

Des Moines, IA

PROJECT: Des Moines Co,2024 Well Drill Assist,IA 27224416.00 DATE: 3/11/2025

SUBJECT: Des Moines County Regional Sanitary Landfill - 29-SDP-01-76P - Monitoring Well Installation and Abandonment TRANSMITTAL ID: 00001

PURPOSE: For your approval VIA: Info Exchange

FROM

NAME	COMPANY	EMAIL	PHONE
Clayton Davis Des Moines, IA	SCS Engineers	CDavis@scsengineers.com	+1-515-415-9219

TO

NAME	COMPANY	EMAIL	PHONE
Geoffrey Spain United States		geoffrey.spain@dnr.iowa.gov	

REMARKS: Dear Geoff,

Please find for your download the Des Moines County Regional Sanitary Landfill Monitoring Well Installation and Abandonment Report.

If you have any questions regarding this submittal, please let us know.

Thank you,

Clayton Davis, EIT, Associate Professional
SCS Engineers
1690 All State Court, Suite 100
West Des Moines, IA 50265
515-631-6160 (O)
515-415-9219 (C)
cdavis@scsengineers.com

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DESCRIPTION OF CONTENTS

QTY	DATED	TITLE	NOTES
1	3/5/2025	Des Moines County Well Installation and Abandonment Report.pdf	

Transmittal

DATE: 3/11/2025
TRANSMITTAL ID: 00001

COPIES:

Becky Jolly	
Chris Ball	(Des Moines County)
Eric Houtz	(Des Moines County)
Clayton Davis	(SCS Engineers)
Sean Marczewski	(SCS Engineers)

March 5, 2025
File No. 27224416.00

Mr. Geoff Spain
Iowa Department of Natural Resources
Land Quality Bureau
6200 Park Ave, Suite 200
Des Moines, Iowa 50321

Subject: Monitoring Well Installation and Abandonment
Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

Dear Geoff:

SCS Engineers, on behalf of the Des Moines County Regional Solid Waste Commission (Commission), is submitting the boring log/well construction and abandonment documentation following the well abandonment and installation of monitoring wells associated with the Des Moines County Regional Sanitary Landfill (Landfill).

As presented in correspondence dated June 16, 2022 (Doc #103436), monitoring wells MW-47, MW-48, and MW-49 were installed in October 2024 and MW-45R and MW-46R were installed in January 2025. The monitoring wells were installed to function as attenuation zone point of compliance (AZPOC) monitoring wells in the Corrective Action Groundwater Monitoring Program (CAMP) for the Landfill. Methane monitoring points LFGW-S1 was also installed in October 2024 to provide monitoring of the property boundary south of the Landfill for subsurface methane migration. LFGW-S2R was installed in January 2025 to replace LFGW-S2.

Monitoring wells MW-45 and MW-46 and monitoring point LFGW-S2 were abandoned in accordance with Iowa Administrative Code (IAC) 567-113.10 (2)"d" and replaced with monitoring wells MW-45R, MW-46R, and monitoring point LFGW-S2R, respectively, in January 2025.

Well abandonment documentation for abandoned monitoring wells MW-45, MW-46, and monitoring point LFGW-S2 are included in Attachment A. Boring log and well construction documentation for the newly installed monitoring wells is included in Attachment B. A site map including the locations of the new monitoring wells and monitoring points is included in Figure 1.

If you have any questions regarding this submittal, please contact Sean Marczewski at (712) 661-9682.

Sincerely,



Clayton Davis, E.I.T.
Associate Professional
SCS Engineers



Sean Marczewski
Project Professional II
SCS Engineers

CJD/SAM

Copies: Chris Ball, Des Moines County Solid Waste Commission
Eric Houtz, Des Moines County Regional Sanitary Landfill



Attachment A

Monitoring Well Abandonment Forms



IOWA DEPARTMENT OF NATURAL RESOURCES

Abandoned Water Well
Plugging Record

1. Owner:

Name: Des Moines County Regional Landfill Phone: 319-753-8722
Address: 13758 Washington Road
City: West Burlington State: Iowa Zip: 52655

If this was a Public Water Supply Well, please provide:

PWSID Name: PWSID Number:

2. Location of Well (Cistern):

SE 1/4 of, SE 1/4 of, NW 1/4 of, Section 22, T 70 N, R 3 East West
County: Des Moines Describe well location on property: See Attached Map
GPS Well Location: Latitude: Longitude:

3. Well Description:

Well depth: 16 ft Plugging Description: Overdrilled and filled with bentonite grout
Depth to water: Dry ft.
Casing depth: 5 ft. Casing Material: Steel Plastic Concrete Clay Brick Stone
Casing diameter: 2 in.
Year or decade constructed: 2024 Type of Construction: Drilled Driven Bored Augured Dug
Is this a Monitoring Well? Yes No Well ID: MW-45
Check if Cistern Depth: ft. Diameter: ft.

I certify this well has been plugged as required by rule 567-39.8 of the Iowa Administrative Code (IAC). I agree to provide any additional information the county or department may need concerning this well.

Signature of Owner Date Plugged: 1/29/2025

If plugged by certified well contractor, complete this box:
I have plugged this well as required by rule 567-39.8 of the Iowa Administrative Code (IAC), and will provide an itemized paid invoice to the owner if seeking PWG funds:

Signature of Contractor: Ryan P. [Signature] Cert No: 10115

OR, if plugged by well owner, complete this box:
The property owner has plugged this well following requirements in rule 567-39.8 of the Iowa Administrative Code (IAC) with the oversight and assistance of the designated county agent.

Signature of County Agent: Date Approved:

Eligible for Private Well Grants (PWG) cost share: Yes No (Determined by County Agent)

Complete one form for each well plugged and submit within 30 days to the local county agent: OR, only if no county agent is available, to:

Table with 2 columns: Contact information for Greg Lemke (505 Curran Street, Burlington, Iowa 52601) and Water Supply Section (6200 Park Ave St 200, Des Moines IA 50321).



IOWA DEPARTMENT OF NATURAL RESOURCES

Abandoned Water Well
Plugging Record

1. Owner:

Name: Des Moines County Regional Landfill Phone: 319-753-8722
Address: 13758 Washington Road
City: West Burlington State: Iowa Zip: 52655

If this was a Public Water Supply Well, please provide:

PWSID Name: PWSID Number:

2. Location of Well (Cistern):

SE 1/4 of, SE 1/4 of, NW 1/4 of, Section 22, T 70 N, R 3 East West
County: Des Moines Describe well location on property: See Attached Map
GPS Well Location: Latitude: Longitude:

3. Well Description:

Well depth: 25 ft. Depth to water: 22 ft. Casing depth: 15 ft. Casing diameter: 2 in.
Plugging Description: Overdrilled and filled with bentonite grout
Casing Material: Steel Plastic Concrete Clay Brick Stone
Year or decade constructed: 2024 Type of Construction: Drilled Driven Bored Augured Dug
Is this a Monitoring Well? Yes No Well ID: MW-46
Check if Cistern Depth: ft. Diameter: ft.

I certify this well has been plugged as required by rule 567-39.8 of the Iowa Administrative Code (IAC). I agree to provide any additional information the county or department may need concerning this well.

Signature of Owner Date Plugged: 1/29/2025

If plugged by certified well contractor, complete this box:
I have plugged this well as required by rule 567-39.8 of the Iowa Administrative Code (IAC), and will provide an itemized paid invoice to the owner if seeking PWG funds:

Signature of Contractor: Ryan Pate Cert No: 10115

OR, if plugged by well owner, complete this box:
The property owner has plugged this well following requirements in rule 567-39.8 of the Iowa Administrative Code (IAC) with the oversight and assistance of the designated county agent.

Signature of County Agent: Date Approved:

Eligible for Private Well Grants (PWG) cost share: Yes No (Determined by County Agent)

Complete one form for each well plugged and submit within 30 days to the local county agent: OR, only if no county agent is available, to:

Table with contact information for Greg Lemke (505 Curran Street, Burlington, Iowa 52601) and the Water Supply Section (6200 Park Ave St 200, Des Moines IA 50321).



IOWA DEPARTMENT OF NATURAL RESOURCES

Abandoned Water Well
Plugging Record

1. Owner:

Name: Des Moines County Regional Landfill Phone: 319-753-8722
Address: 13758 Washington Road
City: West Burlington State: Iowa Zip: 52655

If this was a Public Water Supply Well, please provide:

PWSID Name: PWSID Number:

2. Location of Well (Cistern):

SE 1/4 of, SE 1/4 of, NW 1/4 of, Section 22, T 70 N, R 3 East West
County: Des Moines Describe well location on property: See Attached Map
GPS Well Location: Latitude: Longitude:

3. Well Description:

Well depth: 10 ft Plugging Description: Overdrilled and filled with bentonite grout
Depth to water: Dry ft.
Casing depth: 5 ft. Casing Material: Steel Plastic Concrete Clay Brick Stone
Casing diameter: 2 in.
Year or decade constructed: 2024 Type of Construction: Drilled Driven Bored Augured Dug
Is this a Monitoring Well? Yes No Well ID: B-37
Check if Cistern Depth: ft. Diameter: ft.

I certify this well has been plugged as required by rule 567-39.8 of the Iowa Administrative Code (IAC). I agree to provide any additional information the county or department may need concerning this well.

Signature of Owner Date Plugged: 1/29/2025

If plugged by certified well contractor, complete this box:
I have plugged this well as required by rule 567-39.8 of the Iowa Administrative Code (IAC), and will provide an itemized paid invoice to the owner if seeking PWG funds:

Signature of Contractor: Ryan P. [Signature] Cert No: 10115

OR, if plugged by well owner, complete this box:
The property owner has plugged this well following requirements in rule 567-39.8 of the Iowa Administrative Code (IAC) with the oversight and assistance of the designated county agent.

Signature of County Agent: Date Approved:

Eligible for Private Well Grants (PWG) cost share: Yes No (Determined by County Agent)

Complete one form for each well plugged and submit within 30 days to the local county agent:

OR, only if no county agent is available, to:

Table with 2 columns: Contact information for Greg Lemke (505 Curran Street, Burlington, Iowa 52601) and Water Supply Section (6200 Park Ave St 200, Des Moines IA 50321).

Attachment B

Boring Logs/Well Construction Documentation

Pursuant to 567 IAC 82.12, well record submittal is a requirement for all wells drilled in Iowa. Well logs can be submitted to the State via the following methods:

1) *Public Water Supply wells*

Email to: well.records@dnr.iowa.gov or,

Submit a paper copy mailed to: Well Records, 502 E. 9th St., Des Moines, IA
50319-0034

2) *For all remaining wells*

Submit using one of the following options -

- a. Submit electronically through the Private Well Tracking System (PWTS) database, or
- b. Submit a paper copy to the respective county sanitarian (permitting authority)

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: B-37R	Facility Name: Des Moines County Landfill	Facility Street Address: 13758 Washington Road, Burlington, Iowa
Boring Depth (ft) X Diameter (in): 10.0 x 8.25		Drilling Method: Hollow Stem Auger
Well Contractor Name: Terracon - Ryan Peterson		Logged by: Nate Demarr
Registration Number: 10115		

Ground Surface Elevation (ASL):	Top of Casing Elevation (ASL):
Date: 1/29/2025 Start Time:	Date: 1/29/2025 End Time:
UST Number:	
LUST Number:	

Depth (feet)	Well Construction Details	Blow Count if applicable	Sample No.*	Type	PID / FID Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.) First column for USCS
			1	SS		CL Topsoil Brown Sandy Lean Clay
			2	SS		
5			3	SS		
			4	SS		
10			5	SS		CL Gray Glacial Till

* Sample submitted to lab ND-Non detectable DT-Direct push SS-Split Spoon
 Temporary monitoring well was removed and borehole backfilled with bentonite chips upon completion of sampling.

Observations	Date:					
Water Level (ASL)	Level:					
Static Water Level Symbol	Time:					

IOWA DNR DNR 07247138.GPJ IA_DNR.GDT 1/31/25

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: MW-45R	Facility Name: Des Moines County Landfill	Facility Street Address: 13758 Washington Road, Burlington, Iowa
Boring Depth (ft) X Diameter (in): 52.0 x 8.25		Drilling Method: Hollow Stem Auger
Well Contractor Name: Terracon - Ryan Peterson		Logged by: Nate Demarr
Registration Number: 10115		

Ground Surface Elevation (ASL):	Top of Casing Elevation (ASL):
---------------------------------	--------------------------------

Date: 1/29/2025	Date: 1/29/2025	UST Number:	LUST Number:
Start Time:	End Time:		

Depth (feet)	Well Construction Details	Blow Count if applicable	Sample No.*	Type	PID / FID Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.) First column for USCS
			1	SS		Topsoil, Trace Gravel
5			2	SS		CL Brown Gray Lean to Fat Clay, Trace Gravel
			3	SS		
			4	SS		CL/CH Brown Lean Clay
10			5	SS		
			6	SS		CL Gray Lean to Fat Clay, Trace Gravel
15			7	SS		
			8	SS		OL Gray Lean Clay, Trace Organics, Trace Gravel
20			9	SS		
			10	SS		CL Gray Brown Organic Lean Clay, Trace Gravel
25			11	SS		
			12	SS		CL Brown Gray Lean Clay, Trace Gravel
30			13	SS		
			14	SS		CL Dark Gray Sandy Lean Clay
35			15	SS		
			16	SS		CH Dark Gray Brown Fat Clay, Trace Gravel
40			17	SS		
			18	SS		CH Dark Gray Fat Clay, Trace Gravel and Sand
45			19	SS		
			20	SS		CL Dark Gray Lean Clay With Sand, Trace Gravel
50			21	SS		
			22	SS		
			23	SS		
			24	SS		
			25	SS		
			26	SS		

* Sample submitted to lab ND-Non detectable DT-Direct push SS-Split Spoon
 Temporary monitoring well was removed and borehole backfilled with bentonite chips upon completion of sampling.

Observations	Date:	1/29/2025				
Water Level (BGS)	Level:	▽ 48 ft				
Static Water Level Symbol	Time:					

IOWA DNR DNR 07247138.GPJ IA_DNR.GDT 1/31/25

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: MW-46R	Facility Name: Des Moines County Landfill	Facility Street Address: 13758 Washington Road, Burlington, Iowa
Boring Depth (ft) X Diameter (in): 32.0 x 8.25		Drilling Method: Hollow Stem Auger
Well Contractor Name: Terracon - Ryan Peterson		Logged by: Nate Demarr
Registration Number: 10115		

Ground Surface Elevation (ASL):	Top of Casing Elevation (ASL):
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Date: 1/29/2025	Date: 1/29/2025	UST Number:	LUST Number:
Start Time:	End Time:		

Depth (feet)	Well Construction Details	Blow Count if applicable	Sample No.*	Type	PID / FID Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.) First column for USCS
5			1	SS		CL Brown Gray Lean Clay
6		2	SS			
7		3	SS			
8		4	SS			
9		5	SS			
10		6	SS			
11		7	SS			
12		8	SS			
15			9	SS		CL Brown Gray Lean Clay, With Gravel
16			10	SS		
17			11	SS		CL Gray Glacial Till
18			12	SS		
19			13	SS		
20			14	SS		
21			15	SS		
22			16	SS		

* Sample submitted to lab ND-Non detectable DT-Direct push SS-Spit Spoon
 Temporary monitoring well was removed and borehole backfilled with bentonite chips upon completion of sampling.

Observations	Date:	1/29/2025				
Water Level (BGS)	Level:	▽ 28 ft				
Static Water Level Symbol	Time:					

IOWA DNR DNR 07247138.GPJ IA_DNR.GDT 1/31/25

Pursuant to 567 IAC 82.12, well record submittal is a requirement for all wells drilled in Iowa. Well logs can be submitted to the State via the following methods:

1) *Public Water Supply wells*

Email to: well.records@dnr.iowa.gov or,

Submit a paper copy mailed to: Well Records, 502 E. 9th St., Des Moines, IA
50319-0034

2) *For all remaining wells*

Submit using one of the following options -

- a. Submit electronically through the Private Well Tracking System (PWTS) database, or
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2) *For all remaining wells*

Submit using one of the following options -

- a. Submit electronically through the Private Well Tracking System (PWTS) database, or
- b. Submit a paper copy to the respective county sanitarian (permitting authority)



NOTES: 1.) FIELD WORK COMPLETED ON 11/13/2024.

2.) HORIZONTAL DATUM: IOWA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE 1402 (NAD83)

3.) VERTICAL DATUM: NAVD 88

SURVEY CONTROL POINT:
 DES MOINES COUNTY GPS MONUMENT #236
 N: 313488.94
 E: 2279200.88
 ELEV: 703.67

DES MOINES COUNTY REGIONAL SANITARY LANDFILL WEST BURLINGTON, IOWA					
MONITORING WELL / GAS PROBE NUMBER	COORDINATES IOWA STATE PLANE SOUTH ZONE 1402 (NAD83)		ELEVATION (NAVD88)		
	NORTHING	EASTING	TOP OF STEEL CASING	TOP OF 2" PVC PIPE (NORTH EDGE)	GROUND (NORTH EDGE)
LFGW-S1 (36)	316340.71	2277215.63		703.00	699.7
LFGW-S2 (37)	316251.60	2277889.35		704.71	701.2
MW-45	317831.00	2278940.26	632.80	632.57	628.5
MW-46	317775.69	2279021.16	623.49	623.33	618.9
MW-47	317185.44	2276226.61	697.45	697.32	694.0
MW-48	317403.21	2276480.02	703.14	702.99	699.3
MW-49	316490.95	2278077.31	705.50	705.34	702.0

This document shall not be used for any purpose or project for which it is not intended. Changes & alterations to this document shall be indicated by the client and shall become part of the original drawing. All issues and corrections, including attorney fees and costs of printing, shall be the responsibility of the client. No liability shall be assumed by the firm for any errors or omissions in this document, in whole or in part, or for any consequences arising therefrom.

REVISION HISTORY			
NO.	DESCRIPTION	DATE	BY
1			

ISSUED FOR	XXXXXX2024
PROJECT STATUS	

PROJECT NO.	24-2185 / 3722-22
DRAWING ISSUED DATE	11/21/2024
SHEET	

NEWLY INSTALLED GAS PROBES/MONITORING WELLS

DES MOINES COUNTY REGIONAL SANITARY LANDFILL
WEST BURLINGTON, IOWA

Non-Reduced Sheet Size: 30" x 42"
 All sheet sizes have been prepared using standard scales and shall be used as indicated on the drawing.

DESIGNED	DRW
DRAWN	GEP
FIELD BOOK	318A-S
CHECKED	CHECK DATE

SHEET TITLE

PROJECT NO.
24-2185 / 3722-22
DRAWING ISSUED DATE:
11/21/2024
SHEET

1 OF 1