Name <b>Boundary Road Landfill</b>		License/Permit/Monitoring Number <b>1537101</b>	Boring Number <b>P101</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Exploration Technology, Inc. - Ken Tainter</b>		Date Drilling Started <b>9/30/91</b>	Date Drilling Completed <b>10/2/91</b>	Drilling Method 4 1/4" I.D. HSA 0-100'
DNR Facility Well No.	WI Unique Well No.	Common Well Name <b>P101</b>	Final Static Water Level <b>744.9</b> Feet MSL	Surface Elevation <b>758.0</b> Feet MSL
Boring Location State Plane <b>437664.0</b> N, <b>2515526.0</b> E <input checked="" type="checkbox"/> S/C/N Lat _____		Local Grid Location (if applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W		
1/4 of <b>SE</b> 1/4 of Section <b>1</b> , T <b>8</b> N, R <b>21</b> <input checked="" type="checkbox"/> E/W Long _____		Feet _____ Feet _____		

County **Waukesha** DNR County Code **68** Civil Town/City/or Village **Menomonee Falls**

Sample Number	Length Recovered (In.)	Blow Counts	Depth in Ft	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					ROD/Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
1	24	16		Stiff, Light Brown Lean CLAY, Trace Gravel, Moist (CL)	CL									SS
2	24	7		Loose, Light Brown Clayey SAND, Moist (SC)	SC									SS
3	24	4	5	Soft, Black Organic CLAY, Trace Plastic, Moist (OL)	OL			0.0	1.0					SS
4	20	6		Loose, Light Brown Gravelly SAND, Moist (SP)	SP				2.5					SS
5	24	15		Stiff to Very Stiff, Light Brown Lean CLAY, Trace Gravel, Moist (CL) Change to Light Gray at 8.0 ft	CL				2.0					SS
6	24	13	10					0.0	3.0					SS
7	24	27							4.0					SS
8	24	17	15						4.0					SS
9	24	28							2.5					SS
10	24	22							4.0					SS
11	24	28	20											SS
12	24	38		Very Stiff, Light Gray Silty CLAY, Little to Some Fine Sand, Trace Gravel, Moist (CL-ML)	CL-ML									SS
13	24	62	25											SS
				Medium Dense, Light Gray Silty SAND, Wet (SM) No Sample 26-28 ft	SM									
14	24	27		Hydro Punch 28-29 ft, Hammered 26-29 ft, Hydro Punch Duplicate Attempted (No Water)					3.5					SS

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature *Thomas J. Karwinski* M. Osten / RJR/JEM Firm **WARZYN INC.**

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.



Sample		Blow Counts	Depth In Ft	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					ROD/ Comments				
Number	Length Recovered (in.)								Standard Penetra- tion	Moisture Content	Liquid Limit	Plastic Limit	P 200					
39	24	48	80	Stiff to Very Stiff, Gray Lean CLAY, Trace Gravel, Moist (CL)	CL									SS				
								2.5 TSF										
40	24	28						1.5 TSF		37	17	99.5					SS	
41	24	34						1.7 TSF									SS	
42	24	20	85					1.5 TSF									SS	
43	24	24						1.7 TSF									SS	
44	24	17	90					1.0 TSF									SS	
45	24	36						2.5 TSF									SS	
46	24	24	95					1.7 TSF									SS	
47	24	34		1.5 TSF									SS					
48	24	25		1.0 TSF									SS					
				100	End of Boring at 100.0 ft													
				105														
				110														
				115														
				120														
				125														

Facility/Project Name  
**Boundary Road Landfill**

Facility License, Permit or Monitoring Number

Type of Well Water Table Observation Well  11  
Piezometer  12

Distance Well Is From Waste/Source Boundary  
25 ft.

Is Well A Point of Enforcement Std. Application?  
 Yes  No

Local Grid Location of Well  
ft.  N  S ft.  E  W

Grid Origin Location  
Lat. \_\_\_\_\_ Long. \_\_\_\_\_ or

St. Plane 437568 ft. N. 2515857 ft. E.

Section Location of Waste/Source  
1/4 of SE 1/4 of Sec. 1, T. 8 N. R. 21 E. W.

Location of Well Relative to Waste/Source  
u  Upgradient s  Sidegradient  
d  Downgradient n  Not Known

Well Name  
TW2R

Wis. Unique Well Number DNR Well Number

Date Well Installed 10/31/91  
m m / d d / y y

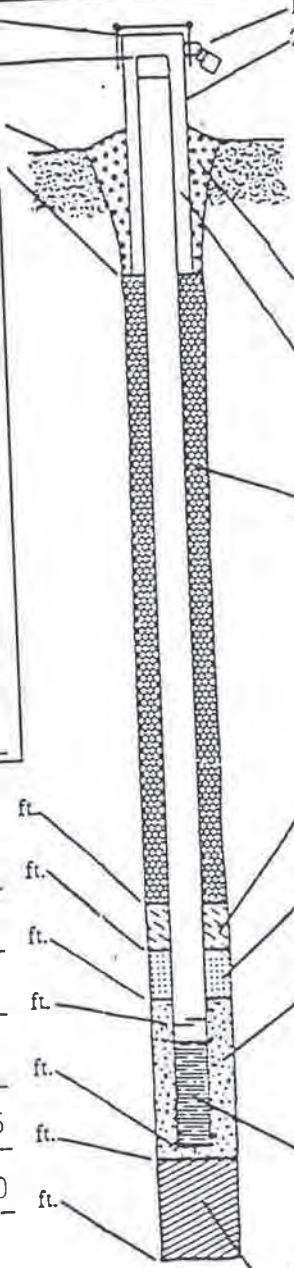
Well Installed By: (Person's Name and Firm)  
Terry March  
Warzyn Inc.

A. Protective pipe, top elevation 766.48 ft. MSL

B. Well casing, top elevation 766.39 ft. MSL

C. Land surface elevation 763.8 ft. MSL

D. Surface seal, bottom 758.3 ft. MSL or 5.5 ft.



1. Cap and lock?  Yes  No

2. Protective cover pipe:  
a. Inside diameter: 3.8 in. / 8.0 ft.  
b. Length:  
c. Material: Steel  04  
Anodized Aluminum  Other   
d. Additional protection?  Yes  No  
If yes, describe: \_\_\_\_\_

3. Surface seal:  
Bentonite  30  
Concrete  01  
Other

4. Material between well casing and protective pipe:  
Bentonite  30  
Annular space seal   
#30 filter sand above ground surf

5. Annular space seal:  
a. Granular Bentonite  33  
b. \_\_\_\_\_ Lbs/gal mud weight ... Bentonite-sand slurry  35  
c. \_\_\_\_\_ Lbs/gal mud weight ... Bentonite slurry  31  
d. \_\_\_\_\_ % Bentonite ... Bentonite-cement grout  50  
e. 2.1 Ft<sup>3</sup> volume added for any of the above  
Tremie  01  
Tremie pumped  02  
Gravity  08  
f. How installed:

6. Bentonite seal:  
a. Bentonite granules  33  
b.  1/4 in.  3/8 in.  1/2 in. Bentonite pellets  32  
c. \_\_\_\_\_ Other

7. Fine sand material: Manufacturer, product name & mesh size  
a. Badger Mining Corp. - fine mesh silica  
b. Volume added 0.5 ft<sup>3</sup>

8. Filter pack material: Manufacturer, product name and mesh size  
a. Red flint sand #30  
b. Volume added 2.0 ft<sup>3</sup>

9. Well casing:  
Flush threaded PVC schedule 40  2  
Flush threaded PVC schedule 80  24  
Other

10. Screen material: Schedule 40 PVC  
a. Screen type:  
Factory cut  1  
Continuous slot  01  
Other

b. Manufacturer: Diedrich  
c. Slot size: 0.010 in.  
d. Slotted length: 9.7 ft.

11. Backfill material (below filter pack):  
None   
Collapsed natural sand

12. USCS classification of soil near screen:  
GP  GM  GC  GW  SW  SP   
SM  SC  ML  MH  CL  CH   
Bedrock

13. Sieve analysis attached?  Yes  No

14. Drilling method used:  
Rotary  50  
Hollow Stem Auger  41  
Other

15. Drilling fluid used: Water  02 Air  01  
Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No  
Describe \_\_\_\_\_

17. Source of water (attach analysis):

E. Bentonite seal, top 763.5 ft. MSL or 0.3 ft.

F. Fine sand, top 758.3 ft. MSL or 5.5 ft.

G. Filter pack, top 757.4 ft. MSL or 6.4 ft.

H. Screen joint, top 756.8 ft. MSL or 7.0 ft.

I. Well bottom 746.7 ft. MSL or 17.1 ft.

J. Filter pack, bottom 746.3 ft. MSL or 17.5 ft.

K. Borehole, bottom 745.8 ft. MSL or 18.0 ft.

L. Borehole, diameter 8.5 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 1.97 in.

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Terry S. March RSR Firm Warzyn Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. See instructions for more information including where the completed form should be sent.



**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

**Verification Only of Fill and Seal**

**Route to DNR Bureau:**

Drinking Water       Watershed/Wastewater       Remediation/Redevelopment

Waste Management       Other: \_\_\_\_\_

**1. Well Location Information**      **2. Facility / Owner Information**

County <b>Waukesha</b>		WI Unique Well # of Removed Well		Hicap #		Facility Name <b>Boundary Road Landfill</b>	
Latitude / Longitude (see instructions) _____ N _____ W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM		Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001		Facility ID (FID or PWS) <b>268152390</b>	
¼ / ¼ or Gov't Lot #		Section <b>1</b>		Township <b>8 N</b>		License/Permit/Monitoring # <b>License #0011</b>	
Well Street Address <b>W124 N8925, Boundary Rd</b>		Well ZIP Code <b>53051</b>		Original Well Owner <b>Waste Management of Wisconsin, Inc.</b>		Present Well Owner <b>Waste Management of Wisconsin, Inc.</b>	
Well City, Village or Town <b>Menomonee Falls</b>		Subdivision Name		Lot #		Mailing Address of Present Owner <b>W124 N8925 Boundary Road</b>	
City of Present Owner <b>Menomonee Falls</b>		State <b>WI</b>		ZIP Code <b>53051</b>			

**Reason for Removal from Service**  
Landfill Expansion

WI Unique Well # of Replacement Well \_\_\_\_\_

**3. Filled & Sealed Well / Drillhole / Borehole Information**

Monitoring Well      Original Construction Date (mm/dd/yyyy)  
**10/31/1991**

Water Well

Borehole / Drillhole      If a Well Construction Report is available, please attach.

Construction Type:

Drilled       Driven (Sandpoint)       Dug

Other (specify): \_\_\_\_\_

Formation Type:

Unconsolidated Formation       Bedrock

Total Well Depth From Ground Surface (ft.)      Casing Diameter (in.)

**18**      **2**

Lower Drillhole Diameter (in.)      Casing Depth (ft.)

**8.5**      **7**

Was well annular space grouted?       Yes       No       Unknown

If yes, to what depth (feet)?      Depth to Water (feet)

**5.5**      **13.6**

**4. Pump, Liner, Screen, Casing & Sealing Material**

Pump and piping removed?       Yes       No       N/A

Liner(s) removed?       Yes       No       N/A

Liner(s) perforated?       Yes       No       N/A

Screen removed?       Yes       No       N/A

Casing left in place?       Yes       No       N/A

Was casing cut off below surface?       Yes       No       N/A

Did sealing material rise to surface?       Yes       No       N/A

Did material settle after 24 hours?       Yes       No       N/A

If yes, was hole retopped?       Yes       No       N/A

If bentonite chips were used, were they hydrated with water from a known safe source?       Yes       No       N/A

Required Method of Placing Sealing Material

Conductor Pipe-Gravity       Conductor Pipe-Pumped

Screened & Poured (Bentonite Chips)       Other (Explain): \_\_\_\_\_

Sealing Materials

Neat Cement Grout       Concrete

Sand-Cement (Concrete) Grout       Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

Bentonite Chips       Bentonite - Cement Grout

Granular Bentonite       Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
<b>Bentonite-Cement Grout</b>	<b>Surface</b>	<b>22</b>	<b>25 gallons</b>	

**6. Comments**

TW2R, overdrilled and grouted well, DNR Well ID Number: 059

**7. Supervision of Work**

Name of Person or Firm Doing Filling & Sealing Horizon Construction & Exploration	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) 11/14/2022	<b>DNR Use Only</b>	
Street or Route 764 Tower Drive	Telephone Number (262 ) 692-3348	Date Received	Noted By	
City Fredonia	State WI	ZIP Code 53021	Signature of Person Doing Work <i>Caron Helling</i>	Date Signed 11/22/2022

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**Route to DNR Bureau:**

Drinking Water       Watershed/Wastewater       Remediation/Redevelopment

Waste Management       Other: \_\_\_\_\_

**1. Well Location Information**      **2. Facility / Owner Information**

County <b>Waukesha</b>		WI Unique Well # of Removed Well		Hicap #		Facility Name <b>Boundary Road Landfill</b>	
Latitude / Longitude (see instructions) _____ N _____ W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM		Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001		Facility ID (FID or PWS) <b>268152390</b>	
¼ / ¼ or Gov't Lot #		Section <b>1</b>		Township <b>8 N</b>		License/Permit/Monitoring # <b>License #0011</b>	
Well Street Address <b>W124 N8925, Boundary Rd</b>		Well ZIP Code <b>53051</b>		Original Well Owner <b>Waste Management of Wisconsin, Inc.</b>		Present Well Owner <b>Waste Management of Wisconsin, Inc.</b>	
Well City, Village or Town <b>Menomonee Falls</b>		Subdivision Name		Lot #		Mailing Address of Present Owner <b>W124 N8925 Boundary Road</b>	
City of Present Owner <b>Menomonee Falls</b>		State <b>WI</b>		ZIP Code <b>53051</b>			

**Reason for Removal from Service**  
Landfill Expansion

WI Unique Well # of Replacement Well \_\_\_\_\_

**3. Filled & Sealed Well / Drillhole / Borehole Information**

Monitoring Well      Original Construction Date (mm/dd/yyyy)  
**10/24/1991**

Water Well

Borehole / Drillhole      If a Well Construction Report is available, please attach.

Construction Type:  
 Drilled       Driven (Sandpoint)       Dug

Other (specify): \_\_\_\_\_

Formation Type:  
 Unconsolidated Formation       Bedrock

**4. Pump, Liner, Screen, Casing & Sealing Material**

Pump and piping removed?       Yes       No       N/A

Liner(s) removed?       Yes       No       N/A

Liner(s) perforated?       Yes       No       N/A

Screen removed?       Yes       No       N/A

Casing left in place?       Yes       No       N/A

Was casing cut off below surface?       Yes       No       N/A

Did sealing material rise to surface?       Yes       No       N/A

Did material settle after 24 hours?       Yes       No       N/A

    If yes, was hole retopped?       Yes       No       N/A

If bentonite chips were used, were they hydrated with water from a known safe source?       Yes       No       N/A

**5. Material Used to Fill Well / Drillhole**

Total Well Depth From Ground Surface (ft.) <b>31.5</b>	Casing Diameter (in.) <b>2</b>	Required Method of Placing Sealing Material <input type="checkbox"/> Conductor Pipe-Gravity <input checked="" type="checkbox"/> Conductor Pipe-Pumped	
Lower Drillhole Diameter (in.) <b>unconfirmed- 8.5 assumed</b>	Casing Depth (ft.) <b>20</b>	<input type="checkbox"/> Screened & Poured (Bentonite Chips) <input type="checkbox"/> Other (Explain): _____	
Was well annular space grouted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite Chips	
If yes, to what depth (feet)? <b>18</b>	Depth to Water (feet) <b>12.5</b>	For Monitoring Wells and Monitoring Well Boreholes Only: <input type="checkbox"/> Bentonite Chips <input checked="" type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Sand Slurry	

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	<b>34</b>	<b>35 gallons</b>	

**6. Comments**

TW3R, overdrilled and grouted well, DNR Well ID Number: 061

**7. Supervision of Work**

Name of Person or Firm Doing Filling & Sealing Horizon Construction & Exploration	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) <b>11/14/2022</b>	<b>DNR Use Only</b>	
Street or Route <b>764 Tower Drive</b>	Telephone Number <b>(262 ) 692-3348</b>	Date Received	Noted By	
City <b>Fredonia</b>	State <b>WI</b>	ZIP Code <b>53021</b>	Signature of Person Doing Work <i>Caron Helling</i>	
			Date Signed <b>11/22/2022</b>	