SCS ENGINEERS

December 27, 2024 File No. 25224152.00

Mr. Brian Clepper Columbia Energy Center W8375 Murray Road Pardeeville, WI 53954

Subject: Columbia Energy Center Ash Disposal Facility – Documentation of Construction of Monitoring Wells MW-317, MW-318, and MW-319 and Abandonment of MW-313, MW-314, and MW-315

Dear Mr. Clepper:

SCS Engineers (SCS) has completed the installation of three groundwater monitoring wells and the abandonment of three groundwater monitoring wells at the Columbia Energy Center in Pardeeville, Wisconsin (**Figure 1**). The well construction and abandonment was completed to support compliance with the final Coal Combustion Residuals (CCR) Rule (40 CFR 257.50-107), and this documentation is being submitted for placement in the CCR Rule Operating Record for the facility in accordance with 40 CFR 257.105(h)(2). The well construction and abandonment described in this letter also supports compliance with the groundwater monitoring requirements of NR 507.15(3), and documentation of the well construction and abandonment must be submitted to the Wisconsin Department of Natural Resources.

MW-317, MW-318, and MW-319 were installed as water table observation wells to provide data on shallow groundwater flow and water quality at the north edge of Modules 12 and 13 of the ADF, which were under construction at the time of well installation. Monitoring wells MW-313, MW-314, and MW-315 were previously located at the edge of waste in Modules 10-11, but were abandoned because they were located within the approved footprint of Module 12. The monitoring well locations are shown on **Figure 2**.

BORING LOGS

The borings for monitoring wells MW-317, MW-318, and MW-319 were drilled from April 9 through 11, 2024, by Horizon Construction and Exploration, LLC, of Fredonia, Wisconsin. All drilling and well construction was performed under the supervision of SCS.

Native soils encountered in the soil borings were poorly graded sand with some lean clay at the bottom of the borings. The boring logs are included in **Attachment A**.

MONITORING WELL CONSTRUCTION/DEVELOPMENT

Monitoring wells MW-317, MW-318, and MW-319 were installed by Horizon from April 9 through 11. SCS completed well development on June 5, 2024, and surveyed the wells on April 19, 2024. The wells were re-surveyed on September 15, 2024, to resolve an apparent error in the original survey elevations.



Mr. Brian Clepper December 27, 2024 Page 2

The well construction and development forms for the new wells are included in **Attachment B**. A Well Information Form (Wisconsin Department of Natural Resources form 4400-089) is also included in **Attachment B**. Photographs of the monitoring wells are included in **Attachment C**.

SCS completed hydraulic conductivity testing at the wells on July 17, 2024. Conductivity test results are included in **Attachment D** and are summarized below. These values are the typical range for the soil types observed within the screened intervals.

Well	Calculated Hydraulic Conductivity (cm/sec)
MW-317	7.3x 10 ⁻⁴
MW-318	4.5 x 10 ⁻⁴
MW-319	3.0 x 10 ⁻⁴

MONITORING WELL ABANDONMENT

Monitoring wells MW-313, MW-314, and MW-315 were abandoned on May 22, 2024. These wells were located within the future Module 12 fill area, therefore abandonment was completed by overdrilling the wells and sealing the resulting boreholes in accordance with the requirements of NR 141.25(2)(c). Abandonment documentation for MW-313, MW-314, and MW-315 is included in **Attachment B**. The wells' abandoned status is indicated on the WIF included in **Attachment B**.

Please contact us at 608-224-2830 if you have any questions about the well documentation.

Sincerely,

Bung

Bridget Russell Associate Geologist SCS Engineers

BR/AJR/BK/MDB

Thomas J. Karwoski, PG

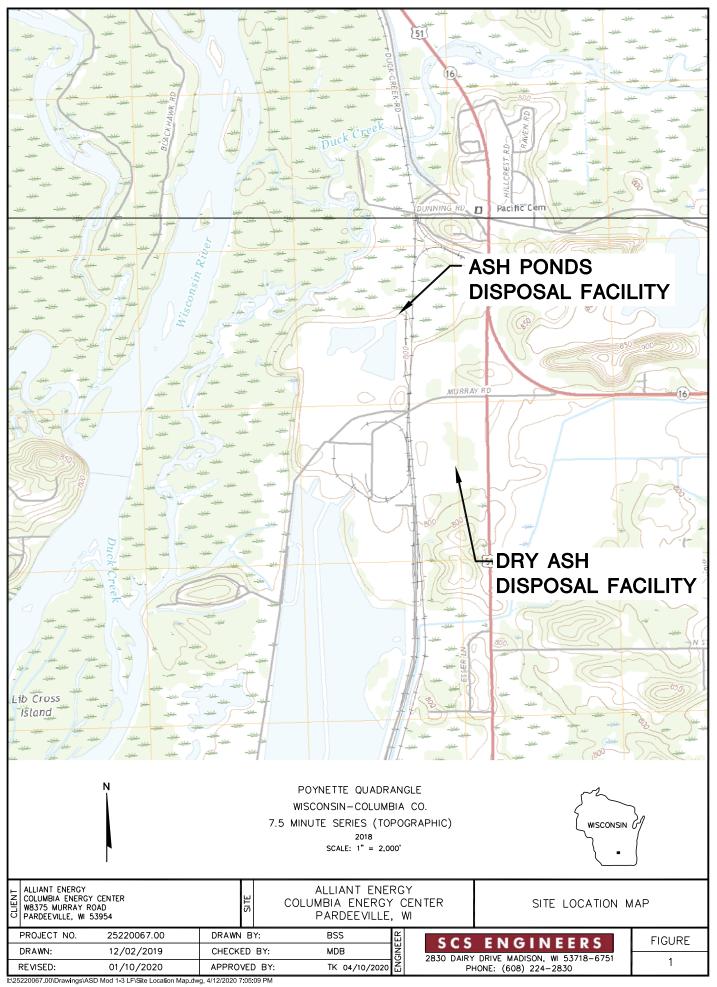
Thomas J. Karwoski, PG Senior Project Manager SCS Engineers

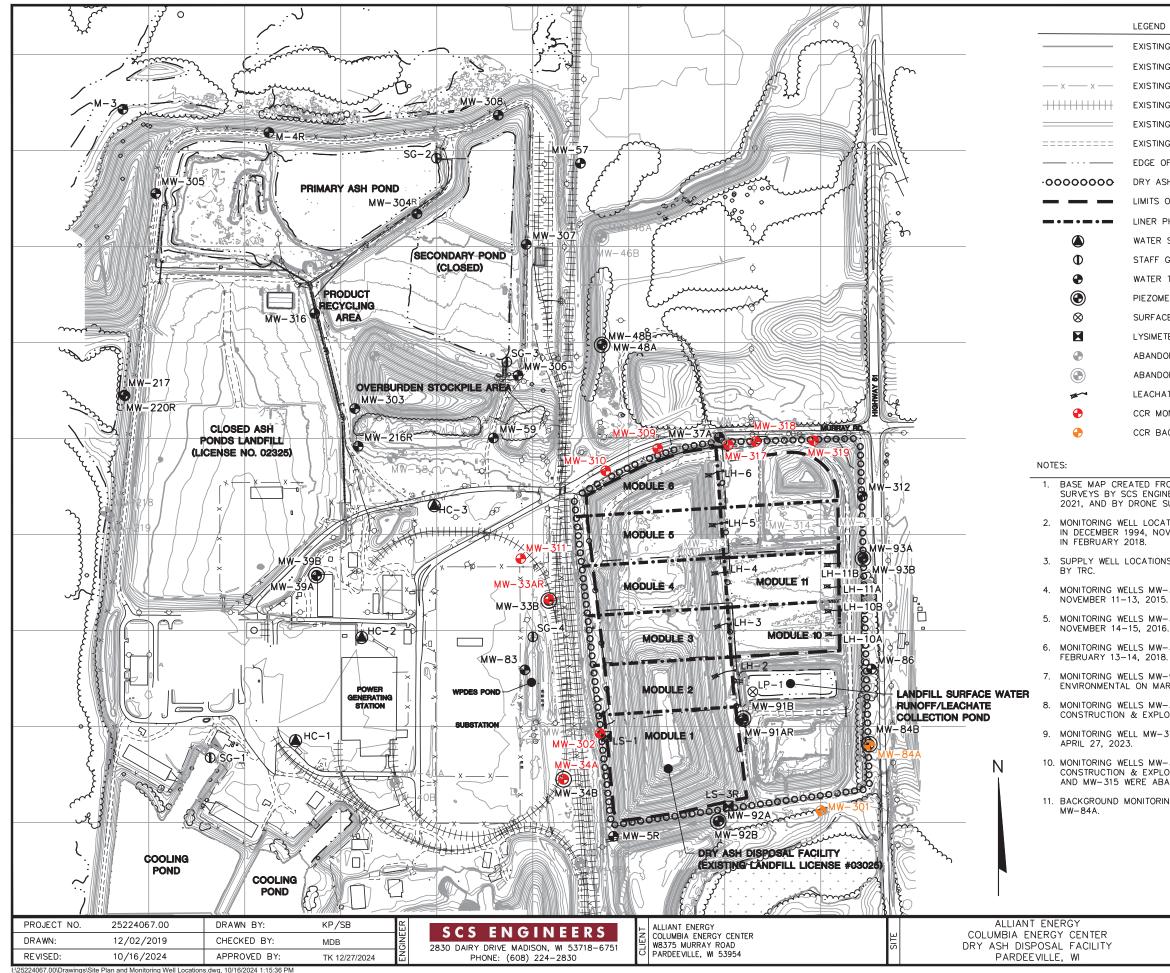
- cc: Jeff Maxted, Alliant Energy Matt Bizjack, Alliant Energy
- Encl. Figure 1 Site Location Map
 Figure 2 Site Plan and Monitoring Well Locations
 Attachment A Boring Logs
 Attachment B Well Construction, Development, and Abandonment Forms
 Attachment C Site Photographs
 Attachment D Hydraulic Conductivity Test Results

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Figures

- 1 Site Location Map
- 2 Site Plan and Monitoring Well Locations





01/17/2025 - Classification: Internal - ECRM13439915

LEGEND

EXISTING MAJOR CONTOUR (10' INTERVAL) EXISTING MINOR CONTOUR (2' CONTOUR) EXISTING FENCELINE EXISTING TRACKS EXISTING PAVED ROAD EXISTING UNPAVED ROAD EDGE OF WATER DRY ASH DISPOSAL FACILITY LIMITS LIMITS OF WASTE LINER PHASE/MODULE LIMITS WATER SUPPLY WELL STAFF GAUGE WATER TABLE WELL PIEZOMETER SURFACE WATER SAMPLE LOCATION LYSIMETER ABANDONED WATER TABLE WELL ABANDONED PIEZOMETER LEACHATE HEADWELL

CCR MONITORING WELL

CCR BACKGROUND MONITORING WELL

1. BASE MAP CREATED FROM AERIAL SURVEY BY KBM, FLOWN DECEMBER 1, 2014, AND GROUND SURVEYS BY SCS ENGINEERS IN MAY 2019, DECEMBER 2020, NOVEMBER 2021, AND DECEMBER 2021, AND BY DRONE SURVEY BY AMES IN NOVEMBER 2022.

2. MONITORING WELL LOCATIONS AND ELEVATIONS SURVEYED BY WISCONSIN POWER AND LIGHT, INC. IN DECEMBER 1994, NOVEMBER 1996, APRIL 2003, AND JANUARY 2016, AND BY SCS ENGINEERS

3. SUPPLY WELL LOCATIONS ARE APPROXIMATE AND ASSUMED BASED ON JANUARY 2013 DRAWINGS

4. MONITORING WELLS MW-301 THROUGH MW-305 INSTALLED BY BADGER STATE DRILLING ON

5. MONITORING WELLS MW-306 THROUGH MW-308 INSTALLED BY BADGER STATE DRILLING ON

6. MONITORING WELLS MW-309 THROUGH MW-311 INSTALLED BY BADGER STATE DRILLING ON

7. MONITORING WELLS MW-93A, MW-93B, AND MW-312 WERE INSTALLED BY CASCADE ENVIRONMENTAL ON MARCH 23-28, 2022.

8. MONITORING WELLS MW-313, MW-314, AND MW-315 WERE INSTALLED BY HORIZON CONSTRUCTION & EXPLORATION ON DECEMBER 12 AND 19, 2022.

9. MONITORING WELL MW-316 WAS INSTALLED BY HORIZON CONSTRUCTION & EXPLORATION ON

10. MONITORING WELLS MW-317, M2-318, AND MW-319 WERE INSTALLED BY HORIZON CONSTRUCTION & EXPLORATION ON APRIL 9-11, 2024. MONITORING WELLS MW-313, MW-314, AND MW-315 WERE ABANDONED BY HORIZON CONSTRUCTION & EXPLORATION ON MAY 22, 2024.

11. BACKGROUND MONITORING WELLS FOR THE DRY ASH DISPOSAL FACILITY ARE: MW-301 AND

500 500 \cap SCALE: 1" = 500'

SITE PLAN AND MONITORING WELL LOCATIONS: COLUMBIA DRY ASH DISPOSAL FACILITY

Attachment A

Boring Logs

Route To:

Watershed/Wastewater Remediation/Redevelopment Waste Management Other 🛛 N

SOIL BORING LOG INFORMATION Form 4400-122

Rev. 7-98

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Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet		5		U S O	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
<u> </u>	I	-		ORGANIC SILT (OL)	dark brown (10YR 3	/3).									+	
			E, I	organics (roots).	, umii oromi (rorres	,,	OL			X						
			E^{-1}	POORLY GRADED S	AND (SP) and gravel,	dark				8						
			E_2	yellowish brown (10Y) trace fine to coarse gra	R 4/6), fine to coarse s vel, rounded sand, sub	and and brounded										
S1	33		Ē	to subangular gravel (f	ill), , broken up rock a	t bottom.)		M				Soil from 0-10'
	55		-3				SP			3						extremely hot, had to collect in
										3						bucket. Steaming when dumped on
			E-4)						table.
			=5				L			3						
			ΕΊ	POORLY GRADED S brown and dark yellow	AND (SP), light yello vish brown (10YR 6/4	wish and 4/4)				Ž						
			-6	fine to medium sand, the	race silt, fine to coarse	gravel,				X						
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S3	32		Ē		any role brown (10VD	7/4)		 		X	0.5	M				Samples from:
			-13	SILTY SAND (SM), very fine to fine sand, s	silt, trace fine to coarse	e angular					0.0					0-11 [°] , 11"-5', 5-7.5', 7.5-10',
			E, I	gravel.			SM			3						10-12.5', 12.5-15', 15-20'
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I hereł	by certif	fy that	the infor	rmation on this form is tr	ue and correct to the b	best of my k	nowled	lge.	-						-	
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Signature Firm SCS Engineers get Runel 2830 Dairy Drive, Madison, WI 53718

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

SOIL BORING LOG INFORMATION SUPPLEMENT

Form 4400-122A

Borin	g Numb	ber	MW	Use only as an attachment to Form 4400-	122.							Page	2 of 3
San	nple								Soil	Prope	rties		
	Length Att. & Recovered (in)	nts	feet	Soil/Rock Description									
er ype	n Ati ered	Cour	In F	And Geologic Origin For	s	<u>і</u>	8	ation	nt e	_	ity		lents
Number and Type	engtl ecov	Blow Counts	Depth In Feet	Each Major Unit	SC	Graphic Log Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
ar Z	Ц Ж Г	В			D		E.	P. S.	ΣU	μ	Pl hl	Р	2 U
			-17										
S4	24				SM			1.0	М				
			- 18										
			E_19										
			-20	POORLY GRADED SAND (SP), yellowish brown (10YR 5/4), trace silt, trace fine to coarse subround									
			-21	(10YR 5/4), trace silt, trace fine to coarse subround gravel.	SP								
			E-22	SILTY SAND (SM), very pale brown and light yellowish brown (10YR 7/3 and 6/4), very fine to fine									
S5	34		-23	yellowish brown (10YR 7/3 and 6/4), very fine to fine sand.					M				Samples from: 20-22', 22-25', 25-27', 27-30'
													23-27, 27-30
			-24										
			-25		SM								
			-26										
			-27										
S6	44			LEAN CLAY (CL), light yellowish brown (10YR 6/4), trace red mottling.					M/W				
			-28	seam of silt and trace sand									
			-29		CL								
			-										
			= 30	SILTY SAND (SM), pale brown (10YR 6/3), very fine									
			-31	to fine sand, clay, trace fine gravel, rounded sand, rounded gravel.									
			-										
			-32										
S7	11		-33		SM			0.25	M/W				30-35' fell out, likely in the
			-										saturated "silty quicksand-like zone" Going to
			-34										40' with catcher bit. First attempt
			-35										0" recovered, second attempt 11" recovered.
			-	POORLY GRADED SAND (SP), very pale brown (10YR 7/3 and 8/4), very fine to coarse sand, fine to									TT Tecovered.
			E-36	coarse gravel and trace silt (outwash), rounded sand, rounded gravel.									
			-37										
S 8	47		Ē		SP				w				Hole sluffed
			-38										back in to 33' after drilling to 40' in saturated
			E 										zone.
			Ę										
L			-40										

SOIL BORING LOG INFORMATION SUPPLEMENT

Form 4400-122A

Borin	<u>g Num</u> t	ber	MW	V-317 Use only as an attachment to Form 4400-1	22.			-					Page	3 of 3
San	nple									Soil	Prop	perties		-
	& (in)	ts	set	Soil/Rock Description										
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Number and Type	Length Att. & Recovered (in)	Blo	Dep		ΩS	Graphic Log	Well Diagram	PID	Standard Penetration	C Mo	Liquid 1 imit	Plastic Index	P 200	RQD/ Comments
			-41				l:目:							
				Yellow (2.5Y 7/6), Iron and grey mottling										
			-42				.:⊟.:							
S9	43				SP									Had to drill to 45' to clear out way
			-43											and prevent sluffing. Well to be set at 42'.
			-44											Sampled from:
			-											40-41', 41-45'.
			-45	End of boring at 45'.		<u></u>	·.···							

Route To:

Watershed/Wastewater Remediation/Redevelopment Waste Management Other 🖾 N

SOIL BORING LOG INFORMATION Form 4400-122

Rev. 7-98

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			_	ORGANIC SILT (OL) (10YR 3/2), gravel, (to	, very dark greyish brow provil).	vn	OL	¦	Š	Š						
			-1		AND (SP), dark yellow											
			Ē	brown (10YR 4/6), tra	ce fine to coarse gravel,	silt, and										
S1			-2	roots.						Š						
S1	35		-3									M				Samples: 0-11", 11"-5', 5-10', 10-15', 15-19',
			_													19-20'
			-4							X						
			Ē							3						
			-5	some dark yellowish b	rown (10YR 3/4).											
			-6							X						
			E													
			<u>-</u> 7	trace black mottling.												
S2	33		-8	_			SP			X		M				
										3						
			-9													
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F			10	trace roots (fill).						{						
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I herel	by certif	y that	the info	ormation on this form is t	rue and correct to the be	st of my k	nowled	lge.								

Signature Firm SCS Engineers Bunel Bridget 2830 Dairy Drive, Madison, WI 53718

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

SOIL BORING LOG INFORMATION SUPPLEMENT

Form 4400-122A

Boring	<u>g Numb</u>	ber	MW	V-318 Use only as an attachment to Form 4400-	122.								Page	2 of 3
San	nple									Soil	Prope	erties		
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er ype	n Att ered	Cour	In F	And Geologic Origin For	s	ic	ш	Ð	ation	ut u	_	ity		ients
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Each Major Unit	USC	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
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							\mathbb{X}							
			-17		SP									
S4	23									М				
			-18											
			-19	Very pale brown (10YR 7/4)										
			20	POORLY GRADED SAND (SP), dark yellowish brown (10YR 4/6 and 3/4) silt, and roots, trace										
			-21	mottling.										
			-22											
S5	15									М				Samples: 20-25'.
			-23		SP									Samples: 20-25', 25-27.5', 27.5-30', 30-35', 35-40' 4.5"
			E 											diameter from now on using
														water
-			25	trace gravel, fine to coarse subround black sand										
			-26											
			E											
~ (-27											
S6	37		-28	POORLY GRADED SAND (SP), very pale brown (10YR 7/4), formation change with color change, very fine to fine rounded sand.						M				DTW~ 31'/32' clay very soft
				fine to fine rounded sand.	SP									
			-29 											
_			-30	LEAN CLAY (CL), very pale brown (10YR 7/4), silt										
			-31	seams.										
			-32											
S7	44		-33		CL				1.0	M/W				
			-34	organic odor										
			-35											
			Ē	SILT (ML), very pale brown (10YR 7/4), trace sand, very soft.										
			-36											
			-37											
S 8	2				ML									35-40' almost no recovery.
			<u>-</u> 38											
			-39											
<u> </u>	i		-40		I	1	·····	l	I	I	I	I		I

SOIL BORING LOG INFORMATION SUPPLEMENT

Form 4400-122A

Sample Soil/Rock Description addLip Soil/Rock Description And Geologic Origin For Soil/Rock Description addLip Soil/Rock Description And Geologic Origin For Soil/Rock Description Bary Soil/Rock Description And Geologic Origin For Soil/Rock Description Soil/Rock Description Soil/Rock Description Mult Image: Soil/Rock Description Soil/Rock Description Soil/Rock Description Mult Image: Soil/Rock Description Soil/Rock Description Mult Index Image: Soil/Rock Description Soil/Rock Description Mult Image: Soil/Rock Description Mult Index Image: Soil/Rock Description Soil/Rock Description Mult Image: Soil/Rock Description Mult Image: Soil/Rock Description Mult Index Image: Soil/Rock Description Image: Soil/Rock Description Mult Image: Soil/Rock Description Soil/Rock Description Image: Soil/Rock Description Image: Soil/Rock Description Image: Soil/Rock Description Image	Plasticity Index sait P 200 RQD/ Comments
S9 17 -41 POORLY GRADED SAND (SP), very pale brown (10YR 7/4), fine to medium sand, fine to coarse gravel, rounded sand, rounded gravel. ML	Plasticity Index P 200 RQD/ Comments
S9 17 -41 POORLY GRADED SAND (SP), very pale brown (10YR 7/4), fine to medium sand, fine to coarse gravel, rounded sand, rounded gravel. ML	Plasticity Index P 200 RQD/ Comments
S9 17 -41 POORLY GRADED SAND (SP), very pale brown (10YR 7/4), fine to medium sand, fine to coarse gravel, rounded sand, rounded gravel. ML	Plastici Index P 200 RQD/ Commo
S9 17 -41 POORLY GRADED SAND (SP), very pale brown (10YR 7/4), fine to medium sand, fine to coarse gravel, rounded sand, rounded gravel. ML	Pla Ind RQ Co Co
S9 17 -41 POORLY GRADED SAND (SP), very pale brown (10YR 7/4), fine to medium sand, fine to coarse gravel, rounded sand, rounded gravel. SP	
S9 17 -41 POORLY GRADED SAND (SP), very pale brown (10YR 7/4), fine to medium sand, fine to coarse gravel, rounded sand, rounded gravel. SP	
S9 17 Image: Constraint of the constraint	
	Samples: 40-41',
$ \begin{array}{ c c c c } \hline -43 \\ \hline & \hline$	41-43'.
End of boring at 43'	

Route To:

Watershed/Wastewater Remediation/Redevelopment Waste Management Other 🛛 N

SOIL BORING LOG INFORMATION Form 4400-122

Rev. 7-98

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				sh Disposal Facility	SCS#: 25224152.00	03025				-			MW-			
-	-	-	Name of	f crew chief (first, last) a	and Firm	Date Dri	lling St	arted		Da	te Drilli	ng Cor	npleted		Drill	ing Method
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	ique W			DNR Well ID No.	Common Well Name	Final Sta			-1	Surfac	e Elevat		024	Bo		Diameter
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Local	Grid Or		(es	timated: 🗌) or Bo	ring Location						Local C					
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Facilit	-			County		County Co	de	Civil To		-	Village					
111	04918	30		Columbia		11		Town	n of Pa	cific						
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e	Att. ed (ount	l Fe	And G	eologic Origin For				_		Lion			~		ats
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Ea	ch Major Unit		CS	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	t q	Plasticity Index	0	RQD/ Comments
un ⁷	Sec	3lov	Dept				U S	Grap Log	Well Diag1	Â	Stan	Cont	Liquid Limit	Plastic Index	P 200	Non QI
<u> </u>		H		ORGANIC SILT (OI), dark brown (10YR 3	/3) trace	OL				блщ				1	<u> </u>
			È	¬ fine rounded sand, or	ganics (roots).	·										
			-1	POORLY GRADED	SAND (SP), yellowish a barse sand, fine to coars	brown										
			E, I	angular gravel, round	ed sand, trace silt.	e glavel,										
			$\begin{bmatrix} -2 \end{bmatrix}$	0 0)	,				\mathbb{X}							
			F,													
~ (=3													
S1	11											M				4.5" diameter rods 7' run for
																first run, 5' for following
			E_5													-
			Ē													
			-6													
			E				SP		ĸ							
_	-		-7	1:14	1	6										
			E I	coarse angular gravel	, large subround cobble (alluvium)	es, fine to										
			-8	0 0	· · · ·											
			F													
			-9													
S2	11		E I									Μ				Samples: 0-5",
			-10													5"-7', 7-12'
			E I													
			E ¹¹													
			E.													
			E ⁻¹²	no recovery					\mathbb{X}							
			÷ 12													
			= 13													
			E-14													
c2			- 1													N
S3	0		E_15						× ×							No recovery 12-17' or 17-22',
I herel	by certif	y that	the info	rmation on this form is	true and correct to the b	best of my k	nowled	lge.								
Signat	ure	0	-24	~ ~	Firm	SCS Eng	inaar									

SCS Engineers Bridget Runel 2830 Dairy Drive, Madison, WI 53718

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

SOIL BORING LOG INFORMATION SUPPLEMENT

Form 4400-122A

Borin	g Numb	ber	MW	Use only as an attachment to Form 440	0-122.							Page	2 of 3
Sar	nple								Soil	Prope	rties		-
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
S4	0		16 17 18 19 20 21										no water used in 12-22'.
S5	21		22 23 24 24 25 26 27	POORLY GRADED SAND (SP), pale brown (10YR 6/3), fine to medium sand, trace fine to coarse gravel, rounded sand, subangular gravel (alluvium)	SP				М				6" diameter rods 27' onward using water 22' onward
S6	11		28 29 30 31 31	SILTY SAND (SM), light yellowish brown (10YR 6/4), very fine to fine sand, trace medium to coarse sand, rounded sand.					M/W				Samples from: 22-27', 27-32' 32-37' might have hit water, going to confirm with next 5' run. Water receding very shallow only on high sensitivity, stuck
S7	16		-33 -34 -35 -36 -37	no medium to coarse sand	SM				M/W				in casing. Felt very different at 38'
S8	13								W				DTW at 38' measured at 20',

SOIL BORING LOG INFORMATION SUPPLEMENT

Form 4400-122A

Boring Num	ber	MW	V-319 Use only as an attachment to Form 4400-	122.								Page	3 of 3
Sample									Soil	Prope	rties		
Number and Type Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
S9 43		41 42 43 44 45 46 47 48 49 -50	LEAN CLAY, yellowish brown (10yr 5/4), some red mottling Original End of boring at 47', ended up dropping to 50' when pulling rods. EOB at 50'.	SM CL				3.5	W				but stuck in casing DTW revised to be believed at 35'

Attachment B

Well Construction, Development, and Abandonment Forms

-	Watershed/Wastewater	Waste Man	agemen 🔀	MONITORING WELI Form 4400-113A	L CONSTRUCTION Rev. 7-98
Facility/Project Name WPL-COL Dry Ash	Local Grid Location of Well		ft. W	Well Name MW-317	
Facility License, Permit or Monitoring No 03025	Lat. 45° 16 16.7629	"Long. <u>-70</u> °	Well Location 24' 07.5014''or	Wis. Unique Well No. VZ439	DNR Well ID No.
Facility ID	St. Plane <u>543466.051</u> ft. Section Location of Waste/So		9.41 ft. E. S/C/N	Date Well Installed $\frac{04}{m}$	$\frac{11}{d} \frac{11}{d} \frac{11}{v} \frac{2024}{v}$
Type of Well Well Code 11 / MW	<u>NW</u> 1/4 of <u>NE</u> 1/4 of Sec	c <u>27</u> , T . <u>1</u> 2		Well Installed By: Nar Adam Sweet	
Distance from Waste/ Enf. Stds.	Location of Well Relative to u Upgradient s	Sidegradient	Gov. Lot Number	Horizon	
Sourceft. Apply X A. Protective pipe, top elevation	d Downgradient n	Not Known	L. Cap and lock?		Yes No
B. Well casing, top elevation	818.88 ft. MSL		2. Protective cover p a. Inside diameter	-	
	816.6 ft. MSL		b. Length:		ft.
D. Surface seal, bottom $_$ $_$ $_$ $\frac{816.6}{100}$ ft. M	SL or 0 ft.		c. Material: anodiz	zed aluminum	Steel 04 Other X
12. USCS classification of soil near scree		N N	d. Additional pro		X Yes No
			If yes, describe	e: cement blocks	Bentonite 🔀 30
Bedrock	Yes No		3. Surface scal:	ahina	
	$tary \ 50$		3/8" bentonite 4. Material between	well casing and protecti	Other
Hollow Stem A Rotosonic	uger 4 1 Diher X		Red flint #40		Bentonite 30 Other X
			5. Annular space se	al: a. Granular/Chipp	
15. Drilling fiuid used: Water 🔀 0 2 Drilling Mud 🗌 0 3	Air 0 1 None 99			nud weight Bentonite	
16. Drilling additives used?	Yes XNo		d. 10 % Benton	nud weight Bent ite Bentonite-c	cement grout \times 50
			e. <u>5.347</u> Ft ⁻¹ f. How installed:	³ volume added for any .	of the above Tremie 🔽 01
Describe			1. How instance.		nie pumped $\times 02$
Tap water horizon offic			6. Bentonite seal:	a. Bentor	Gravity 08 nite granules 33
					ntonite chips \times 3 2
E. Bentonite seal, top 193.0 ft. M	SL or $_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _$		c		Other
F. Fine sand, top788.6 ft. M	SL or $\frac{28}{2}$ ft.		7. Fine sand materia Red Flint #15	al: Manufacturer, produ	ct name & mesh size
G. Filter pack, top786.6 ft. M	SL or $_$ $_$ $\frac{30}{10}$ ft.		a. b. Volume added		
H. Screen joint, top 784.6 ft. M	SL or <u>32</u> ft.		 Filter pack mater a 	ial: Manufacturer, produ Red Flint #40	ict name & mesh size
	SL or $_$ $_$ $\frac{42}{1}$ ft.		b. Volume addee		
			9. Well casing:	Flush threaded PVC so Flush threaded PVC so	• •
J. Filter pack, bottom $\frac{771.6}{1.6}$ ft. M	SL or $__\{-}^{45}$ ft.		0. Screen material:	PVC schedul	Other _ * * * * * *
K. Borehole, bottom771.6 ft. M	SL or $____^{45}$ ft.		a. Screen type:		Factory cut 🔀 11
L. Borehole, diameter $ \frac{6.0}{-}$ in.				Cont 10 slot	tinuous slot 🔲 01 Other 🗌 🎆
0.05			b. Manufacturer c. Slot size:	Johnso	01 in.
-		\setminus	d. Slotted length		<u>10</u> ft.
N. I.D. well casing $-\frac{2.0}{-}$ in.		1	1. Backfill material	(below filter pack):	None 🔀 14 Other 🔲 🏾
I hereby certify that the information on thi		e best of my kno	wledge.		
Signature Bridget Rume	Firm SCS E		2830 Dairv Drive	Madison, WI 53718	
chune	×		, ,		

-	Watershed/Wastewater	Waste Mana	agemen 🔀	MONITORING WELI Form 4400-113A	CONSTRUCTION Rev. 7-98
Facility/Project Name WPL-COL Dry Ash	Local Grid Location of Well		ft. W	Well Name MW-318	
Facility License, Permit or Monitoring No 03025	Lat. 45° 16' 16.2735'	Long. <u>-70°</u>	Well Location 24 00.9814 or	Wis. Unique Well No. VZ438	DNR Well ID No.
Facility ID	St. Plane543484.464 ft. 1 Section Location of Waste/So		211 ft. E. S/C/N	Date Well Installed $\frac{04}{m}$	$\frac{10}{d}$ / $\frac{2024}{v}$
Type of Well Well Code 11 / MW	NW1/4 ofNE 1/4 of Sec	27. T . <u>1</u> 2		Well Installed By: Nan Adam Sweet	
Distance from Waste/ Enf. Stds. Source ft.	Location of Well Relative to u Upgradient s d Downgradient n	Waste/Source Sidegradient Not Known	Gov. Lot Number	Horizon	
			. Cap and lock?		Yes No
B. Well casing, top elevation	ft. MSL	⊟₿╱╯́	2. Protective cover p a. Inside diameter	-	in.
C. Land surface elevation	818.0 ft. MSL		b. Length: c. Material:		ft. Steel
D. Surface seal, bottom $_$ $_$ $_$ $\frac{818.0}{-}$ ft. M	SL or 0 ft.			zed aluminum	Other X
12. USCS classification of soil near scree			d. Additional pro		X Yes No
			If yes, describe 3. Surfacc scal:	e: cement blocks	Bentonite 🔀 30
13. Sieve analysis performed?	Yes No		3/8" bentonite	chips	Concrete 0 1 Other
	otary 5 0		4. Material between	well casing and protecti	ve pipe:
Hollow Stem A	uger 41 Dther X		Red flint #40		Bentonite 30 Other 🔀
15. Drilling fiuid used: Water X0 2	Air 🗌 0 1		5. Annular space se		ed Bentonite 🔲 3 3
	None 99			nud weight Bentonite nud weight Bente	
16. Drilling additives used?	Yes XNo		d. 10 % Benton	ite Bentonite-c	ement grout 🔀 50
			e. <u>5.347</u> Ft [*] f. How installed:	³ volume added for any c	of the above Tremie 0 1
Describe 17. Source of water (attach analysis, if req	uired):				nie pumped 🔀 02
Tap water horizon offic			5. Bentonite seal:	a. Benton	Gravity 08 ite granules 33
					ntonite chips \times 3 2
E. Bentonite seal, top $2 - \frac{797.0}{10}$ ft. M	SL or $__\{21}^{21}$ ft.		c		Other
•••	SL or <u>26</u> ft.		7. Fine sand materia a. <u>Red</u> Flint #15	al: Manufacturer, produ	ct name & mesh size
G. Filter pack, top790.0 ft. M	SL or <u>28</u> ft.		b. Volume added		
H. Screen joint, top787.4 ft. M	SL or <u>30.6</u> ft.		 Filter pack mater a 	ial: Manufacturer, produ Red Flint #40	ict name & mesh size
	SL or40.6 ft.		b. Volume addee		
			9. Well casing:	Flush threaded PVC so Flush threaded PVC so	· ·
J. Filter pack, bottom 775 ft. M	SL or $_$ $_$ $_$ $_$ $_$ $_$ $_$ $_$ ft.		0 Conner	PVC schedule	Other 🔲 🚆
K. Borehole, bottom775.0 ft. M	SL or 43ft.		0. Screen material:a. Screen type:		e 40 Factory cut ⊠ 11 inuous slot □ 01
L. Borehole, diameter $\frac{6.0}{-}$ in.				10 slot	Other 🗌 🎆
M. O.D. well casing -2.25 in.			b. Manufacturerc. Slot size:d. Slotted length		0 <u>1</u> in. <u>10</u> ft.
N. I.D. well casing $-\frac{2.0}{-1}$ in.		1	-	(below filter pack):	None \times 14 Other \square
I hereby certify that the information on thi	s form is true and correct to the	e best of my kno	wledge.		
Signature Bridget Prince	/Firm SCS E	NGINEERS, 2	2830 Dairy Drive,	Madison, WI 53718	
	S				

-	Watershed/Wastewater	Waste Man	agemen 🔀	MONITORING WELL Form 4400-113A	CONSTRUCTION Rev. 7-98
Facility/Project Name WPL-COL Dry Ash	Local Grid Location of Well		ftW_	Well Name MW-319	
Facility License, Permit or Monitoring No. 03025	Lat. 45° 16 14.1238	"Long. <u>-70</u> *	Well Location 23' 47.4896 or	Wis. Unique Well No. VZ437	DNR Well ID No.
Facility ID	St. Plane543488.425 ft. Section Location of Waste/So		822 ft. E. S/C/N	Date Well Installed $\frac{04}{m}$	$\frac{9}{d} \frac{9}{d} \frac{1}{x} \frac{2024}{x}$
Type of Well Well Code 11 / MW	NW1/4 ofNE 1/4 of Sec	c <u>. 27</u> .T. <u>12</u>		Well Installed By: Nan Adam Sweet	e (first, last) and Firm
Distance from Waste/ Enf. Stds. Source ft.	Location of Well Relative to u Upgradient s d Downgradient n	Waste/Source Sidegradient	Gov. Lot Number	Horizon	
	828.81 ft. MSL		L. Cap and lock?		Yes No
B. Well casing, top elevation	828.28 ft. MSL	Π P	2. Protective cover p a. Inside diameter	-	in.
C. Land surface elevation	825.7 ft. MSL		b. Length: c. Material:		ft. Steel 🔲 04
D. Surface seal, bottom $\frac{825.7}{100}$ ft. M:	SL or $__\0^{-1}$ ft.			zed aluminum	Other 🔀 🧾
12. USCS classification of soil near scree		New Contractor	d. Additional pro		🗙 Yes 🗌 No
			If yes, describ 3. Surfacc scal:	e: Cement Diocks	Bentonite \times 30 Concrete 01
	Yes No		3/8" bentonite	chips	Concrete 0 1 Other
U U	tary 50		4. Material between	well casing and protectiv	/e pipe:
Hollow Stem An rotosonic C	uger 41 hther 🗙		Red flint #40		Bentonite 30 Other X
15. Drilling fiuid used: Water $\times 0.2$	Air 🗌 0 1		5. Annular space se		
	None 99			nud weight Bentonite nud weight Bento	
16. Drilling additives used?	Yes 🗙 No		d. <u>10</u> % Benton	ite Bentonite-co volume added for any c	ement grout \times 50
Describe			f. How installed	:	Tremie 🔲 01
17. Source of water (attach analysis, if req	uired):			Trem	$\begin{array}{c c} \text{ie pumped} & \times & 0 \\ \hline & \text{Gravity} & \hline & 0 \\ \end{array}$
Tap water horizon offic	e		6. Ben <u>ton</u> ite seal:	a. Benton	Gravity 08 ite granules 33
E. Bentonite seal, top 797.7 ft. MS	SL or ²⁸ ft.		b. /4 in. 🗙 c	3/8 in. 1/2 in. Ben	tonite chips 🔀 3 2 Other 🔲 🏬
F. Fine sand, top792.7 ft. MS	SL or <u>33</u> ft.		7. Fine sand materia Red Flint #15	al: Manufacturer, produc	et name & mesh size
G. Filter pack, top790.7 ft. MS	SL or $\frac{35}{2}$ ft.		a. b. Volume addee		
H. Screen joint, top 789.2 ft. MS	SL or $_{-}$ $_{-}$ $_{-}$ $_{-}$ ft.		-	ial: Manufacturer, produ Red Flint #40	ct name & mesh size
			a b. Volume adde	d <u>1.5</u> ft	
	SL or $_ \{46.5}^{46.5}$ ft.		9. Well casing:	Flush threaded PVC sc Flush threaded PVC sc	· ·
J. Filter pack, bottom775.7 ft. MS	SL or $_{-}^{50}$ ft.				Other 🔲 🚛
K. Borehole, bottom $ 775.7$ ft. MS	SL or $_$ $_$ $_$ $\stackrel{50}{_}$ ft.		0. Screen material:a. Screen type:		a 40 Factory cut ⊠ 11 inuous slot □ 01
L. Borehole, diameter $\frac{6.0}{}$ in.				10 slot	Other 🗌 🎆
M. O.D. well casing -2.25 in.			 b. Manufacturer c. Slot size: d. Slotted length 		0. <u>1</u> in. _ <u>10</u> ft.
N. I.D. well casing $-\frac{2.0}{-}$ in.		1	-	: (below filter pack):	None \times 14 Other \square
I hereby certify that the information on this		e best of my kno	wledge.		
Signature Bridget Rund	7Firm SCS E	ENGINEERS,	2830 Dairy Drive,	Madison, WI 53718	

State of Wisconsin Department of Natural Resources

MONITORING WELL DEVELOPMENT Form 4400-113B Rev. 7-98

Route to: Watershed/Waste	water	Waste Managemen	nt 🗙			
Remediation/Red	evelopment	Other				
Facility/Project Name COL	County Name	olumbia	Well Name	M	W-317	
Facility License, Permit or Monitoring Number 03025	County Code <u>11</u>	Wis. Unique Well M		DNR Well	ID Number 	
surged with bailer and pumped Image: Constraint of the surged with block and pumped surged with block and pumped Image: Constraint of the surged with block, bailed and pumped surged with block, bailed and pumped Image: Constraint of the surged with block, bailed and pumped compressed air Image: Constraint of the surged with block bailed only Image: Constraint of the surged with block pumped only Image: Constraint of the surged with block	cs No 4 1 6 1 4 2 6 2 7 0 2 0 1 0 5 1 5 0	 11. Depth to Water (from top of well casing) Date Time 12. Sediment in well bottom 13. Water clarity 	a35 b. $\frac{05}{m} / \frac{2}{d}$ c1: 14 14. Clear [] 1	$\frac{23}{y} \text{ ft.}$ $\frac{2}{y} \frac{20}{y} \frac{20}{y}$ $\frac{1}{y} \frac{20}{y} \frac{20}{y}$ $\frac{1}{y} \frac{1}{y} \frac{1}{y} \frac{1}{y}$ $\frac{1}{y} \frac{1}{y} \frac{1}{y} \frac{1}{y}$ $\frac{5}{y} \text{ inches}$ $0 \qquad 0$	After Development $- 43 \cdot 17 \text{ ft.}$ $\frac{24}{y} = \frac{06}{m} / \frac{05}{d} / \frac{12}{y}$ $- 12 : 30 \text{ [x] p.m.}$ $- 1 \cdot 5 \text{ inches}$ Clear $- 20$	
4. Depth of well (from top of well casisng)4	262 min. 4.3_ft. 0in.		Turbid X 1 (Describe) Black	() 	Furbid 🔀 2 5 Describe) grayish brown very turbid no odor	
	$\frac{2}{5}$ gal.	Fill in if drilling flu	ids were used as	nd well is at s	solid waste facility:	
	<u>0</u> gal.	14. Total suspended solids	d <u>495</u>	<u>00</u> mg/l	mg/i	
9. Source of water added N/A		15. COD		mg/l	mg/l	
10. Analysis performed on water added? Y (If yes, attach results)	es 🛛 No	16. Well developed First Name: Bridg Firm: SCS ENG	et / Paul	Last Name:	Russell / Grover e, Madison, WI 53718	3
17. Additional comments on development:						

5/20/2024 (1314-1440): DTW: 35.23 / TD 44.3 / 4.5 inches sediment / 16 W in caring 10 ft filter pack = 9.12x10=91.2 gallons / black color and turbid / Developed for 86 min / Purged dry 3 times / Purged 4.5 gallons / light brown and turbid / DTW after: 37.64 / 0.5 inches of sediment / Bridget Russell

6/05/2024 (934-1230): DTW: -- / TD: 44.5 / volume of water in filter pack: 9.2 gallons / Developed for 176 minutes / Purged 10.5 gallons / gravish brown, very turbid, no odor / 1.5 inches of sediment / DTW 43.17 / Paul Grover

Name and Address of Facility Contact /Owner/Responsible Party First Name: Brian Last Clepper	I hereby certify that the above information is true and correct to the best of my knowledge.
Facility/Firm:Alliant Energy - Columbia	Signature: Bridget Runch
Street: W8375 Murray Rd	Print Name: Bridget Russell and Paul Grover
City/State/Zip: Pardeeville, WI 53954	Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

NOTE: See instructions for more information including a list of county codes and well type codes.

Form 4400-113B

MONITORING WELL DEVELOPMENT

Rev. 7-98

State of Wisconsin Department of Natural Resources

Route to: Watershed/Waste	water	Waste Management	X			
Remediation/Red	evelopment	Other				
Facility/Project Name	County Name		Well Name			
COL	c c	olumbia		MW	/-318	
Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Nu	mber	DNR Well ID) Number	—
03025	11	VZ438				
1. Can this well be purged dry? X 2. Well development method surged with bailer and bailed 4 surged with bailer and pumped 6 surged with block and bailed 4 surged with block and pumped 6 surged with block, bailed and pumped 7 compressed air 2 bailed only 1 pumped only 5	·	 11. Depth to Water (from top of well casing) Date 	Before Deve a36 b. $\frac{05}{m m} / \frac{20}{d}$ c2: $\frac{55}{d}$	$- \frac{6}{y} \frac{1}{y} \frac{202^2}{y} \frac{202^2}{y}$	$\frac{\text{fter Development}}{\frac{1}{2} - \frac{41}{2} - \frac{97}{2} \text{ ft.}}$ $\frac{4}{m} \frac{06}{m} / \frac{05}{d} / \frac{2}{y} \frac{2}{y}$ $\frac{11}{2} \cdot \frac{15}{2} - \frac{2}{p} \text{ m.}$ $\frac{11}{2} \cdot \frac{5}{2} \text{ inches}$	<u>2024</u> y y
Other	149 min.	13. Water clarity	Clear 1 (Turbid X 1 5 (Describe)	5 Tu	ear 20 rbid X 25 escribe)	
4. Depth of well (from top of well casisng) $- \frac{42}{2}$	<u>95</u> ft.		very turbid		yish brown	
5. Inside diameter of well2)in.		brown		odor	
	$\frac{27}{2}$ gal.	Fill in if drilling fluid	s were used and	d well is at so	lid waste facility:	
	gal.	14. Total suspended solids	<u>3410</u> .	<u>0</u> mg/l	<u></u> mg/i	
9. Source of water added N/A		15. COD		mg/l	<u></u> mg/l	
 10. Analysis performed on water added? Ye (If yes, attach results) 17. Additional comments on development: 	es 🔀 No	16. Well developed by First Name: Bridget Firm: SCS ENGIN	/ Paul	Last Name: R	ussell / Grover Madison, WI 53718	

5/20/2024 (1455-1524): DTW: 36.6 / TD 42.95 / 14.0 inches of sediment / 8.27 gallons rose for volume in filter pack + casing = 8.27x10=82.7 gallons / brown color, thick with sediment and very turbid / Developed for 29 min / Purged dry 3 times / Purged 2.0 gallons / brown color, thick with sediment and very turbid / DTW after: 37.12 / 2.5 inches of sediment / Bridget Russell

6/05/2024 (915-1115): DTW: -- / TD: 43.1 / volume of water in filter pack: 8.3 gallons / Developed for 120 minutes / Purged 11 gallons / grayish brown, very turbid, no odor / DTW 41.97 / 1.5 inches of sediment / Paul Grover

Name and Address of Facility Contact /Owner/Responsible Party First Name: Brian Last Clepper	I hereby certify that the above information is true and correct to the best of my knowledge.
Facility/Firm:Alliant Energy - Columbia	Signature: Bridget Runel
Street: W8375 Murray Rd	Print Name: Bridget Russell and Paul Grover
City/State/Zip: Pardeeville, WI 53954	Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin Department of Natural Resources

MONITORING	WELL DEVELOPMENT
Form 4400-113B	Rev. 7-98

Route to: Watershed/Wastew	ater	Waste Management	\mathbf{X}			
Remediation/Redev	velopment	Other				
Facility/Project Name	County Name		Well Name			
COL	С	olumbia		MM	/-319	
Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Nu	umber	DNR Well II) Number	
03025	<u>11</u>	<u>VZ437</u>	, 			
1. Can this well be purged dry? X 2. Well development method X surged with bailer and bailed X surged with bailer and pumped 6 surged with block and bailed 4 surged with block and pumped 6 surged with block and pumped 6 surged with block, bailed and pumped 7 compressed air 2 bailed only 1 pumped only 5 pumped slowly 5	1 No 2 2 0 0 1 1	11. Depth to Water (from top of well casing) Date	Before Devi a42 b. $\frac{05}{m}$ / $\frac{20}{d}$ c3: 40	$\frac{10}{y} \text{ ft.} \qquad -\frac{10}{y} \frac{10}{y} \frac{2024}{y}$	<u>fter Development</u> <u>4</u> <u>48</u> <u>37</u> ft. <u>4</u> <u>06</u> / <u>05</u> / <u>y</u> <u>13</u> : 00 <u>a.m.</u> <u>7</u> p.m.	<u>2024</u> y y y
Other	9 <u>0 min</u> .	13. Water clarity	Clear □ 1 Turbid × 1 (Describe)	5 Tu	ear 20 rbid X 25 escribe)	
4. Depth of well (from top of well casisng) $- \frac{49}{2}$.	. <u>1</u> ft.		very turbid		ayish brown ry turbid	-
5. Inside diameter of well $-\frac{2}{2}$. $\frac{0}{2}$	in.		chunks coming out a	s purged dry NO	odor	-
	0 gal.	Fill in if drilling fluid	brown is were used an	nd well is at so	lid waste facility:	-
7. Volume of water removed from well9		14. Total suspended	13300	<u>0</u> mg/l	mg/l	ł
8. Volume of water added (if any)	gal.	solids				
9. Source of water added N/A		15. COD		mg/l	<u></u> mg/J	l
		16. Well developed by	y: Name (first, la	ast) and Firm		
10. Analysis performed on water added? Yes (If yes, attach results)	No No	First Name: Bridge	t	Last Name: R	ussell	
17 Additional comments on devial annuals		Firm: SCS ENGIN	NEERS, 2830	Dairy Drive,	Madison, WI 5371	8

17. Additional comments on development:

5/20/2024 (1540-1630): DTW: 42.10 / TD 44.6 (difficult to determine TD due to high sediment content) / 60 inches of sediment / 8.03 gallons for volume in filter pack + casing = 8.03x10=80.3 gallons / brown color, thick with sediment and very turbid / Developed for 50 min / Purged dry 3 times / Purged 1.5 gallons / brown color, thick with sediment, less chunks and very turbid / DTW after: 39.50 / TD after: 47.6 / 36 inches of sediment / Bridget Russell

6/05/2024 (915-1115): DTW: -- / TD: 49.1 / volume of water in filter pack: 8.0 gallons / Developed for 140 minutes / Purged 7.5 gallons / grayish brown, very turbid, no odor / DTW 48.37 / ? inches of sediment, very fine uniform SM in bottom / Paul Grover

Name and Address of Facility Contact /Owner/Responsible Party First Name: Brian Last Name: Clepper	I hereby certify that the above information is true and correct to the best of my knowledge.
Facility/Firm:Alliant Energy - Columbia	Signature: Bridget Runch
Street: W8375 Murray Rd	Print Name: Bridget Russell and Paul Grover
City/State/Zip: Pardeeville, WI 53954	Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wis., Dept. of Natural Resources SCS No. 25224152.00 dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report Page 1 of 2

Form 3300-005 (R 4/2015)

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.

		Route	to DNR Bureau:						
Verification Only of Fill and Seal				Watershed/W	Vastewater	Remedi	ation/Redevelopment		
X Waste Managemen			nt 🗌	Other:	·····				
1. Well Location Informatio				2. Facility	/ Owner Inf	formation			
	ique Well # of ved Well	comm	non well	Facility Nam				181	
Columbia W		name	MW-313	WPL - Co Facility ID (F		ergy Center			
Latitude / Longitude (see instructi	ons) For	mat Code	Method Code						
43.4882067	N	XDD	GPS008	License/Perr	nit/Monitoring	1#			
89.4119296	w	DDM				MS Well ID #′	110		
¹ / ₄ / ¹ / ₄ NW ¹ / ₄ SE	Section	Township	Range 🗙 E	Original Wel					
or Gov't Lot #	27	12 N	9 🗌 W			nd Light Comp	any		
Well Street Address				Present Wel		d Light Comp			
W8375 Murray Rd						d Light Compa	any		
Well City, Village or Town			ZIP Code	W8375 M	ess of Preser urray Rd	it Owner			
Pardeeville, WI		539		City of Prese	•		State	ZIP Code	
Subdivision Name		Lot #		Pardeevill			WI	53954	
Reason for Removal from Service		Well # of Re	placement Well	4. Pump, L	iner, Scree	en, Casing & S	ealing Mate	erial	
Within landfill expansion a			placement wen		piping remov				
3. Filled & Sealed Well / Dri		ole Inform	ation	Liner(s) re	emoved?			Yes 🗌 No 🗙 N/A	
X Monitoring Well	Original Constr			Liner(s) pe				Yes No XN/A	
		12/19/2022			moved?		No.		
Water Well	If a Well Construction Report is available,				t in place?			Yes X No N/A	
Borehole / Drillhole	please attach.	5		1	ng cut off belo			Yes No XN/A	
Construction Type:				Did sealing material rise to surface? X Yes No N/A Did material settle after 24 hours? X Yes No N/A					
	(Sandpoint)	Dug	9	Did material settle after 24 hours? X Yes No N/A If yes, was hole retopped? X Yes No N/A					
Other (specify):				If bentonite chips were used were they hydrated					
Formation Type:	_			with water	from a know	n safe source?	X	Yes No N/A	
X Unconsolidated Formation	I	edrock				ng Sealing Materi			
Total Well Depth From Ground Se		ing Diameter	r (in.)		ctor Pipe-Gra ied & Poured		tor Pipe-Pump	ed	
43	2		*	(Bento	nite Chips)	Other (E	Explain):		
Lower Drillhole Diameter (in.)	Cas	ing Depth (ft	.)	Sealing Mate					
8.25	33				ement Grout	arata) Cravit		China	
Was well annular space grouted?	X Yes	s 🗌 No	Unknown		Cement (Conc ng Wells and	Monitoring Well E	Bentonite		
If yes, to what depth (feet)?	Depth to	Water (feet)		X Bentor			ntonite - Ceme		
29	34				ar Bentonite		ntonite - Sand		
5. Material Used to Fill Well	/ Drillhole			From (ft.)	To (ft.)	No. Yards, Sac Volume (ci		Mix Ratio or Mud Weight	
Bentonite Chips				Surface	1.5	3/4 B		N/A	
Bentonite Cement Grout				1.5	47	3.5 bgs port,		90:10	
6. Comments									

7. Supervision of Work	DNR Use Only						
Name of Person or Firm Doing Filling & Sealing	Licens	License # Date of I		Filling & Sealing or Verification	Date Received	Noted By	
Adam Sweet, Horizon Construction & Exploration, LL	& Exploration, LLC (mm/d		(mm/dd/	уууу) 05/22/2024			
Street or Route				Telephone Number	Comments		
764 Tower Drive				(262)692-3347			
City	State	ZIP Code		Signature of Person Doing W SCS Engineers (on behalf of Hor	/ork 👖 👔	Date Signed	
Fredonia	WI	530	021	SCS Engineers (on behalf of Ho	izon Bridget Runel	05/22/2024	

SCS # 25220183.00

State of Wisconsin Department of Natural Resources <u>Route to:</u>	Watershed/Wastewater Remediation/Redevelopment	Waste <u>Managemen</u> X	MONITORING WELL CONSTRUCTION Form 4400-113A Rev. 7-98
Facility/Project Name WPL-Columbia Dry Ash Disposal Facilit	Local Grid Location of Well y ft.	Nft. W.	Well Name MW-313
Facility License, Permit or Monitoring N 03025		ated: [_]) or Well Location 🗖 Long on	Wis. Unique Well No. DNR Well ID No.
Facility ID 111049180	St. Plane542956.598 ft. N Section Location of Waste/Sou		
Type of Well Well Code 11 / MW		1700 12 N, R. 09 10 W	Well Installed By: Name (first, last) and Firm Adam Sweet
Well Code/ MW Distance from Waste/ Enf. Stds.	Location of Well Relative to V u Upgradient s	Sidegradient Gov. Lot Number	
Sourceft. Apply	$d \times Downgradient n$	Not Known	Horizon Construction and Exploration
A. Protective pipe, top elevation	ft. MSL	1. Cap and lock?	
B. Well casing, top elevation	ft. MSL	2. Protective cover a. Inside diameter	er:4 in.
C. Land surface elevation	~817.80 ft. MSL	b. Length:	<u>5</u> ft.
D. Surface seal, bottom ft. I	/SL or ft.	c. Material:	Steel 🔀 04 Other
12. USCS classification of soil near scre		d. Additional pr	
		If yes, descrit	
SM SC ML MH Bedrock		3. Surface scal:	$\begin{array}{c c} \mathbf{Bentonite} & \mathbf{X} & 30 \\ \mathbf{Concrete} & 01 \end{array}$
13. Sicve analysis performed?	Yes No		Other
	totary 5 0	4. Material betwee	n well casing and protective pipe:
Hollow Stem	Auger 41 Other X	Filter sand	Bentonite 🗵 30 Other 🗵
		5. Annular space se	eal: a. Granular/Chipped Bentonite 🔀 3 3
15. Drilling fiuid used: Water X 0 2 Drilling Mud 0 3	Air 01 None $\times 99$		mud weight Bentonite-sand slurry 35 mud weight Bentonite slurry 31
			mud weight 31 nite Bentonite-cement grout 50
16. Drilling additives used?]Yes XNo		³ volume added for any of the above
Describe NA		f. How installed	
17. Source of water (attach analysis, if re	DOC.		Tremie pumped 0 2 Gravity X 0 8
Horizon's drilling sho	p	6. Bentonite seal:	a. Bentonite granules 33
E. Bentonite seal, top $-\frac{-817.80}{5}$ ft. N	fSL or 0ft.	b. []/4 in. 🔀	3/8 in. 1/2 in. Bentonite chips ∑ 3 2 Other ○
F. Fine sand, top68.80 ft. N	ISL or ft.	7. Fine sand materi	ial: Manufacturer, product name & mesh size
G. Filter pack, top6.80 ft. N	ISL or31 ft.	b. Volume adde	dft ³
H. Screen joint, top~784.80 ft. M	ISL or33 ft.		rial: Manufacturer, product name & mesh size Red Flint #7
		a. b. Volume adde	
I. Well bottom -774.80 ft. N	ISL or 43 n.	9. Well casing:	Flush threaded PVC schedule 40 2 3 Flush threaded PVC schedule 80 2 4
J. Filter pack, bottom772.80 ft. M	ISL or 45ft.		Other
K. Borehole, bottom772.80 ft. M	ISL or45ft.	a. Screen type:	Factory cut X 11
L. Borehole, diameter in		×	Continuous slot 0 1
M. O.D. well casing -2.31 in		b. Manufacturer c. Slot size:	0. <u>010</u> in.
N. I.D. well casing in		d. Slotted lengt	
N. I.D. well casing 2.21 in	8	SP- native, ca	
I hereby certify that the information on the		best of my knowledge.	
Signature Jackie Rennebohn	Firm SCS EN	NGINEERS, 2830 Dairy Drive	, Madison, WI 53718

State of Wis., Dept. of Natural Resources SCS No. 25224152.00 dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report Page 1 of 2

Form 3300-005 (R 4/2015)

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		Route	to DNR Bureau:						
Verification Only of Fill and Seal				Watershed/W	/astewater	Remedi	ation/Redevelopment		
X Waste Managemen			nt 🗌	Other:	······				
1. Well Location Information				2. Facility	/ Owner Inf	ormation			
	nique Well # of oved Well	com	non well	Facility Nam				(2)	
	<u>C 1 9</u>	9 name	e MW-314	WPL - Co Facility ID (F		ergy Center			
Latitude / Longitude (see instruct	tions) F	ormat Code	Method Code						
43.4882614	N	XDD	GPS008	License/Perr	nit/Monitoring	. #			
89.4111030	w	DDM				MS Well ID #1	12		
^{1/4} / ^{1/4} NW ^{1/4} SE	Section	Township	Range 🗙 E	Original Wel					
or Gov't Lot #	27	12 N	9 🗌 W			d Light Comp	any		
Well Street Address				Present Wel					
W8375 Murray Rd						d Light Compa	any		
Well City, Village or Town			ZIP Code	W8375 M	ess of Presen urray Rd	it Owner			
Pardeeville, WI		539		City of Prese	•		State	ZIP Code	
Subdivision Name		Lot #	F	Pardeevill			WI	53954	
Reason for Removal from Servic			eplacement Well			en, Casing & S		rial	
Within landfill expansion a			eplacement wen		piping remov		X		
3. Filled & Sealed Well / Dr	-	ehole Inforn	nation	Liner(s) re	moved?			Yes 🗌 No 🔀 N/A	
		struction Date		Liner(s) po	erforated?			Yes 🗌 No 🗙 N/A	
X Monitoring Well	-	12/01/2022			moved?		X		
Water Well	If a Well Cor	If a Well Construction Report is available,			ft in place?			Yes 🗙 No 🗌 N/A	
Borehole / Drillhole please attach.			Was casir	ng cut off belo	w surface?		Yes 🗌 No 🗙 N/A		
Construction Type:					g material rise		× N		
X Drilled Driven	(Sandpoint)	Du	g	Did material settle after 24 hours?					
Other (specify):				If yes, was hole retopped? X Yes No N/A If bentonite chips were used, were they hydrated					
Formation Type:						n safe source?	Nutrated X	Yes No N/A	
X Unconsolidated Formation		Bedrock		Required Me	thod of Placir	ng Sealing Materia	al		
Total Well Depth From Ground S	Surface (ft.) C	asing Diamete	er (in.)		ctor Pipe-Grav	vity 🗙 Conduct	tor Pipe-Pump	ed	
43.5	2	2			ned & Poured nite Chips)	Other (E	Explain):		
Lower Drillhole Diameter (in.)	С	asing Depth (f	t.)	Sealing Mate	erials				
8.25	3	3.5			ement Grout		Concrete		
Was well annular space grouted?	XY	′es 🗌 No	Unknown		Cement (Conc	crete) Grout <i>Monitoring Well B</i>	Bentonite		
If yes, to what depth (feet)?	Depth t	o Water (feet)		X Benton	-		ntonite - Ceme		
29.5	34	, ,			ar Bentonite		ntonite - Sand		
5. Material Used to Fill We	ll / Drillhole			From (ft.)	To (ft.)	No. Yards, Sack	ks Sealant or	Mix Ratio or	
Bentonite Chips				Surface	1.5	Volume (cir 3/4 B		Mud Weight N/A	
Bentonite Cement Grout				1.5	45	3 bags port.	and the first set of the second se	90:10	
						s sago port.	5.20 Jone		
6. Comments									

7. Supervision of Work				DNR Use Only				
Name of Person or Firm Doing Filling & Sealing		e #	Date of	Filling & Sealing or Verification	Date Received	Noted By		
Adam Sweet, Horizon Construction & Exploration, LLC	C	(mm/dd/yyyy) 05/22/2024						
Street or Route				Telephone Number	Comments			
764 Tower Drive				(262)692-3347				
City	State	ZIP Code		Signature of Person Doing W (SCS Engineers on behalf of Ho	ate Signed			
Fredonia	530	021	(SCS Engineers on behalf of Ho	05/22/2024				
	2420015							

SCS # 25220183.00

	Watershed/Wastewater	Waste Mana	agemen X	MONITORING WELL Form 4400-113A	CONSTRUCTION Rev. 7-98
Facility/Project Name WPL-Columbia Dry Ash Disposal Facility	Local Grid Location of Well		ftE.	Well Name MW-314	
Facility License, Permit or Monitoring No. 03025		hated:]) or	Well Location	Wis. Unique Well No. WC199	DNR Well ID No.
Facility ID 111049180	St. Plane542978.081 ft. 1 Section Location of Waste/So	N, 2124778.2	237 ft. E. S/C/N	Date Well Installed m m /	$\frac{01}{4} \frac{2022}{x x x x x}$
Type of Well	NW1/4 of NE1/4 of Sec		N.R. 09 EE	Well Installed By: Name	
Well Code <u>11</u> / <u>MW</u>	Location of Well Relative to	Waste/Source	Gov. Lot Number	Adam Sweet	<u> </u>
Distance from Waste/ Enf. Stds. Sourceft. Apply	u Upgradient s d X Downgradient n	Sidegradient		Horizon Constructio	·
A. Protective pipe, top elevation	ft. MSL		. Cap and lock?		Yes No
B. Well casing, top elevation	821.57 ft. MSL		. Protective cover p a. Inside diameter	() all	4 _{in.}
C. Land surface elevation 2	819.07 ft. MSL		b. Length:		$\frac{1}{2} = \frac{1}{5} \frac{1}{6}$
D. Surface seal, bottom ft. M			c. Material:		Steel 🗙 04
12. USC <u>S classification of so</u> il near scree			d. Additional pro	lection?	Other
	sw sp 🗵 🔪		If yes, describe		
SM SC ML MH	СL 🗌 СН 🔲 🛛 🕌		. Surface scal:		Bentonite 🗙 30
13. Sieve analysis performed?	Yes No		, buillee soul.		Concrete 01
	$tarv \Box 50$		Material between	well casing and protective	Other
Hollow Stem An					Bentonite X 30
c	Other		Filter sand		Other 🔀 🌉
15. Drilling fiuid used: Water 0 2	Air 01	5	. Annular space set	al: a. Granular/Chipped	
	None X 99	1 KS31		nud weight Bentonite- nud weight Benton	
		837		ite Bentonite-ce	
16. Drilling additives used?	Yes XNo			³ volume added for any of	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Describe NA			f. How installed:		$\begin{array}{c c} Tremie & 0 \\ 0 \\ c \\ pumped & 0 \\ 2 \\ \end{array}$
17. Source of water (attach analysis, if req	uired):			Tienn	e pumped 02 Gravity X 08
NA		6	. Bentonite seal:	a. Bentonit	
E. Bentopite seal, top ~819.07 ft, MS	SL or ⁰ ft.	. 188	b	3/8 in. 1/2 in. Bent	onite chips \mathbf{X} 3 2
,,,,			c		Other
F. Fine sand, top $-\frac{-789.57}{5}$ ft. MS	SL or $_{-}$		Red Flint #5	al: Manufacturer, product	i name & mesh size
G. Filter pack, top787.57 ft. MS	SL or $_{31.5}^{31.5}$ ft.		b. Volume added	10.71_ft ³	
~785.57 c.) (SL or <u>33.5</u> ft.		8. Filter pack mater	ial: Manufacturer, produc	
H. Screen joint, top $2^{-2/85.5/}$ ft. MS	sL or II.		a h. Volume added	Red Flint #7 4.26 ft ³	
I. Well bottom \sim 775.57 ft. MS	SL or43.5ft.	9	b. Volume added Well casing:	Flush threaded PVC sch	edule 40 🗙 23
J. Filter pack, bottom $2^{-775.57}$ ft. MS	SL or 43.5 ft.			Flush threaded PVC sch	other 24
K. Borehole, bottom774.07 ft. MS	63	10	 Screen material: a. Screen type: 	PVC	actory cut 🔀 11
Simon and a second se			a. Gerten type.		$\frac{1}{10000000000000000000000000000000000$
L. Borehole, diameter in.	122			Monoflex	Other 🗌 💹
M. O.D. well casing 2.31 in.			b. Manufacturerc. Slot size:		0. <u>010</u> in.
see control and constant inter-internet and the control of the internet of the		\backslash	d. Slotted length	:	<u>10</u> ft.
N. I.D. well casing 2.21 in.		11	Backfill material <u>SP- native, ca</u>	(below filter pack): ve in	None 14 Other 🗙
I hereby certify that the information on this	s form is true and correct to the	best of my know	wledge.		
Signature Jackie Rennebohm	Firm		2830 Dainy Driva	Madison, WI 53718	
			LOGO Daily Drive,		

State of Wis., Dept. of Natural Resources SCS No. 25224152.00 dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report Page 1 of 2

Form 3300-005 (R 4/2015)

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		Route	to DNR Bureau:					
Verification Only of Fi	II and Seal	D	rinking Water		Watershed/W	/astewater	Remedi	ation/Redevelopment
	laste Managemer	nt 🗌	Other:		And a second			
1. Well Location Information				2. Facility	/ Owner Inf	formation		
	nique Well # of oved Well	comm	non well	Facility Nam				
Columbia P		9 name	MW-315	WPL - Co Facility ID (F		ergy Center		
Latitude / Longitude (see instruct	ions) For	rmat Code	Method Code					
43.4883708	N	XDD	GPS008	License/Perr	nit/Monitoring	1#		
89.4100212	w	DDM				MS Well ID #1	14	
^{1/4} / ^{1/4} NW ^{1/4} SE	Section	Township	Range 🗙 E	Original Wel				
or Gov't Lot #	27	12 N	9 🗌 W			d Light Compa	any	
Well Street Address				Present Wel				
W8375 Murray Rd						d Light Compa	iny	
Well City, Village or Town			ZIP Code	W8375 M	ess of Preser urray Rd	it Owner		
Pardeeville, WI		539		City of Prese			State	ZIP Code
Subdivision Name		Lot #		Pardeevil			WI	53954
Reason for Removal from Service		Moll # of Po	placement Well			en, Casing & S		
Within landfill expansion a		vveii# 01 Ke	placement wen		piping remov		X	
3. Filled & Sealed Well / Dr		nole Inform	ation	Liner(s) re	moved?			Yes 🗌 No 🔀 N/A
X Monitoring Well	Original Constr			Liner(s) p	erforated?			Yes 🗌 No 🔀 N/A
		12/02/202	2	Screen re			X	
Water Well	If a Well Cons			Casing lef	t in place?			Yes 🗙 No 🗌 N/A
Borehole / Drillhole	please attach.			Was casir	ig cut off belo	w surface?		Yes 🗌 No 🔀 N/A
Construction Type:	3				g material rise		X	
X Drilled Driven	(Sandpoint)	Dug)		ial settle after			
Other (specify):					was hole reto		X X	Yes No N/A
Formation Type:						used, were they h n safe source?	National X	Yes No N/A
X Unconsolidated Formation	E	Bedrock				ng Sealing Materia	al	
Total Well Depth From Ground S	urface (ft.) Cas	sing Diameter	r (in.)		ctor Pipe-Gra	vity 🔀 Conduct	tor Pipe-Pump	ed
43	2				ed & Poured nite Chips)	Other (E	xplain):	-
Lower Drillhole Diameter (in.)	Cas	sing Depth (ft	.)	Sealing Mate	erials			
8.25	33				ement Grout		Concrete	
Was well annular space grouted?	X Ye	s 🗌 No	Unknown		Cement (Conc	crete) Grout <i>Monitoring Well B</i>	Bentonite	
If yes, to what depth (feet)?	Depth to	Water (feet)		X Benton			ntonite - Ceme	
29	33	,			ar Bentonite		ntonite - Sand	
5. Material Used to Fill Wel					REAL PRIME	No. Yards, Sack		Mix Ratio or
	i / Drilinole			From (ft.)	To (ft.)	Volume (cir	cle one)	Mud Weight
Bentonite Chips Bentonite Cement Grout				Surface	1.5	3/4 B		N/A
Demonite Cement Grout				G.1	45	3 bags port.	J.25 Dent.	90:10
6. Comments								

7. Supervision of Work	DNR Use Only							
Name of Person or Firm Doing Filling & Sealing		e #	Date of	Filling & Sealing or Verification	Date Received	Noted By		
Adam Sweet, Horizon Construction & Exploration, LLC		(mm/dd/yyyy) 05/22/2024						
Street or Route			ľ	Telephone Number	Comments			
764 Tower Drive		(262)692-3347						
City	State	ZIP Code		Signature of Person Doing W	/ork	Date Signed		
Fredonia	WI	530	021	Signature of Person Doing W SCS Engineers (on behalf of Hor	izon) Dridget Runel	05/23/2024		

SCS # 25220183

	Watershed/Wastewater	Waste Man	agemen X	MONITORING WELL CONSTRUCTIO Form 4400-113A Rev. 7-98	N
Facility/Project Name WPL-Columbia Dry Ash Disposal Facility	Local Grid Location of Well ft.		ftE.	Well Name MW-315	
Facility License, Permit or Monitoring No. 03025	Local Grid Origin (esti	mated: []) or "Long	Well Location	Wis. Unique Well No. DNR Well ID No.	-
Facility ID 111049180	St. Plane <u>543019.956</u> ft. Section Location of Waste/S	. N, 2125065.	014 ft. E. S/C/N	Date Well Installed $\frac{12}{m} \frac{2}{m} \frac{2}{d} \frac{2}{v} \frac{2022}{v}$	_
Type of Well Well Code 11 / MW	<u>NW1/4 of NE1/4 of Sector NE1/</u>		N, R09 ⊠E	Well Installed By: Name (first, last) and Fire Adam Sweet	m
Well Code/ MW Distance from Waste/ Enf. Stds.	Location of Well Relative to u Upgradient s	Waste/Source	Gov. Lot Number		
Sourceft. Apply	$d \times Downgradient n$		· <u> </u>	Horizon Construction and Exploration	
A. Protective pipe, top elevation	ft. MSL		. Cap and lock?		
B. Well casing, top elevation	819.78 ft. MSL		a. Inside diameter		
C. Land surface elevation 2	817.28 ft. MSL		b. Length:	$\begin{array}{c} \overline{5} n. \\ - \overline{5} n. \end{array}$	
D. Surface seal, bottom ft. MS			c. Material:	Steel 🔀 04	۱ ۲
12. USCS classification of soil near screet	2 - 37/4° 3 • 1		d. Additional pro	tection?	100 A
	sw 🗆 sp 🗵 🛛 🔪		If yes, describe		
SM SC ML MH	ст П сн 🗆 🛛 🕅		3. Surface scal:	Bentonite 🔀 30	
13. Sicve analysis performed?	Yes No			Concrete 0 1 Other	
	tary 50		. Material between	well casing and protective pipe:	2
Hollow Stem Au				Bentonite 🔀 30)
o			Filter Sand	Other X	
15. Drilling fiuid used: Water 0 2	Air 01		5. Annular space sea bLbs/gal n	ud weight Bentonite-sand slurry 35	
Drilling Mud 0 3	None 99		cLbs/gal n	uud weight Bentonite slurry 🔲 31	I
16. Drilling additives used?	Yes 🗙 No			ite Bentonite-cement grout 50)
			e. <u>10.23 Pt</u> f. How installed:	volume added for any of the above Tremie 0 :	1
Describe NA			I. HOW Instance.	Tremie pumped 0 2	
17. Source of water (attach analysis, if required NA	uired):			Gravity 🔀 0.8	
NA			5. Bentonite seal: b	a. Bentonite granules 33 3/8 in. $1/2$ in. Bentonite chips 32	
E. Bentonite seal, top $-\frac{817.28}{2}$ ft. MS	5L or0ft.		c	Other	22 24
F. Fine sand, top788.28 ft. MS	SL or ft.		7. Fine sand materia Red Flint #5	I: Manufacturer, product name & mesh size	
G. Filter pack, topft. MS	SL or 31ft .		a. b. Volume added	$1 _ 0.71 _{ft}^3$	
~784.28 €	SL or 33 ft.		3. Filter pack mater	ial: Manufacturer, product name & mesh siz	
H. Screen joint, top784.28 ft. MS	L or1.		a b. Volume addee	$\frac{\text{Red Flint #7}}{4.97 \text{ ft}^3}$]
I. Well bottom ~774.28 ft. MS	SL or $43n$.		9. Well casing:	Flush threaded PVC schedule 40 X 23	3
~772.28	SLor 45ft			Flush threaded PVC schedule 80 24	
J. Filter pack, bottom772.28 ft. MS	SL or		0. Screen material:	Other 🔲 🚛	ł
K. Borehole, bottom772.28 ft. MS	SL or $_$ $_$ $_$ $\overset{45}{}$ ft.		a. Screen type:	Factory cut X 11	3
8 25			anne annearan an stàite an Chine	Continuous slot 🔲 0 j	
L. Borehole, diameter in.			h	Other 🔲 🎆	ŝ
M. O.D. well casing $-\frac{2.31}{1.000}$ in.		\backslash	b. Manufacturerc. Slot size:d. Slotted length	0. <u>010</u> in	
N. I.D. well casing 2.21 in.		1	-	(below filter pack): None X 14	
			13	Other	
I hereby certify that the information on this		ne best of my kno	wledge.		_
Signature Jackie Rennebohm	Firm SCS I	ENGINEERS, 2	2830 Dairy Drive,	Madison, WI 53718	

State of Wisconsin Department of Natural Resources PO Box 7921, Madison WI 53707-7921 dnr.wi.gov

GROUNDWATER MONITORING WELL AND POINT INFORMATION

Form 4400-089 (R 04/19)

Page 1 of 5

Use the Groundwater Monitoring Well and Point Information Form to record identification, location and construction information for groundwater monitoring wells and any other sample "points," (e.g., gas probes, lysimeters, leachate collection systems, etc.), that are part of the environmental monitoring program. **NOTE:** Not all fields will be applicable to all point types. Only **one** coordinate reference system may be used per site. Allowable coordinate systems are listed below. (Coordinates for each system require a minimum number of digits as described below.) Local grid coordinates cannot be accepted. Identify the Coordinate Reference System, Datum and Method used.

Facility NameCountyWPL - Columbia Energy CenterColumbia					Facility ID N	Facility ID No. (FID) License, Permit or Monitoring No.							eted By (Name a	,			
WPL -	Columbia Energy C	Center		Colu	mbia					03025	-		•	09/24/2024	l Megha	n Blodgett, SCS	<u> </u>
DNR Point			WUWN ²	ð	tus	Gradient	Enf. Stds.	Construction		ns msl (ft) Well Top (of	e e	Well Cas Diam ³	Length ⁴	· Well Screen Length	Well (Pt) Total Length⁵		hates ^{6,7,8,9}
ID No.	Point Name ¹		(if app.)	Type	Status	Gra	Y/N.	Date	Surface	casing)	Type	(in)	(ft)	(ft)	(ft)		
110	MW-313		WC188	11	Р	D	Yes	12/19/2022	817.80	820.30	Р	2	36.2	10	46.2	542,956	2,124,559
112	MW-314		WC199	11	Р	D	Yes	12/01/2022	819.07	821.57	Р	2	35.0	10	45.0	542,978	2,124,778
114	MW-315		PM289	11	Р	D	Yes	12/02/2022	817.28	819.78	Р	2	35.6	10	45.6	543,020	2,125,065
116	MW-317		VZ439	11	Α	D	Yes	04/11/2024	816.6	818.88	Р	2	34.3	10	44.3	543466	2124520
118	MW-318		VZ438	11	Α	D	Yes	04/10/2024	818.0	820.37	Р	2	33	10	43	543484.4	2124661
120	MW-319		VZ437	11	Α	D	Yes	04/09/2024	825.7	828.28	Р	2	39.1	10	49.1	543488.5	2124963
as we ² Wisco Numl ³ Well (meas	Casing Diameter ures inside diameter.	one exists. (only one system may be used per site): units* wnits* Sector (Construction Coord in Doctor (Coord in Doctor					l correction	³ Y / Lat / Northing describe the vertical axis. X / Long / Easting describe the norizontal axis. (include "-" where									
from top c ⁵ Total top c of we	h of well casing top of casing to f screen. length of well from f casing to bottom ill. Should equal of well casing	⊗ So ⊖ W (m	ntral uth isc. Transvo in. 2 digits r	right o	f decin	nal)	M91	Units used for	Other Other Describe: OTH001 (Other), Describe: nits used for State Plane, WTM Remarks: Ounty Coord. Sys: Remarks: This table includes CCR monitoring wells constructed a						abandoned due		
lengi lengi	h and screen h.	(mi	cal County (in. digits var	y by c	ounty)	VISC	ro)	*NOTE: A dat not required		s are		suucuon		i woulds I	0-13.		

Completion of this form is mandatory under chs. 281, 289 and 292, Wis. Stats., and ss. NR 110.25, NR 507.14 and NR 716.15, Wis. Admin. Code 01/17/2025 - Classification: Internal - ECRM13439915

Attachment C

Site Photographs

SCS ENGINEERS

Columbia Energy Center W8375 Murray Rd, Pardeeville, WI SCS Engineers Project #25224152.00



Photo 1: MW-317, looking northwest.

Photo 2: MW-318, looking northwest.

I:\25224152.00\Deliverables\Monitoring Well Construction and Abandonment\MW317 MW318 MW319\Appendix C_Photos\C_Photos.docx <u>www.scsengineers.com</u>

SCS ENGINEERS

Columbia Energy Center W8375 Murray Rd, Pardeeville, WI SCS Engineers Project #25224152.00



Photo 3: MW-319, looking north.

I:\25224152.00\Deliverables\Monitoring Well Construction and Abandonment\MW317 MW318 MW319\Appendix C_Photos\C_Photos.docx <u>www.scsengineers.com</u> Attachment D

Hydraulic Conductivity Test Results

