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

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request Form 4400-237 (R 12/18)

Page 1 of 6

Notice: Use this form to request a written response (on agency letterhead) from the Department of Natural Resources (DNR) regarding technical assistance, a post-closure change to a site, a specialized agreement or liability clarification for Property with known or suspected environmental contamination. A fee will be required as is authorized by s. 292.55, Wis. Stats., and NR 749, Wis. Adm. Code., unless noted in the instructions below. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

Definitions

- "Property" refers to the subject Property that is perceived to have been or has been impacted by the discharge of hazardous substances.
- "Liability Clarification" refers to a written determination by the Department provided in response to a request made on this form. The response clarifies whether a person is or may become liable for the environmental contamination of a Property, as provided in s. 292.55, Wis. Stats.

"Technical Assistance" refers to the Department's assistance or comments on the planning and implementation of an environmental investigation or environmental cleanup on a Property in response to a request made on this form as provided in s. 292.55, Wis. Stats.

"Post-closure modification" refers to changes to Property boundaries and/or continuing obligations for Properties or sites that received closure letters for which continuing obligations have been applied or where contamination remains. Many, but not all, of these sites are included on the GIS Registry layer of RR Sites Map to provide public notice of residual contamination and continuing obligations.

Select the Correct Form

This from should be used to request the following from the DNR:

- **Technical Assistance**
- Liability Clarification .
- Post-Closure Modifications
- Specialized Agreements (tax cancellation, negotiated agreements, etc.)

Do not use this form if one of the following applies:

- Request for an off-site liability exemption or clarification for Property that has been or is perceived to be contaminated by one or more hazardous substances that originated on another Property containing the source of the contamination. Use DNR's Off-Site Liability Exemption and Liability Clarification Application Form 4400-201.
- Submittal of an Environmental Assessment for the Lender Liability Exemption, s 292.21, Wis. Stats., if no response or review by DNR is requested. Use the Lender Liability Exemption Environmental Assessment Tracking Form 4400-196.
- Request for an exemption to develop on a historic fill site or licensed landfill. Use DNR's Form 4400-226 or 4400-226A.
- Request for closure for Property where the investigation and cleanup actions are completed. Use DNR's Case Closure GIS Registry Form 4400-202.

All forms, publications and additional information are available on the internet at: <u>dnr.wi.gov/topic/Brownfields/Pubs.html</u>.

Instructions

- 1. Complete sections 1, 2, 6 and 7 for all requests. Be sure to provide adequate and complete information.
- 2. Select the type of assistance requested: Section 3 for technical assistance or post-closure modifications, Section 4 for a written determination or clarification of environmental liabilities; or Section 5 for a specialized agreement.
- 3. Include the fee payment that is listed in Section 3, 4, or 5, unless you are a "Voluntary Party" enrolled in the Voluntary Party Liability Exemption Program and the questions in Section 2 direct otherwise. Information on to whom and where to send the fee is found in Section 8 of this form.
- 4. Send the completed request, supporting materials and the fee to the appropriate DNR regional office where the Property is located. See the map on the last page of this form. A paper copy of the signed form and all reports and supporting materials shall be sent with an electronic copy of the form and supporting materials on a compact disk. For electronic document submittal requirements see: http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf

The time required for DNR's determination varies depending on the complexity of the site, and the clarity and completeness of the request and supporting documentation.

Form 4400-237 (R 12/18)

Section 1. Contact and Recipient Information

Page 2 of 6

Requester Information							
This is the person requesting technical assistance or a post-closure modification review, that his or her liability be clarified or a specialized agreement and is identified as the requester in Section 7. DNR will address its response letter to this person.							
Last Name	First	MI	I Organization/ Business Name				
Oehring	Dennis		RockGen Energy Center				
Mailing Address			City	State	ZIP Code		
2346 Clear View Road			Cambridge	WI	53523		
Phone # (include area code) Fax # (include area code)			Email				
(608) 423-1181		dennis.oehring@rockgenenergy.com					
The requester listed above: (select all that apply)							
S currently the owner		Is considering selling the Property					
Is renting or leasing the Property			Is considering acquiring the Property				
Is a lender with a mortgagee interest in the Property							
Other. Explain the status of the Property with respect to the applicant:							

Contact Information (to be c	contacted with questions	apout	this request)	belect if sar	ne as requester
Contact Last Name	First	MI	Organization/ Business Name		
Ramey	Jeff	Т	TRC		
Mailing Address			City	State	ZIP Code
6737 W. Washington Street, S	Suite 2100		West Allis	WI	53214
Phone # (include area code)	Fax # (include area code)		Email		•
(414) 294-9247			jramey@trccompanies.com		
🗙 Environmental Consultan	t (if applicable)				
Contact Last Name	First	MI	Organization/ Business Name		
Ramey	Jeff	Т	TRC		
Mailing Address			City	State	ZIP Code
6737 W. Washington Street,	Suite 2100		West Allis	WI	53214
Phone # (include area code) Fax # (include area code)			Email		
(414) 294-9247			jramey@trccompanies.com		
Attorney (if applicable)					
Contact Last Name	First	MI	Organization/ Business Name		
Mailing Address			City	State	ZIP Code
Phone # (include area code)	Fax # (include area code)		Email	I	•
Property Owner (if differen	nt from requester)	1			
Contact Last Name	First	MI	Organization/ Business Name		
Mailing Address			City	State	ZIP Code
Phone # (include area code)	Fax # (include area code)		Email	I	•

Form 4400-237 (R 12/18)

Page 3 of 6

Section 2. Property Infor	mation		,			
Property Name			F	ID No. (i	known))
RockGen Energy Center						
BRRTS No. (if known)	Parcel Identificati	on Number				
02-13-587341	061223285002			Otata I		
Street Address		City			State	ZIP Code
2346 Clear View Road	Municipality where the Dreparty is less	Cambridge	ge WI 5352			53523
Dane	County [Municipality where the Property is lo Dane ○ City ● Town ○ Village of Chr			Single tax parcel • Multiple tax parcel • 78		
 Is a response needed by plan accordingly. No ● Yes Date reques Reason: Fi 4/2/2023 	a specific date? (e.g., Property closing sted by: $03/24/2023$ eld team and subcontractors have b	date) Note: Most re een coordinated t	equests are comp o mobilize for d	leted with	in 60 da nd well	ays. Please installation or
 2. Is the "Requester" enrolle No. Include the feet Yes. Do not include Fill out the information Section 3. Technical Section 4. Liability Cl 	d as a Voluntary Party in the Voluntary hat is required for your request in Se a separate fee. This request will be bill in Section 3, 4 or 5 which correspon Assistance or Post-Closure Modifica arification; or Section 5. Specialized	Party Liability Exer ection 3, 4 or 5. ed separately throu ds with the type o tions; Agreement.	mption (VPLE) pro ugh the VPLE Pro f request:	ogram? gram.		
Section 3. Request for Te	echnical Assistance or Post-Closur	e Modification				
Select the type of technical	assistance requested: [Numbers in br	ackets are for WI	DNR Use]			
 No Further Action to an immediate a Review of Site Inv Review of Site Inv Approval of a Site Review of a Reme Review of a Reme Review of a Reme Review of a Reme Review of a Long- Review of an Ope 	Letter (NFA) (Immediate Actions) - NR action after a discharge of a hazardous restigation Work Plan - NR 716.09, [135 -specific Soil Cleanup Standard - NR 7 edial Action Options Report - NR 722.13 edial Action Design Report - NR 724.09 edial Action Documentation Report - NF term Monitoring Plan - NR 724.17, [25] ration and Maintenance Plan - NR 724.	2708.09, [183] - In substance occurs. [6] - Include a fee of Include a fee of \$ 20.10 or 12, [67] - 3, [143] - Include a , [148] - Include a 2724.15, [152] - In - Include a fee o 13, [192] - Include	clude a fee of \$3 Generally, these of \$700. 1050. Include a fee of fee of \$1050. fee of \$1050. clude a fee of \$3 f \$425. e a fee of \$425.	50. Use 1 are for a \$1050. 50	or a writ	tten response e spill event.
Other Technical Assista	Other Technical Assistance - s. 292.55, Wis. Stats. [97] (For request to build on an abandoned landfill use Form 4400-226)					
 Schedule a Technical Assistance Meeting - Include a fee of \$700. Hazardous Waste Determination - Include a fee of \$700. Other Technical Assistance - Include a fee of \$700. Explain your request in an attachment. 						
Post-Closure Modificatio	ns - NR 727, [181]					
Post-Closure Moc sites may be on th \$1050, and:	lifications: Modification to Property bou ne GIS Registry. This also includes rem	ndaries and/or con oval of a site or Pr	tinuing obligations operty from the G	s of a clos IS Regist	ed site ry. Inclu	or Property; Ide a fee of
Include a fee o	of \$300 for sites with residual soil conta	mination; and				
Include a fee of obligations.	of \$350 for sites with residual groundwa	ter contamination,	monitoring wells	or for vap	or intrus	sion continuing
Attach a description to a Property, site	on of the changes you are proposing, an or continuing obligation will result in re	nd documentation a	as to why the char enance plans or p	nges are hotograpi	needed ns, those	(if the change e documents

to a Property, site or continuing obligation will result in revised maps, maintenance plans or photogr may be submitted later in the approval process, on a case-by-case basis).

Form 4400-237 (R 12/18)

Page 4 of 6

\times	Skip Sections 4 and 5 if the technical assistance you are requesting is listed above and complete Sections 6 and 7 of this
	form.

Clarification of local governmental unit (LGU) liability exemption at sites with: (select all that apply)

hazardous substances spills - s. 292.11(9)(e), Wis. Stats. [649];

Perceived environmental contamination - [649];

hazardous waste - s. 292.24 (2), Wis. Stats. [649]; and/or

solid waste - s. 292.23 (2), Wis. Stats. [649].

Include a fee of \$700, a summary of the environmental liability clarification being requested, and the following:

(1) clear supporting documentation showing the acquisition method used, and the steps followed under the appropriate state statute(s).

- (2) current and proposed ownership status of the Property;
- (3) date and means by which the Property was acquired by the LGU, where applicable;
- (4) a map and the 1/4, 1/4 section location of the Property;
- (5) summary of current uses of the Property;
- (6) intended or potential use(s) of the Property;
- (7) descriptions of other investigations that have taken place on the Property; and
- (8) (for solid waste clarifications) a summary of the license history of the facility.

Clarify the liability associated with a "closed" Property - s. 292.55, Wis. Stats. [682]

✤ Include a fee of \$700.

- Include a copy of any closure documents if a state agency other than DNR approved the closure.

Use this space or attach additional sheets to provide necessary information, explanations or specific questions to be answered by the DNR.

Section 5. Request for a Specialized Agreement

Select the type of agreement needed. Include the appropriate draft agreements and supporting materials. Complete Sections 6 and 7 of this form. More information and model draft agreements are available at: <u>dnr.wi.gov/topic/Brownfields/lgu.html#tabx4</u>.

Include a fee of \$700, and the information listed below:

- (1) Phase I and II Environmental Site Assessment Reports,
- (2) a copy of the Property deed with the correct legal description.

Agreement for assignment of tax foreclosure judgement - s.75.106, Wis. Stats. [666]

Include a fee of \$700, and the information listed below:

(1) Phase I and II Environmental Site Assessment Reports,

(2) a copy of the Property deed with the correct legal description.

Negotiated agreement - Enforceable contract for non-emergency remediation - s. 292.11(7)(d) and (e), Wis. Stats. [630]

Include a fee of \$1400, and the information listed below:

- (1) a draft schedule for remediation; and,
- (2) the name, mailing address, phone and email for each party to the agreement.

Form 4400-237 (R 12/18)

Page 5 of 6

Section 6. Other Information Submitted
Identify all materials that are included with this request.
Send both a paper copy of the signed form and all reports and supporting materials, and an electronic copy of the form and all reports, including Environmental Site Assessment Reports, and supporting materials on a compact disk.
Include one copy of any document from any state agency files that you want the Department to review as part of this request. The person submitting this request is responsible for contacting other state agencies to obtain appropriate reports or information.
Phase I Environmental Site Assessment Report - Date:
Phase II Environmental Site Assessment Report - Date:
Legal Description of Property (required for all liability requests and specialized agreements)
Map of the Property (required for all liability requests and specialized agreements)
Analytical results of the following sampled media: Select all that apply and include date of collection.
Groundwater Soil Sediment Other medium - Describe:
Date of Collection: 03/10/2021
A copy of the closure letter and submittal materials
Draft tax cancellation agreement
Draft agreement for assignment of tax foreclosure judgment
Other report(s) or information - Describe:
For Property with newly identified discharges of hazardous substances only: Has a notification of a discharge of a hazardous substance been sent to the DNR as required by s. NR 706.05(1)(b), Wis. Adm. Code?
○ Yes - Date (if known):
Note: The Notification for Hazardous Substance Discharge (non-emergency) form is available at: <u>dnr.wi.gov/files/PDF/forms/4400/4400-225.pdf</u> .
Section 7. Certification by the Person who completed this form
I am the person submitting this request (requester)
M I propored this request for: Donnis Ochring
Requester Name
true, accurate and complete to the best of my knowledge. I also certify I have the legal authority and the applicant's permission to make this request.

Ramey Signature

3|13|2023

Date Signed

(414) 294-9247 Telephone Number (include area code)

Principal Chemist

Title

Form 4400-237 (R 12/18)

Page 6 of 6

Section 8. DNR Contacts and Addresses for Request Submittals

Send or deliver one paper copy and one electronic copy on a compact disk of the completed request, supporting materials, and fee to the region where the property is located to the address below. Contact a <u>DNR regional brownfields specialist</u> with any questions about this form or a specific situation involving a contaminated property. For electronic document submittal requirements see: http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf.



Note: These are the Remediation and Redevelopment Program's designated regions. Other DNR program regional boundaries may be different.

DNR Use Only							
Date Received	Date Assigned		BRRTS Activity Code	BRRTS No. (if used)			
DNR Reviewer Com		Comm	ients				
Fee Enclosed?	Fee Amount		Date Additional Information Requested	Date Requested for DNR Response Letter			
🔿 Yes 🔿 No	\$						
Date Approved	Final Determination		-	-			



Supplemental Site Investigation Work Plan Addendum

RockGen Energy Center Town of Christiana, Wisconsin

March 2023

BRRTS #02-13-587341

Prepared For:

RockGen Energy, LLC 2346 Clear View Road Cambridge, Wisconsin 53523

Prepared By:

TRC Environmental Corporation 6737 West Washington Street, Suite 2100 West Allis, Wisconsin 53214

Lydia Auner Project Geologist

Stephen Sellwood, P.G.(WI) Senior Hydrogeologist

Jeff Ramey Principal Chemist



TABLE OF CONTENTS

1.0	CERT	IFICAT	TONS						
	1.1	Certifie	ed Hydrog	eologist Certification1					
2.0	GENE	RAL IN	L INFORMATION						
	2.1	Site In	formation						
3.0	INTRO	DUCT	ION						
	3.1	Background3							
	3.2	Purpos	se						
	3.3	Scope							
4.0	.0 SITE INVESTIGATION PLAN								
	4.1	Soil Sa	ampling						
		4.1.1	Purpose						
		4.1.2	Scope						
	4.2	Surfac	e Water S	ampling6					
		4.2.1	Purpose						
4.2.2 Scope									
	4.3	Storm	water Sam	pling7					
		4.3.1	Purpose						
		4.3.2	Scope						
	4.4	Ground	dwater Inv	restigation7					
		4.4.1	Purpose						
		4.4.2	Scope						
	4.5	Site In	vestigatior	n Procedures9					
		4.5.1	Soil San	npling9					
			4.5.1.1	Soil Boring Installation and Soil Sampling9					
			4.5.1.2	Borehole Abandonment9					
4.5.2 Water Table Wells and Piezometers		able Wells and Piezometers9							
			4.5.2.1	Well Installation9					
			4.5.2.2	Monitoring Well Development10					
			4.5.2.3	Water Level Measurements10					
			4.5.2.4	Low Flow Sampling10					



4.5.3	Multipor	t Wells			
	4.5.3.1	Multiport Well Installation11			
	4.5.3.2	Multiport Well Groundwater Elevations11			
	4.5.3.3	Multiport Groundwater Sampling12			
4.5.4	Analytic	al Quality Assurance Samples12			
	4.5.4.1	Field Duplicates12			
	4.5.4.2	Equipment Blanks12			
	4.5.4.3	Field Blanks13			
4.5.5	Sample	Sample Identification			
4.5.6	Sample	Sample Shipment and Laboratory Analysis13			
4.5.7	Boring a	Boring and Well Locations14			
4.5.8	Samplin	Sampling Equipment and Decontamination14			
	4.5.8.1	Single-Use Sampling Equipment14			
	4.5.8.2	Non-Dedicated Equipment14			
4.5.9	Investiga	ation-Derived Waste (IDW)15			
SCHEDULE	AND REI	PORTING16			
5.1 Scheo	dule				
5.2 Repor	Reporting16				
REFERENC	ES				

FIGURES

5.0

6.0

Figure 2: Proposed Soil Borings and Wells



1.0 **Certifications**

1.1 **Certified Hydrogeologist Certification**

I, Stephen Sellwood, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

ah Selling

March 10, 2023 Date



2.0 General Information

2.1 Site Information

Parcels #061223285002 and #061223290005 Town of Christiana, Dane County, Wisconsin BRRTS #02-13-587341 X Coordinate (WTM91): 597536 Y Coordinate (WTM91): 278545 NW ¼ of NW ¼, Section 23, T06N R12E

Responsible Party

RockGen Energy, LLC 2346 Clear View Road Cambridge, WI 53523

Attention: Mr. Dennis Oehring 608-423-1181 dennis.oehring@rockgenenergy.com

Environmental Consultant

TRC Environmental Corporation (TRC) 6737 West Washington Street, Suite 2100 West Allis, WI 53214

Attention: Jeff Ramey, Principal Chemist 414-294-9247 jramey@trccompanies.com



3.0 Introduction

3.1 Background

The subject property is located at 2346 Clear View Road in the Town of Christiana, Dane County, Wisconsin and consists of two parcels (parcel #061223285002 and parcel #061223290005) covering 77.81 acres (Figure 1). The RockGen Energy Center, a natural gasand fuel oil-fired power generation facility, is located in the northeast quadrant of the property.

Per- and polyfluoroalkyl substances (PFAS) have been detected in soil, stormwater, and groundwater samples collected on site. The general distribution of PFAS is consistent with impacts from aqueous film-forming foam (AFFF) inspection testing. The PFAS impacts have been assigned Wisconsin Bureau for Remediation and Redevelopment Tracking System (BRRTS) #02-13-587341.

TRC Environmental Corporation (TRC), on behalf of RockGen, has conducted site investigation activities and remedial actions related to the PFAS contamination at RockGen, as described below. The site investigation-related activities conducted to date have included:

- TRC prepared and submitted a site investigation work plan (SIWP) dated April 2021 (TRC, 2021a) that was granted conditional approval by the WDNR on April 9, 2021.
- TRC conducted the initial phases of investigation from April through July 2021 in accordance with the SIWP and conditional approval letter. Investigation activities included soil sampling, stormwater sampling, potable well packer sampling, installation of seven monitoring wells and one piezometer, hydraulic conductivity testing, two rounds of groundwater sampling, industrial well sampling, and off-site private well sampling.
- TRC prepared a Site Investigation Report (September 2021) summarizing the site investigation activities and results from work conducted between April and July 2021 (TRC, 2021b).
- Based on the results from the initial site investigation activities, TRC prepared a Supplemental Site Investigation Work Plan (August 2021) to further define the degree and extent of PFAS in groundwater at the Site by installing multiport wells and conducting additional groundwater sampling (TRC, 2021c). The Supplemental Site Investigation Work Plan was approved by the WDNR on August 13, 2021.
- Supplemental site investigation activities began with the installation of five multiport wells between October 2021 and December 2021. After the five multiport wells were installed, four groundwater sampling events were completed in 2022 (January, April, July, and October) for the entire monitoring well network. Groundwater sample results were submitted to the BRRTS database.



 On December 9, 2022, the Wisconsin Department of Natural Resources (WDNR) met with TRC and RockGen for a technical assistance meeting to discuss site investigation progress, conceptual site model (CSM) using 3-D plume modeling and proposed next steps. WDNR's correspondence memorandum stated that additional groundwater investigation is needed to define the degree and extent of PFAS contamination in the northwest portion of the Site upgradient of MW-01 and downgradient of MW-03. The correspondence memorandum is available on BRRTS, dated January 20, 2023.

Remediation through interim action activities conducted to date have included:

- TRC submitted an Interim Action Workplan (TRC, 2021d) describing proposed interim source control actions to the WDNR on July 23, 2021, which received WDNR approval on July 30, 2021.
- Interim remedial actions were completed between April and June 2022, including installation
 of impermeable cover in select areas (asphalt in the former AFFF testing area and
 geosynthetic cover system along the western fence line of the facility), removal and
 replacement of the septic system and mound, excavation of soils in the area of the former
 septic mound, abandonment of the site potable well, and replumbing to an existing industrial
 well for the new potable water supply.
- TRC submitted an NR 708 Interim Action Construction Report (TRC, 2022) summarizing the interim actions completed to the WDNR on October 7, 2022.
- In response to the NR 708 Interim Action Construction Report, the WDNR provided comments in a letter dated January 20, 2023, requesting additional actions, including the collection of at least one soil sample from the stormwater retention basin, a surface water sample from the stormwater retention basin (if surface water is present), and evaluation of the need to collect additional stormwater samples.

3.2 Purpose

This Supplemental SIWP Addendum describes additional site investigation activities proposed to further delineate the degree and extent of PFAS contamination at the Site by addressing the recommendations identified by the WDNR during the December 19, 2022 technical assistance meeting and in the January 20, 2023 letter response to the NR 708 Interim Action Construction Report (TRC, 2022).

3.3 Scope

This supplemental site investigation work plan addendum includes the following Site investigation activities:

- Soil sampling in and around the area of the stormwater retention basin.
- Surface water sampling from the stormwater retention basin (if surface water is present).
- Stormwater sampling.



- Groundwater monitoring:
 - Installation of up to four wells: one water table well upgradient of the site (pending off-site access agreement), one multiport well downgradient from the stormwater retention basin, and two multiport wells downgradient from the facility; and
 - Up to three rounds of periodic groundwater sampling.
- Reporting of results and recommendations.



4.0 Site Investigation Plan

The proposed soil boring and well locations are shown on Figure 2. At the time of submitting this supplemental SIWP addendum, active negotiations for off-site access to install monitoring wells on parcel numbers 061223281000 and 061215495005 are ongoing but an agreement has not been reached with the landowner. Proposed sampling locations will be modified, if required, due to site access limitations and/or based on observations made during the site investigation.

4.1 Soil Sampling

4.1.1 Purpose

In the January 20, 2023 Response to the NR 708 PFAS Soil Interim Action and Construction Documentation Report, the WDNR stated that "Additional soil investigation is needed within the stormwater retention basin located in the northwest corner of the property. The retention basin is a potential source of PFAS contamination in groundwater as stormwater impacted by PFAS may have drained into the basin. At least one soil sample should be collected from the lowest point in the stormwater retention basin." The following soil sampling scope will address this recommendation and possibly address background concentrations of PFAS beyond the extent of the stormwater retention basin by collecting soil samples in areas not expected to have been impacted by stormwater containing PFAS at the Site.

4.1.2 Scope

Up to eight soil borings will be advanced in and around the stormwater retention basin to depths of 2 feet below ground surface (bgs) or refusal, if shallower, in the proposed locations shown on Figure 2. One of these samples will be taken from the lowest point of the retention basin and up to six samples will be taken along the top or outside of the basin to assess background conditions. Soil sampled from 0 to 2 feet bgs (or depth of refusal, if shallower) will be homogenized and submitted for laboratory analysis of 33 PFAS by a lab certified under NR 149. If direct push borings are not feasible due to field conditions, surficial soil samples may be collected instead with hand tools.

4.2 Surface Water Sampling

4.2.1 Purpose

In the January 20, 2023 Response to the NR 708 PFAS Soil Interim Action and Construction Documentation Report, the WDNR stated that *"If pooled surface water is present within the basin during soil sampling, a surface water sample should also be collected."* The following surface water sampling scope will address this recommendation.

4.2.2 Scope

If surface water is present within the stormwater retention basin during soil sampling and the surface water appears suitable for sampling (*i.e.*, visibly clear water, not turbid, and not mud), a grab sample will be collected by submerging the laboratory-provided sample container(s) underneath the surface of the pooled surface water. If this sampling method is not feasible, a peristaltic pump may be used instead to collect a grab sample, in which case the peristaltic



pump would be outfitted with silicone and high-density polyethylene (HDPE) tubing. The surface water sample will be analyzed by a certified lab under NR 149 for the list of 33 PFAS analytes.

The conditions of the stormwater retention basin will be photo documented to document if sufficient or insufficient surface water is present in the stormwater retention basin for sampling.

4.3 Stormwater Sampling

4.3.1 Purpose

In the January 20, 2023 Response to the NR 708 PFAS Soil Interim Action and Construction Documentation Report, the WDNR stated that, *"Stormwater samples were collected prior to performing any interim actions. Evaluate the need to collect additional stormwater samples to document a reduction of PFAS in stormwater."* The following soil sampling scope will address this statement.

4.3.2 Scope

At least one stormwater sample will be collected from the storm sewer outlet (indicated on Figure 2). The sample will be directly collected from the flow of the storm sewer outlet as a grab sample during or following a precipitation event, either using the sample container itself or a peristaltic pump. The stormwater sample will be analyzed by a certified lab under NR 149 for the list of 33 PFAS analytes.

4.4 Groundwater Investigation

4.4.1 Purpose

According to the correspondence memorandum dated January 20, 2023, the WDNR suggested that additional groundwater investigation is needed to define the degree and extent of PFAS contamination upgradient of MW-01 and to define the degree and extent of downgradient groundwater contamination to the east and southeast. A CSM using a 3-D model of the groundwater plume at the Site was presented to the WDNR during the December 19, 2022 technical assistance meeting and the model was subsequently submitted to the WDNR to aid in visualization. The model interpolates data between the known perfluorooctanoic acid (PFOA) concentrations in the existing water table and multiport monitoring wells. The model extrapolates PFOA concentrations beyond the outer extent of the well network. This model was used to predict the PFOA concentrations downgradient from the existing monitoring well network and determine the proposed locations of the downgradient on-site and off-site multiport wells. The locations of the wells in each downgradient scenario were selected with the intent of installing one downgradient multiport well near the edge of the 20 nanogram per liter (ng/L) PFOA concentration extent of the plume and one multiport well further downgradient and less than 20 ng/L in all intervals. The 3-D plume model will be updated with the data collected from the groundwater monitoring proposed in this scope. This updated model will be presented and provided to the WDNR to aid in visualization and predict PFOA concentrations in groundwater in areas of the Site where groundwater monitoring wells cannot be installed. This is particularly important for this investigation because the future land use of parcel 061223281000 is a solar array which will not allow for the installation of wells beyond 20 feet east of the right-of-way



(ROW). The following groundwater investigation scope will address the recommendation from the WDNR of further defining degree and extent of contamination and improve the extrapolated PFOA concentrations predicted in the model.

4.4.2 Scope

The proposed scope of the groundwater investigation includes the following:

- Installation of up to four wells, as shown on Figure 2, including:
 - One water table well upgradient of the Site on parcel 061215495005 (pending off-site access agreement) approximately 40 feet north of the overhead utility lines running east/west along Koshkonong Road. If off-site access is not granted, this well will not be installed.
 - One multiport well downgradient from the stormwater retention basin.
 - Two multiport wells downgradient from the southern fence line of the facility. Depending on whether off-site access is granted, these wells will either be installed within the RockGen property boundary (as shown on Figure 2) or within 20 feet of the ROW of Carpenter Swain Road on parcel 061223281000 (also shown on Figure 2). Installation of only on-site or off-site downgradient wells is included in this scope, not both. Installation of on-site wells will be completed in lieu of future considerations for off-site wells on parcel 061223281000 due to the inability to reach a timely agreement and future land use of this parcel as solar panel array for a solar farm development.
- Up to three rounds of periodic groundwater sampling will be conducted for the newly
 installed wells. Some or all existing Site wells (monitoring wells, piezometer, and multiport
 wells/intervals) will also be sampled during the same events. Decisions to not sample
 existing Site wells and/or multiport intervals will be made based on prior sampling results.
 Groundwater samples will be analyzed by a laboratory certified under NR 149 for the list of
 33 PFAS analytes for the newly installed wells. A subset of PFAS analytes from the list of 33
 PFAS may be selected for the existing Site wells based on prior sampling results.

The water table well will be installed to a depth of approximately 7 feet below the observed water table depth. The well will be constructed with polyvinyl chloride (PVC) casing and a 10-foot screen and will be developed in accordance with NR 141.21.

The multiport wells will be installed to depths of approximately 250 feet bgs and constructed with six multiport sampling intervals, each measuring approximately 30 feet between packers. The multiport sample interval depths will be designed to be similar to the construction of the existing multiport wells on Site. Total borehole depth and specific port/packer depths may be adjusted in the field pending site conditions. The newly constructed multiport wells will not be developed. Due to the absence of well development in the newly constructed multiport wells, a period of time (*i.e.*, weeks to months) will be allowed to pass after installation before the first sampling event to allow time for equilibrium to be established. This is the same approach that was used for the existing multiport wells on Site.



Groundwater sampling will be conducted following the procedures outlined in Section 4.5. Sampling of water table monitoring wells will be conducted using a portable bladder pump. Sampling of the piezometer PZ-01 will be conducted using the dedicated bladder pump. Sampling of the multiport wells will be conducted using the specialty sampling tools associated with the Westbay[®] multiport well system. Groundwater samples will be analyzed by a laboratory certified under NR 149 for the list of 33 PFAS analytes or a subset of PFAS analytes.

4.5 Site Investigation Procedures

This section describes the specific sampling equipment and methodologies to be used for the site investigation activities described above.

4.5.1 Soil Sampling

4.5.1.1 Soil Boring Installation and Soil Sampling

Soil borings will be advanced using a direct-push technology drilling method. Soil sampling will be conducted continuously from the ground surface to the end of the borehole. The soil samples will be collected using a new, clear plastic sampling liner for each sample interval. Each soil-filled liner will be split open, and the contents will be described in a field log in accordance with the Visual-Manual Procedure (ASTM D-2488).

Soil from the depth interval(s) to be submitted for laboratory analysis will be homogenized using equipment approved for PFAS sampling (such as a stainless-steel bowl and scoop) prior to being used to fill an appropriately labeled laboratory sample container. If the equipment used for soil homogenization is reused and non-dedicated, it will be decontaminated between samples.

Sample processing equipment may be single-use and disposable or may be re-used at the discretion of the field crew, if these materials can be adequately decontaminated following use. All downhole sampling equipment and any other non-dedicated, non-disposable sampling equipment will be decontaminated prior to collecting the subsequent sample.

4.5.1.2 Borehole Abandonment

Boreholes will be abandoned in accordance with NR 141.25. The direct-push tooling will be removed, and the open portion of the borehole will be plugged using bentonite chips, bentonite granules, or a high-solids bentonite grout to 6 inches bgs. The upper 6 inches of the borehole will be filled with bentonite in areas with topsoil and with gravel in areas with gravel cover.

4.5.2 Water Table Wells and Piezometers

4.5.2.1 Well Installation

Drilling will be completed by hammer drilling or other appropriate drilling method using a borehole diameter of at least 4 inches greater than the inside diameter of the well casing. Temporary casing will be installed into the top of competent rock during drilling. Rock cores and/or drilling returns will be logged during drilling as observable; it is expected that descriptive logging may not be feasible during hammer drilling.



Water table monitoring wells will be installed in accordance with NR 141. Monitoring wells will be constructed of 2-inch diameter PVC and 10-foot screens and will be completed with stick-up covers.

4.5.2.2 Monitoring Well Development

The water table monitoring well will be developed after installation in accordance with NR 141.21 with the goal of producing water that is free of sediment. Potential well development methods may consist of bailing for 30 minutes followed by pumping using a submersible pump until the purge water is free of visible turbidity or until a total of at least 10 well volumes of water have been removed from the well.

After development, the water table monitoring well will be allowed to recover completely prior to sampling.

4.5.2.3 Water Level Measurements

Depth to water measurements will be obtained prior to purging or sampling activities. Water level measurements will be collected using an electronic water level indicator (*e.g.*, Slope Indicator Model 51453 or equivalent). The water level indicator consists of a spool of small diameter insulated steel cable with a probe attached to the end. Depth is recorded to the nearest 0.01 foot. Measurements will be taken from the established reference point marked on the casing, or if such a marking is not present, then from the northern edge of the well casing.

4.5.2.4 Low Flow Sampling

Non-multiport wells (water table wells and piezometer) will be purged prior to sample collection using low-flow stabilization methods. Purging and sampling will be conducted using a portable bladder pump or other pump determined to be appropriate depending on the constructed well depth and depth to water.

Pumps that will be submerged in the water column will be determined to be PFAS-free or to not yield PFAS to samples prior to use. Tubing and other sample-contacting material will be HDPE, silicone, or other material determined to be PFAS-free. Portable sampling pumps will be set in the well such that the pump intake is approximately 1 to 2 feet above the base of the well screen.

During purging, the water level will be monitored, and the pump speed should be adjusted until there is little or no drawdown or drawdown has stabilized. Field parameters including dissolved oxygen, pH, temperature, oxidation-reduction potential, turbidity, and specific conductance will also be monitored during purging. Collection of groundwater samples via low-flow methods will take place once stabilization parameter readings and drawdown have stabilized. Stabilization will be considered to be established once the following parameters are achieved for three consecutive measurements taken at 3- to 5-minute intervals.

- pH: ±0.1 pH units
- Specific Conductance: ±3%
- Turbidity: ±10% nephelometric turbidity units (NTUs) or preferably 0 10 NTUs



• Water Level: ±0.3 feet (Aim for water level to stabilize prior to sampling. Total drawdown should be minimized, ideally less than 0.3 feet total.)

If the preceding stabilization criteria cannot be achieved due to field conditions, low flow stabilization and pumping will cease, and the well will be allowed to recover sufficiently prior to sample collection. Once stabilization has been established or the well has recovered sufficiently, appropriate sample containers will be filled.

4.5.3 Multiport Wells

4.5.3.1 Multiport Well Installation

Two multiport wells will be installed on the off-site parcel (061223281000) as indicated in Figure 2 if an access agreement with the landowner can be reached prior to mobilizing for the site investigation as indicated in the schedule in Section 5.1. If an agreement is not reached before mobilization, the downgradient monitoring wells will be installed at or around the locations indicated on parcel 061223285002 in Figure 2. Drilling will be using hammer drilling methods, and the borehole diameter will be 6 inches unless over-drilling is required which will result in a greater borehole diameter. Temporary casing will be installed into the top of competent rock during drilling. Rock cores or drilling returns will be logged during drilling as observable; it is expected that descriptive logging may not be feasible during hammer drilling.

Drilling-derived waste will be placed in containers and managed as investigation-derived waste (IDW). Sample processing equipment may be single-use and disposable or may be re-used at the discretion of the field crew, if these materials can be adequately decontaminated following use. All downhole equipment and any other non-dedicated, non-disposable sampling equipment will be decontaminated prior to installing the next borehole.

Westbay[®] System well installation will be conducted by a Westbay[®] contractor and TRC field staff in coordination with the drilling crew. Multiport monitoring wells will be constructed using Westbay[®] MP-38 Systems methods and completed with stick-up covers. Sampling intervals will be separated by Westbay[®] packers, and each monitoring zone will include a Westbay[®] measurement port, a Westbay[®] pumping port, and a magnetic location collar.

The multiport monitoring wells will be allowed to recover prior to sampling. This will include multiple water level measurements to determine whether the water levels are stable following installation.

4.5.3.2 Multiport Well Groundwater Elevations

Groundwater head will be calculated using pressure differentials measured using the Westbay[®] MOSDAX Sampler Probe, in accordance with WestBay[®] MOSDAX Sampler pressure measurement procedures. Pressure measurements may be made prior to sampling individual multiport intervals (they do not have to be measured in all intervals prior to beginning any multiport sampling during a given sampling event).



4.5.3.3 Multiport Groundwater Sampling

Sampling of the multiport wells will be conducted using the Westbay[®] MOSDAX Sampler Probe in accordance with the WestBay[®] MOSDAX sampling procedures. Due to the design of Westbay[®] multiport wells, purging prior to sampling is not required. The newly installed multiport wells will be allowed equilibrate for weeks to months before being sampled for the first time.

4.5.4 Analytical Quality Assurance Samples

Analytical quality assurance will be assessed through the collection of field QA/QC samples, such as blank and duplicate samples. The frequencies for collection of field duplicate, equipment blank, and field blank samples are specified below using general guidelines.

4.5.4.1 Field Duplicates

Blind field duplicate samples, prepared by splitting a single sample into two separate sets of laboratory containers, will be used to evaluate sampling precision for water samples. Points where duplicate samples are to be collected will be selected by the field personnel and will be submitted as single-blind duplicates to the laboratory. Field duplicates will be collected at a rate of one for every 10 (or fewer) groundwater samples. Field duplicates will not be required for surface water, storm water, or soil samples.

When possible, duplicate samples collected from the multiport wells should be collected at the same time as the parent samples by increasing the number of Westbay[®] sample containers attached to the probe to ensure sufficient volume for the parent sample and duplicate.

4.5.4.2 Equipment Blanks

Equipment blanks are analyzed to check that equipment coming into contact with the samples is not causing sample contamination. The following equipment blanks may be collected for soil and groundwater sampling:

- Soil Sampling: Equipment blanks will be collected in a manner representative of the samplecontacting equipment used for soil sampling. Multiple pieces of equipment may be represented with the same equipment blank if desired (for example, a rinsate of both the stainless-steel bowl and scoop used for soil homogenization).
- Groundwater Sampling: Equipment blanks for groundwater samples will be collected at a frequency of one for every 10 (or fewer) primary samples that are collected with non-dedicated, non-disposable equipment, such as a portable bladder pump or the Westbay[®] MOSDAX Sampler containers.
 - Water Table Monitoring Wells: Equipment blanks for groundwater samples will be collected in the field by running laboratory certified PFAS-free water through new tubing using the same pump set-up used for groundwater sampling. If the pump components are sample contacting, the equipment blank will be collected after the pump has been decontaminated.
 - Multiport Wells: Equipment blanks will be collected in the field as rinsates of the interior of the MOSDAX Sampler canisters used to collect groundwater samples, after the containers have been decontaminated.



4.5.4.3 Field Blanks

Field blanks are analyzed to check for contamination introduced during sample collection and handling. Field blanks will be collected in the field by pouring laboratory certified PFAS-free water into the sample containers and submitting for PFAS analysis. One field blank will be collected during each sampling event.

4.5.5 Sample Identification

Sample IDs will be recorded in the field notes and laboratory chain of custody. Example IDs for sampling points and samples are provided in the table below. For water samples, the sample date will be appended to the Sample ID using the YYYYMM format. For example, the sample ID for a groundwater sample from water table monitoring well MW-03 collected in July 2023 would be "MW-03-202307."

Sample/Point Type	Example ID	Notes		
Soil Boring	SB-01	Number sequentially for site		
Soil Sample from Boring	SB-01(0-2)	Note sample interval depth (feet bgs) in parentheses		
Surficial Soil Sample	SS-01	Number sequentially for site		
Monitoring Well ID	MW-01	Number sequentially for site		
Monitoring Well Sample ID	MW-01-YYYYMM			
Piezometer	PZ-01	Number sequentially for site		
Piezometer Sample ID	PZ-01-YYYYMM			
Multiport Well	MP-01	Number sequentially for site		
Multiport Well Sample ID	MP-01(100-110)-YYYYMM	Note sample interval depth (feet bgs) in parentheses		
Stormwater Sample ID	SW-01-YYYYMM	Number based on sample location		
Surface Water Sample ID	SUW-01-YYYYMM			
Equipment Blank	EB-01-YYYYMM	Number sequentially for sampling event		
Field Blank	FB-01-YYYYMM	Number sequentially for sampling event		
Field Duplicate	DUP-01-YYYYMM	Number sequentially for sampling event		

4.5.6 Sample Shipment and Laboratory Analysis

Samples collected for laboratory analysis will be placed in appropriate sample containers provided by the laboratory. Sample containers will be placed on ice immediately after collection for transport to a laboratory certified by Wisconsin DNR for PFAS under NR 149 for soil and



non-potable water matrices and report the list of 33 PFAS analytes or a subset of PFAS analytes. Method detection limits for the proposed analytes will be in the 2 - 5 ng/L range per PFAS analyte which is consistent with method criteria established and certified for NR 149 and applied to the previous analytical testing conducted at the Site.

4.5.7 Boring and Well Locations

The final locations of soil borings will be logged using differential Global Positioning System (GPS) techniques. The Juniper Geode GPS receiver, a real-time sub-meter Bluetooth Global Navigation Satellite System GNSS receiver, will be used to collect these locations while paired with a tablet or phone. GPS averaging will be used to ensure a more accurate point. All data will be collected in Web Mercator within the ESRI Field Maps application and will then be transformed and projected into the State Plane coordinate system (NAD83, US Feet) using Geographic Information System (GIS) software.

The final locations of wells will be surveyed. Survey measurements will include the state plane northing and easting, the top of PVC casing elevation, and the ground surface elevation.

4.5.8 Sampling Equipment and Decontamination

An appropriately developed, executed, and documented equipment decontamination procedure is an integral and essential part of environmental site investigations. The benefits include minimizing the spread of contaminants and improved data quality and reliability.

4.5.8.1 Single-Use Sampling Equipment

To the extent practicable, single-use sampling equipment and materials will be used for the collection of samples. The single-use materials used will be new and clean and will be placed in plastic for transport to the Site. Once used, single-use equipment will be placed in plastic bags and managed as IDW material. Single-use equipment includes, but is not limited to, HDPE and silicone tubing. Single-use equipment and materials will not require field decontamination.

4.5.8.2 Non-Dedicated Equipment

Proper decontamination of equipment is essential to minimize the possibility of crosscontamination of samples. Non-dedicated equipment such as stainless-steel bowls and scoops, water level indicators, non-dedicated submersible pumps, and the Westbay[®] MOSDAX Sample containers will be decontaminated prior to their initial use on-site and in between sampling points and transported to the Site in a protected and decontaminated condition. Decontamination procedures will include the following steps:

- Wash the equipment in a non-phosphate detergent;
- Rinse with potable water or distilled water; and
- Rinse with water determined to be PFAS-free.

Field decontamination of equipment may take place at the sampling location. Decontamination water will be collected in 5-gallon buckets or similar containers and managed as described in Section 4.5.9.



4.5.9 Investigation-Derived Waste (IDW)

IDW streams generated during this investigation are expected to include rock and soil cuttings, drilling fluids/slurry, decontamination fluids, monitoring well development water, and general refuse (*e.g.*, used personal protective equipment, single-use sampling equipment, and trash). Rock and soil cuttings, drilling fluids/slurry, monitoring well development water, and decontamination fluids will be containerized, labeled with the date and contents, and left on Site pending waste manifesting and disposal acceptance. IDW will be disposed off-site by an approved contractor. General refuse will be collected in trash bags and placed in a waste dumpster.



5.0 Schedule and Reporting

5.1 Schedule

Mobilization of drilling equipment and contractors for the installation of the new wells described herein is anticipated to commence in early April 2023, but mobilization may be adjusted based on field conditions and contractor availability. Soil boring installation and soil sampling will be conducted during the same dates as the monitoring well installation or at a time shortly after well installation based on field conditions and contractor availability.

A data notification for each sampling event will be submitted to the WDNR and property owner within 10 days of receipt of the final laboratory reports.

The results of the Supplemental Site investigation, including results from the work described in the August 2021 Supplemental Site Investigation Workplan and in this addendum, will be compiled into a Supplemental Site Investigation Report to be submitted to WDNR within 60 days of completing the Supplemental Site investigation.

5.2 Reporting

TRC will tabulate and evaluate the results of the Supplemental Site investigation and will present the results in a Site Investigation Report Addendum to be submitted to the WDNR. Groundwater results will be compared to proposed NR 140 groundwater standards for PFAS that are under Cycle 10 and Cycle 11 rule-making procedures. Soil results will be compared to generic and site-specific criteria established within the previous SIR.

The results of this Supplemental Site investigation will be used to evaluate whether additional investigation, interim action, and/or remedial action is required to address the environmental impacts and ultimately achieve Site closure.



6.0 References

TRC. 2021a. Site Investigation Work Plan, RockGen Energy Center, Town of Christiana, Wisconsin. April.

TRC. 2021b. Site Investigation Report, RockGen Energy Center, Town of Christiana, Wisconsin. September.

TRC. 2021c. Supplemental Site Investigation Work Plan, RockGen Energy Center, Town of Christiana, Wisconsin. August.

TRC. 2021d. Interim Action Workplan, RockGen Energy Center, Town of Christiana, Wisconsin. July.

TRC. 2022. NR 708 PFAS Soil Interim Action and Construction Documentation Report, RockGen Energy Center, Town of Christiana, Wisconsin. September.



Figures

- Figure 1: Site Location Map
- Figure 2: Proposed Soil Borings and Wells



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Map ŝ 1B(11"x17") 15148214544 LAYOUT: **AFOJTIK** 13:33 PM by .



- GEOPROBE SOIL BORING (APRIL 2021)
- HAND AUGER SOIL BORING (MAY 2021) •
- SOIL SAMPLE
- ۵ POTABLE WELL
- ۲ POTABLE WELL
- DEEP PRODUCTION WELL
- MONITORING WELL
- X PIEZOMETER
- MULTIPORT WELL \bigcirc
- PROPOSED SOIL
- PROPOSED WATER TABLE .
- 0 PROPOSED MULTIPORT
- PROPOSED MULTIPORT WELL IF OFF-SITE ACCESS IS \bigcirc GRANTED
- 0 STORM SEWER INLET/OUTLET
- DRAINAGE CHANNEL

EVS GROUNDWATER MODEL EXTENT OF PFOA AT 20 PPT 14.44 BASED ON JULY 2022 GROUNDWATER SAMPLE RESULTS

APPROXIMATE AREA OF AFFF INSPECTION

APPROXIMATE EXTENT OF FORMER SEPTIC MOUND

PROPERTY BOUNDARY

PARCEL BOUNDARY

FACILITY FENCE LINE

NOTES

- BASE MAP IMAGERY FROM GOOGLE EARTH PRO, 06/2022. 1.
- PARCEL DATA ACQUIRED FROM WISCONSIN STATE 2. CARTOGRAPHER'S OFFICE PARCEL DATA.
- 3. * = DRAINAGE CHANNEL APPEARS TO BIFURCATE; MAP SHOWS CHANNEL THAT APPEARS TO BE PRIMARY DRAINAGE PATHWAY.



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