

August 30, 2024

Certified Mail #: 7021 2720 0002 9301 3360

Ms. Caryn Owens
Michigan Department of Environment, Great Lakes, and Energy (EGLE)
Air Quality Division (AQD)
Grand Rapids District Office
350 Ottawa Avenue NW, Unit 10
Grand Rapids, MI 49503

Subject: Consumers Energy's D E Karn Generating Complex (DEK) SRN B2840
ROP Modification (Rule 216(2)/Minor Modification to remove retired equipment)

Dear Ms. Owens:

After May of 2023, the two coal fired boilers located at DEK ceased to be commercially available to operate. The purpose of this submittal is to request that the now obsolete portions of MI-ROP-B2840-2022 be removed from the DEK ROP. Currently, the DEK ROP has two sections, most of the equipment and requirements in Section 1 are related to the retired coal fired boilers and are flagged for deletion in the enclosed documents. A few auxiliary pieces of equipment (e.g., emergency engines) from Section 1 of the current DEK ROP continue to operate and these pieces of equipment from Section 1 of the current DEK ROP that will continue to operate have been identified in the enclosed documents. Further, the equipment from Section 1 of the current DEK ROP that will continue to operate should be consolidated with the equipment in Section 2 of the current DEK ROP to create an updated DEK ROP without any sections. To facilitate these changes, find enclosed with this letter a Modification (M-001) Form, Certification (C-001) Form, and Additional Information (AI-001) Form, and Mark Up of the current DEK ROP showing Emission Unit and Flexible Group tables with changes. MI-ROP-B2840-2022 has also been updated to allow an alternative electronic reporting format under the Mercury Air Toxics Standard (MATS) 40 CFR 63 Subpart UUUUU as approved by EGLE in a May 2, 2024, email and a few other minor administrative changes were identified in the AI-001 form and the Mark Up of the current DEK ROP. DEK ROP Mark-up also includes changes identified in an August 1, 2024, Rule 215(3) Off-Permit change submittal to add small natural gas heating boilers at Karn 3&4.

If you have any questions, or require additional information, please feel free to contact me at (989) 891-5580 or at Michael.GruberII@cmsenergy.com or Tashia Walraven at (989) 891-3357 or at Tashia.Walraven@cmsenergy.com.

Sincerely,



Michael Gruber II
Senior Environmental Engineer

CC: EGLE-ROP@Michigan.gov (electronic copy)
Tashia Walraven (electronic copy only)
Karn File

Enclosed

EQP 5775 Modification (M-001) Form

EQP 5773 Certification (C-001) Form

EQP 5774 Additional Information (AI-001) Form

Mark Up of the current Karn ROP

Email titled "RE_MATS Rule_Electronic Reporting Mtg. Follow-up"



Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division

RENEWABLE OPERATING PERMIT APPLICATION

C-001: CERTIFICATION

This information is required by Article II, Chapter 1, part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to provide this information may result in civil and/or criminal penalties. Please type or print clearly.

This form is completed and included as part of Renewable Operating Permit (ROP) initial and renewal applications, notifications of change, amendments, modifications, and additional information.

Form Type C-001	SRN B2840
------------------------	-----------

Stationary Source Name Consumers Energy - Karn Facility	
City Essexville	County Bay

SUBMITTAL CERTIFICATION INFORMATION	
1. Type of Submittal <i>Check only one box.</i>	
<input type="checkbox"/> Initial Application (Rule 210)	<input checked="" type="checkbox"/> Notification / Administrative Amendment / Modification (Rules 215/216)
<input type="checkbox"/> Renewal (Rule 210)	<input type="checkbox"/> Other, describe on AI-001
2. If this ROP has more than one Section, list the Section(s) that this Certification applies to <u>1 and 2</u>	
3. Submittal Media <input checked="" type="checkbox"/> E-mail <input type="checkbox"/> FTP <input type="checkbox"/> Disk <input checked="" type="checkbox"/> Paper	
4. Operator's Additional Information ID - Create an Additional Information (AI) ID that is used to provide supplemental information on AI-001 regarding a submittal. AI 2023K1&2ret	

CONTACT INFORMATION	
Contact Name Michael Gruber	Title Sr Environmental Engineer II
Phone number 989-891-5580	E-mail address Michael.GruberII@cmsenergy.com

This form must be signed and dated by a Responsible Official.				
Responsible Official Name Sean P. Kelly			Title Senior Manager of Plant Operations	
Mailing address 2860 North Weadock Highway				
City Essexville	State MI	ZIP Code 48732	County Bay	Country USA
<p>As a Responsible Official, I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this submittal are true, accurate and complete.</p> <div style="display: flex; justify-content: space-between; align-items: flex-end; margin-top: 20px;"> <div style="width: 45%;"> <div style="border-top: 1px solid black; width: 100%;"></div> <p style="margin-top: 0;">Signature of Responsible Official</p> </div> <div style="width: 45%; text-align: center;"> <div style="border-top: 1px solid black; width: 100%;"></div> <p style="margin-top: 0;">Date</p> </div> </div>				

RENEWABLE OPERATING PERMIT

M-001: RULE 215 CHANGE NOTIFICATION

RULE 216 AMENDMENT/MODIFICATION APPLICATION

This information is required by Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment.

1. SRN B2840	2. ROP Number MI-ROP-B2840-2022	3. County Bay
4. Stationary Source Name Consumers Energy - D E Karn Generating Complex		
5. Location Address 2680 North Weadock Hwy		6. City Essexville
7. Submittal Type - <i>The submittal must meet the criteria for the box checked below. Check only one box. Attach a mark-up of the affected ROP pages for applications for Rule 216 changes.</i> <input type="checkbox"/> Rule 215(1) Notification of change. <i>Complete Items 8 – 10 and 14</i> <input type="checkbox"/> Rule 215(2) Notification of change. <i>Complete Items 8 – 10 and 14</i> <input type="checkbox"/> Rule 215(3) Notification of change. <i>Complete Items 8 – 11 and 14</i> <input type="checkbox"/> Rule 215(5) Notification of change. <i>Complete Items 8 – 10 and 14</i> <input type="checkbox"/> Rule 216(1)(a)(i)-(iv) Administrative Amendment. <i>Complete Items 8 – 10 and 14</i> <input type="checkbox"/> Rule 216(1)(a)(v) Administrative Amendment. <i>Complete Items 8 – 14. Results of testing, monitoring & recordkeeping must be submitted. See detailed instructions.</i> <input checked="" type="checkbox"/> Rule 216(2) Minor Modification. <i>Complete Items 8 – 12 and 14</i> <input type="checkbox"/> Rule 216(3) Significant Modification. <i>Complete Items 8 – 12 and 14, and provide any additional information needed on ROP application forms. See detailed instructions.</i> <input type="checkbox"/> Rule 216(4) State-Only Modification. <i>Complete Items 8 – 12 and 14</i>		
8. Effective date of the change. (MM/DD/YYYY) <i>See detailed instructions.</i> <u>9/30/2024</u>		9. Change in emissions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10. Description of Change - <i>Describe any changes or additions to the ROP, including any changes in emissions and/or pollutants that will occur. If additional space is needed, complete an Additional Information form (AI-001).</i> Updating the Karn ROP to remove special conditions applicable to the coal fired boilers EU-KARN1-1 and EU-KARN2-1 which were permanently retired on 6/1/2023. Further, the retirement of EU-Karn1-1 and EU-Karn 2-1 on 6/1/2023 caused several other emission units at Karn site to cease to operate see enclosed AI-001 form title "AI-2023K1&2 ret" and Karn MI-ROP-B2840-2022 Mark-Up file titled "B2840 Final 7-27-22 Mark-Up K1K2 retire.docx" for a list of obsolete emission units and obsolete applicable requirements.		
11. New Source Review Permit(s) to Install (PTI) associated with this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, enter the PTI Number(s) _____ - _____ - _____ - _____ - _____		
12. Compliance Status - <i>A narrative compliance plan, including a schedule for compliance, must be submitted using an AI-001 if any of the following are checked No.</i> a. Is the change identified above in compliance with the associated applicable requirement(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No b. Will the change identified above continue to be in compliance with the associated applicable requirement(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No c. If the change includes a future applicable requirement(s), will timely compliance be achieved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
13. Operator's Additional Information ID - <i>Create an Additional Information (AI) ID for the associated AI-001 form used to provide supplemental information.</i>		AI -2023K1&2 ret
14. Contact Name Michael Gruber	Telephone No. 989-891-5580	E-mail Address michael.gruberII@cmsenergy.com
15. This submittal also updates the ROP renewal application submitted on ____/____/____ <input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A <i>(If yes, a mark-up of the affected pages of the ROP must be attached.)</i>		



RENEWABLE OPERATING PERMIT APPLICATION
AI-001: ADDITIONAL INFORMATION

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Please type or print clearly. Refer to instructions for additional information to complete this form.

SRN: B2840	Section Number (if applicable): 1-2
1. Additional Information ID AI-2023K1&2ret	

Additional Information	
2. Is This Information Confidential? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<p>The retirement of emission units EU-KARN1-1 and EU-KARN2-1 on 6/1/2023 made the continued operation of the following emission units and associated Flexible Groups unnecessary: EU-SORBENT-1, EU-LIMEPREP-1, EU-BPRECYCLE-1, EU-BPDISPOSAL-1, EU-COALHAND-1*, EU-KARN12DCGEN-1, EU-KARN12ACGEN-1, EU-PARTSCLEANERS, FG-KARN12-1, FG-MATS-1, and FG-EMERGENCYCIGEN-1. *A small residual coal pile did remain in place at DE Karn Complex for all of calendar year 2023 and part of calendar year 2024 and the coal pile is considered part of EU-COALHAND-1. EU-COALHAND-1 was not operated normally after May 31, 2023, meaning EU-COALHAND-1 did not receive and empty trains loaded with coal, did not receive and empty ships loaded with coal, and did not transfer any coal with mobile heavy equipment and conveyer belts to the coal bunkers for use in EU-KARN1-1 and EU-KARN2-1 boilers, but the small existing coal pile that remained onsite had the potential to release fugitive emissions due to wind erosion. Fugitive emissions from this small coal pile due to wind were minimized by implementing the Karn Site's fugitive dust plan. The process of removing the un-combusted coal from the DE Karn Complex began in March of 2024 and is set to be completed before the end of September 2024. The other equipment associated with EU-KARN1-1 and EU-KARN2-1 other than the coal pile portion of EU-COALHAND-1 ceased operations by the end of June of 2023.</p> <p>Therefore, Karn is requesting that the following emissions units and flexible groups be removed from existing Section 1 of MI-ROP-B2840-2022 (Karn ROP):</p> <p>EU-KARN1-1, EU-KARN2-1, EU-SORBENT-1, EU-LIMEPREP-1, EU-BPRECYCLE-1, EU-BPDISPOSAL-1, EU-COALHAND-1, EU-KARN12DCGEN-1, EU-KARN12ACGEN-1, EU-PARTSCLEANERS, FG-KARN12-1, FG-MATS-1, and FG-EMERGENCYCIGEN-1.</p> <p>The removal of the above listed emission units and flexible groups is a step towards streamlining operations and ensuring that the facility's permit reflects its current state. Additionally, the Karn ROP Mark-Up included with this AI-Form identifies all the equipment and special conditions to be removed from Karn ROP.</p> <p>The only emission units and flexible groups currently in the existing Section 1 of MI-ROP-B2840-2022 that should remain in the Karn ROP after this minor modification is completed are as follows: EUGUARDHSEGEN1-1, EU-FISHBARGEN-1, EUGUARDHSEGEN2-1, EU-FHPUMP-1, EU-WDKPMP(5765)-1, and EU-WDKPMP(6284)-1, FG-EMERGENCYCIGEN-1, and FG-NON-EMERGENCYCIGEN-1</p> <p>Also, Karn is requesting that the emission units, flexible groups, and applicable requirements currently included in the existing Section 2 of MI-ROP-B2840-2022 be combined with emission units and flexible groups from Section 1 of MI-ROP-B2840-2022 that have not been retired and or physically disabled. When the Karn ROP MI-ROP-B2840-2022 is reissued as MI-ROP-B2840-2022a it will no longer be a sectioned ROP.</p>	



RENEWABLE OPERATING PERMIT APPLICATION
AI-001: ADDITIONAL INFORMATION

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Please type or print clearly. Refer to instructions for additional information to complete this form.

SRN: B2840	Section Number (if applicable): 1-2
1. Additional Information ID AI-2023K1&2ret	

Additional Information	
2. Is This Information Confidential? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<p>Also, with this ROP modification, various minor issues such as typos, numbering issues, and referencing issues were corrected in the Karn ROP mark-up as follows:</p> <p>In table FG-TANKFARMBLRS-2 renumber Section III Process/Operational Restrictions (see ROP Mark-Up).</p> <p>In table EU-GUARDHSEGEN2-1 Section II for clarification please rewrite condition to state that the emergency engine burns just Liquefied Petroleum Gas (LPG/Propane) instead of both Pipeline Natural Gas and Propane/LPG being listed. (See ROP-Mark-Up for suggested language.). The engine is certified to operate on either fuel (see picture of engine plaque below), but the EU-GUARDHSEGEN2-1 is only physically connected to an LPG fuel source.</p> <p>Removed all references to sections in the nomenclature of emission units and flexible groups throughout the Karn ROP since the permit will no longer be a sectioned ROP.</p> <p>Also, update the reporting special condition VII. 7. to include approved alternative electronic format. Enclosed is an email titled "RE_MATS Rule Electronic Reporting Mtg. Follow-up.pdf" where approval was granted to continue to use the PDF format for MATS quarterly submittals to Emission Collection and Monitoring Plan System (ECMPS) instead of XML format until EPA publish ECMPS version 2.0.</p>	



RENEWABLE OPERATING PERMIT APPLICATION
AI-001: ADDITIONAL INFORMATION

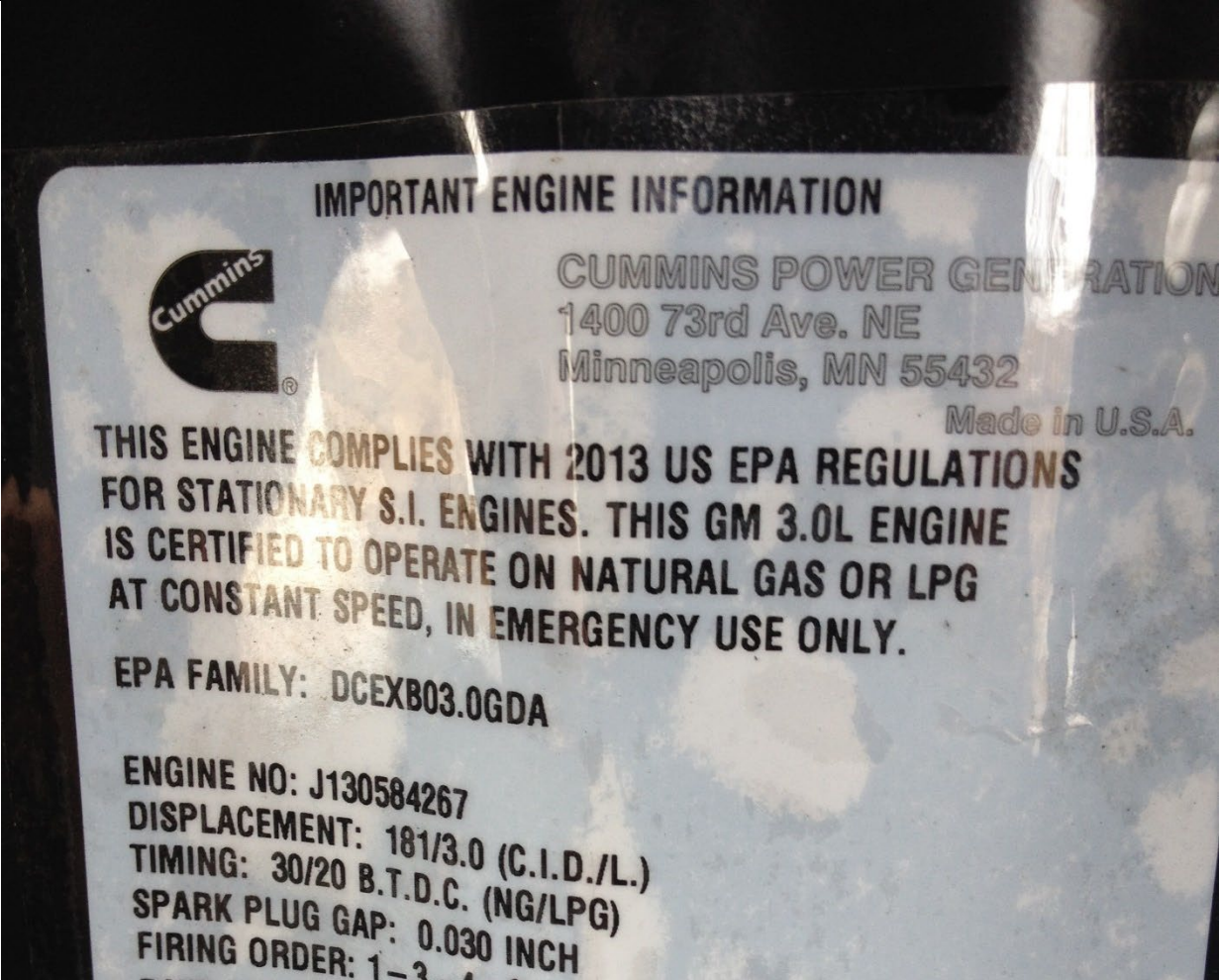
This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Please type or print clearly. Refer to instructions for additional information to complete this form.

SRN: B2840	Section Number (if applicable): 1-2
------------	-------------------------------------

1. Additional Information ID
AI-2023K1&2ret

Additional Information

2. Is This Information Confidential? ☐ Yes ☒ No



From: [Carley, Brian \(EGLE\)](#)
To: [Michael E. Gruber II](#)
Cc: [Howe, Jeremy \(EGLE\)](#); [Brunner, Julie \(EGLE\)](#); [Jason M. Prentice](#); [JAMES M. WALKER](#); [Barry J Marietta](#); [Mark R Grigereit](#); [Jason Logan](#); [Myott, Brad \(EGLE\)](#); [Owens, Caryn \(EGLE\)](#)
Subject: RE: MATS Rule Electronic Reporting Mtg. Follow-up
Date: Thursday, May 2, 2024 4:25:52 PM

**##CAUTION##: This email originated from outside of CMS/CE.
Remember your security awareness training: Stop, think, and use caution
before clicking links/attachments.**

Hi Michael,

AQD is granting permission to for Consumers Energy and DTE to continue submitting MATS reports as PDF files until ECMPS 2.0 is fully developed. This is concurrence with EPA's stance posted in the EPA webpage that you provided below. I am going to request that you submit a Rule 215(3) notification for this alternative record submittal procedure for your respective ROPs that are affected by this decision. If you have any questions about this approval, please feel free to contact me. Thanks!

Brian Carley
Air Quality Division
Jackson District Office
Michigan Department of Environment, Great Lakes, and Energy
517-416-4631

From: Michael E. Gruber II <Michael.GruberII@cmsenergy.com>
Sent: Tuesday, April 30, 2024 9:46 AM
To: Carley, Brian (EGLE) <CARLEYB@michigan.gov>
Cc: Howe, Jeremy (EGLE) <HoweJ1@michigan.gov>; Brunner, Julie (EGLE) <BRUNNERJ1@michigan.gov>; Jason M. Prentice <jason.prentice@cmsenergy.com>; JAMES M. WALKER <james.walker@cmsenergy.com>
Subject: FW: MATS Rule Electronic Reporting Mtg. Follow-up

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Brian,

I tried contacting you via phone earlier morning, but I was routed to your voice mail. The purpose of my earlier phone call and this email is to find out if EGLE has made a final decision to approve the submittal of MATS reports as PDF files instead of as XML file. It was Consumers Energy Company's intent in the April 11, 2024 meeting to formally request that EGLE approve the PDF versus the XML format for everything outside of Appendix E, Sections 17-30. It is our understanding based on EPA guidance documents found at ([Frequent Questions about the CAMD Re-engineering Effort | US EPA](#)

[\[epa.gov\]](https://www.epa.gov)) that EGLE has the authority to approve this alternate file format under 40 CFR 63.10(f)(2).

Regards,

Michael E. Gruber II

Environmental Quality & Sustainability - Air Quality | Consumers Energy

DE Karn Plant Annex Building | 2742 N. Weadock Hwy | Essexville, MI 48732

Ph: 989-891-5580 | Email: Michael.GruberII@cmsenergy.com

Cell: 989-493-3363



From: Michael E. Gruber II

Sent: Friday, April 19, 2024 3:26 PM

To: Carley, Brian (EGLE) <CARLEYB@michigan.gov>

Cc: Brunner, Julie (EGLE) <BRUNNERJ1@michigan.gov>; Howe, Jeremy (EGLE) <Howej1@michigan.gov>; Jason M. Prentice <JASON.PRENTICE@cmsenergy.com>; JAMES M. WALKER <JAMES.WALKER@cmsenergy.com>

Subject: MATS Rule Electronic Reporting Mtg. Follow-up

Brian,

I appreciate the Michigan Department of Environment, Great Lakes, and Energy (EGLE) staff (you, Julie Brunner, and Jeremy Howe) taking the time to meet with Consumers Energy Company (CEC) staff (Jason Prentice, James Walker, and myself) and Detroit Edison (DTE) staff (Kailyn Johnson, Barry Marietta, and Jason Logan) on 4/11/2024, to discuss the recently effective electronic reporting requirements in MATS Rule (40 CFR 63 Subpart UUUUU).

The key understandings that CEC has from the April 11th meeting are as follows:

1. As noted during the meeting, Emissions Collection and Monitoring Plan System (ECMPS) was supposed to be updated to ECMPS 2.0 before the new MATS Rule electronic reporting requirements became effective to allow for hourly PM data identified in Appendix C of the MATS rule to be submitted to ECMPS via an XML file within 30-days of the end of a reporting quarter. USEPA has failed to build its ECMPS software to accept hourly PM data via XML file as the MATS rule requires. Therefore, this hourly PM data will be submitted via a PDF file to the MATS submittal portion of the existing ECMPS software. EGLE provided tentative approval that submitting hourly PM information required by the MATS Appendix C as PDF to ECMPS instead of as an XML file is not considered a deviation since CEC cannot submit an XML file due to EPA's failure to provide an upgraded version of the ECMPS software to accept the XML data. EGLE plans to confirm this tentative decision by the end of the month. Also, it is CEC's understanding that EGLE does not want a hard copy or other form of this hourly PM data submittal since the PM hourly data submitted to ECMPS will become publicly viewable at the USEPA's WebFire website (<https://cfpub.epa.gov/webfire/> [\[cfpub.epa.gov\]](https://cfpub.epa.gov)). Note: that the existing version of ECMPS already accepts hourly Hg and hourly SO2 data which is visible on EPA's CAMDP website and when ECMPS is upgraded to version ECMPS 2.0 the hourly PM

data will be viewable at the CAMDP website(<https://campd.epa.gov/> [campd.epa.gov]).

2. Further, the MATS rule now requires that quarterly compliance reports be submitted instead of semi-annual compliance reports. These quarterly compliance reports are due 60-days after the end of a quarter and have new reporting requirements. Per Appendix E of the MATS Rule, these quarterly compliance reports are supposed to again be submitted via XML file to the EPA via ECMPS. Again, EGLE provided tentative approval that submitting this new quarterly compliance report as PDF file instead of as an XML file to ECMPS is not a deviation. It is CEC's understanding that EGLE does want a complete hard copy of this PDF quarterly compliance report.
3. Further, it was asked by DTE staff if MATS stack test reports could be submitted solely to ECMPS when ECMPS is upgraded to accept this type of MATS data (since it would be visible to EGLE). EGLE responded that at this time, hardcopy versions with the traditional test report data elements are still required to be submitted to District Offices (w/ hard copy wet ink certification) and the EGLE technical programs unit (TPU).

Please let us know EGLE's final decision regarding whether it is applicable to report a deviation due to the lack of ability to submit XML files in ECMPS, as discussed above in items #1 and #2.

Regards,

Michael E. Gruber II

Environmental Quality & Sustainability - Air Quality | Consumers Energy

DE Karn Plant Annex Building | 2742 N. Weadock Hwy | Essexville, MI 48732

Ph: 989-891-5580 | Email: Michael.GrubertII@cmsenergy.com

Cell: 989-493-3363



**DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
AIR QUALITY DIVISION**

EFFECTIVE DATE: July 27, 2022

ISSUED TO

CONSUMERS ENERGY COMPANY
Consumers Energy – Karn Facility

State Registration Number (SRN): B2840

LOCATED AT

~~2742 and~~ 2680 North Weadock Highway, Essexville, Bay County, Michigan 48732

Style Definition: TOC 1

Style Definition: TOC 2

Commented [MEGI1]: Tashia, I have been told that 2742 is the address for Karn 1&2 . Let me know if you agree and if you want it deleted.

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B2840-2022

Expiration Date: July 27, 2027

Administratively Complete ROP Renewal Application Due Between
January 27, 2026 and January 27, 2027

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Pursuant to Rule 210(1) of the administrative rules promulgated under Act 451, this ROP constitutes the permittee's authority to operate the stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the stationary source and all emission units listed in the permit are subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-B2840-2022

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(1) of Act 451. Pursuant to Rule 214a of the administrative rules promulgated under Act 451, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environment, Great Lakes, and Energy

Chris Hare, Bay City District Supervisor

TABLE OF CONTENTS

AUTHORITY AND ENFORCEABILITY	5
SECTION 1 – KARN 1 AND KARN 2	6
A. GENERAL CONDITIONS.....	7
Permit Enforceability	7
General Provisions.....	7
Equipment & Design	8
Emission Limits.....	8
Testing/Sampling	8
Monitoring/Recordkeeping	9
Certification & Reporting	9
Permit Shield	10
Revisions	11
Reopenings.....	11
Renewals	12
Stratospheric Ozone Protection	12
Risk Management Plan	12
Emission Trading	12
Permit to Install (PTI)	13
B. SOURCE-WIDE CONDITIONS	14
C. EMISSION UNIT SPECIAL CONDITIONS	15
EMISSION UNIT SUMMARY TABLE.....	15
EU-LIMEPREP 1	19 19
EU-BPRECYCLE 1	24 24
EU-BPDISPOSAL 1.....	30 30
EU-SORBENT 1	35 35
EU-COALHAND 1.....	38 38
EU-GUARDHSEGEN2 1.....	44 42
D. FLEXIBLE GROUP SPECIAL CONDITIONS.....	47 45
FLEXIBLE GROUP SUMMARY TABLE	47 45
FG-KARN12 1	49 47
FG-MATS 1	54 62
FG-PARTSCLEANERS 1	64 61
FG-EMERGENCYCIGEN 1	67 64
FG-EMERGENCYSIGEN 1	71 68
FG-NON-EMERGENCYCIENG 1	75 72
E. NON-APPLICABLE REQUIREMENTS	77 74
APPENDICES	78 75
Appendix 1-A 1. Acronyms and Abbreviations	78 75
Appendix 1-B 1. Definitions Applicable to Specified Permit Conditions	79 76
Appendix 2 1. Schedule of Compliance	83 80
Appendix 3-A 1. Monitoring Requirements	83 80
Appendix 3-B 1. PM CEMS	84 81
Appendix 3-C 1. Optimization of Baghouses	84 81
Appendix 4 1. Recordkeeping	85 82

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2027
PTI No: MI-PTI-B2840-2022

Appendix 5-1. Testing Procedures	8582
Appendix 6-1. Permits to Install	8582
Appendix 7-1. Emission Calculations	8784
Appendix 8-1. Reporting	8784
Appendix 9-1. Phase II Acid Rain Permit	8886
Appendix 10-1. Transport Rule (TR) Trading Program Title V Requirements	9895
Appendix 11 A-1. System Wide Tonnage Limitations	109406
Appendix 11 B-1. Allowance Provisions	109406
SECTION 2 – KARN 3 AND KARN 4	113440
A. GENERAL CONDITIONS	114444
Permit Enforceability	114444
General Provisions	114444
Equipment & Design	115442
Emission Limits	115442
Testing/Sampling	115442
Monitoring/Recordkeeping	116443
Certification & Reporting	116443
Permit Shield	117444
Revisions	118445
Reopenings	118445
Renewals	119446
Stratospheric Ozone Protection	119446
Risk Management Plan	119446
Emission Trading	119446
Permit to Install (PTI)	120447
B. SOURCE-WIDE CONDITIONS	121448
C. EMISSION UNIT SPECIAL CONDITIONS	122449
EMISSION UNIT SUMMARY TABLE	122449
EU-FOTANKA-2	124424
EU-KARN34GEN-2	126423
D. FLEXIBLE GROUP SPECIAL CONDITIONS	128425
FLEXIBLE GROUP SUMMARY TABLE	128425
FG-KARN34-2	130427
FG-AUXBLRSAB-2	136433
FG-TANKFARMBLRS-2	142436
FG-PARTSCLEANER34-2	145439
FG-PAINTROOM34-2	148442
E. NON-APPLICABLE REQUIREMENTS	150444
APPENDICES	151445
Appendix 1-2. Abbreviations and Acronyms	151445
Appendix 2-2. Schedule of Compliance	152446
Appendix 3-2. Monitoring Requirements	152446
Appendix 4-2. Recordkeeping	152446
Appendix 5-2. Testing Procedures	152446
Appendix 6-2. Permits to Install	153447
Appendix 7-2. Emission Calculations	153447

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2027
PTI No: MI-PTI-B2840-2022

Appendix 8-2. Reporting153~~147~~
Appendix 9-2. Phase II Acid Rain Permit154~~148~~
Appendix 10-2. Cross State Air Pollution Rule (CSAPR) Trading Program Title V Requirements ..164~~158~~
Appendix 11-2. Fully Reclaimed On-Spec and Specification Used Oil - Fuel Regulatory Specifications175~~169~~

Commented [MEGI2]: Not sure what the point of a ROP Section designation is if there is only going to be one Section in the final document, but I have updated all the Section 2 numbering to Section 1 incase this is a EGLE requirement.

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2022
PTI No: MI-PTI-B2840-2022

AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) or his or her designee.

The permittee shall comply with all specific details in the permit terms and conditions and the cited underlying applicable requirements. All terms and conditions in this ROP are both federally enforceable and state enforceable unless otherwise footnoted. Certain terms and conditions are applicable to most stationary sources for which an ROP has been issued. These general conditions are included in Part A of this ROP. Other terms and conditions may apply to a specific emission unit, several emission units which are represented as a flexible group, or the entire stationary source which is represented as a source-wide group. Special conditions are identified in Parts B, C, D and/or the appendices.

In accordance with Rule 213(2)(a), all underlying applicable requirements will be identified for each ROP term or condition. All terms and conditions that are included in a PTI are streamlined or subsumed, or is state only enforceable will be noted as such.

In accordance with Section 5507 of Act 451, the permittee has included in the ROP application a compliance certification, a schedule of compliance, and a compliance plan. For applicable requirements with which the source is in compliance, the source will continue to comply with these requirements. For applicable requirements with which the source is not in compliance, the source will comply with the detailed schedule of compliance requirements that are incorporated as an appendix in this ROP. Furthermore, for any applicable requirements effective after the date of issuance of this ROP, the stationary source will meet the requirements on a timely basis, unless the underlying applicable requirement requires a more detailed schedule of compliance.

Issuance of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

Consumers Energy Company
Section 1 – Karn 1 and Karn 2

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2027
PTI No: MI-PTI-B2840-2022

SECTION 1 – KARN 1 AND KARN 2

A. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state-only enforceable Source-Wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. **(R 336.1213(5)(a), R 336.1214a(5))**
- Those conditions that are hereby incorporated in a federally enforceable Source-Wide PTI pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: **(R 336.1213(1)(d))**
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2).² **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in Subrules 2, 3, and 4 of this rule, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following:"² **(R 336.1301(1))**
 - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b. A limit specified by an applicable federal new source performance standard.

The grading of visible emissions shall be determined in accordance with Rule 303.
12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(R 336.1901(b))**

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).² **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. **(R 336.1213(3)(b))**
- The date, location, time, and method of sampling or measurements.
 - The dates the analyses of the samples were performed.
 - The company or entity that performed the analyses of the samples.
 - The analytical techniques or methods used.
 - The results of the analyses.
 - The related process operating conditions or parameters that existed at the time of sampling or measurement.
17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
- For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
- Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that; "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete." The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.² **(R 336.1912)**

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
- The applicable requirements are included and are specifically identified in the ROP.
 - The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.
- Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.
27. Nothing in this ROP shall alter or affect any of the following:
- The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**

- d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
- 28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
 - a. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
 - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
 - c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
 - d. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
 - e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
- 29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

- 30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
- 31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**
- 32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(10))**
- 33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

- 34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
 - a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
 - c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
 - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(9))**

Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR Part 68)**

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. **(R 336.1213(12))**

Consumers Energy Company
Section 1 – Karn 1 and Karn 2

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2022
PTI No: MI-PTI-B2840-2022

Permit to Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.² **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.² **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.² **(R 336.1219)**
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.² **(R 336.1201(4))**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

B. SOURCE-WIDE CONDITIONS

Part B outlines the Source-Wide Terms and Conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the general conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no Source-Wide Conditions, this section will be left blank.

C. EMISSION UNIT SPECIAL CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-LIMEPREP-1	Lime preparation operations consisting of lime storage silos for truck unloading, lime detention slakers and lime slurry transfer and product tanks. Emissions from the silos are controlled by bin vent filters and the lime slakers are controlled by spray scrubbers. Both bin vent filters (LSABV-1 and LSBBV-2) and both of the dust/spray scrubbers (LSADVS-5 and LSBDVS-6) are subject to 40 CFR Part 64 Compliance Assurance Monitoring (CAM). (PTI No. 224-10A)	06-26-2014	NA
EU-BPRECYCLE-1	Byproduct (ash, spent lime, and sorbent) recycle system for Karn 1 and 2 consisting of byproduct recycle storage bins, byproduct vacuum transport blowers, and byproduct recycle slurry mix tanks. Emissions from the vacuum transport blowers vent through filter separators that exhaust to the fabric filter baghouses on either EUKARN1 or EUKARN2, and emissions from the recycle storage bins are controlled by bin vent filters. Emissions from the recycle slurry mix tanks are controlled by spray scrubbers. (PTI No. 224-10A)	06-26-2014	NA

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-BPDISPOSAL-1	Byproduct (ash, spent lime, and sorbent) disposal system for Karn 1 and 2 consisting of byproduct disposal storage silos and byproduct vacuum transport blowers to silos. Emissions from the vacuum transport blowers are controlled by filter separators and emissions from the disposal storage silos are controlled by bin vent filters. (PTI No. 224-10A)	06-26-2014	NA
EU-SORBENT-1	Two sorbent storage silos controlled by bin vent filters. (PTI No. 224-10A)	06-26-2014	NA
EU-FHPUMP-1	A new diesel-fired non-emergency compressor-assisted pump used onsite for water management. The design capacity of the generator is 31 kW or 42 horsepower (hp). This emission unit is subject to 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.	12-2017	FG-NON-EMERGENCCIENG-1
EU-COALHAND-1	Coal handling activities for Karn 1 and Karn 2	01-01-1939 / 10-01-1991	NA
EU-KARN1-1	Karn Boiler #1 is a 2500 MMBTU/hr dry bottom tangential coal fired boiler with fuel oil startup capabilities and supplemental co-firing for flame stabilization and mill outages. Particulate emissions are controlled by a low pressure high volume (LPHV) pulse jet fabric filter (PJFF) (installed in 2011). A Selective Catalytic Reduction (SCR) unit (installed in 2004), a spray dry absorber (SDA) (installed in 2014), and sorbent injection (installed in 2015) are utilized for nitrogen oxides (NOx), sulfur dioxide (SO₂), and other acid gases, and mercury (Hg) control, respectively. (PTI No. 40-15)	07-01-1956 / 06-26-2014	FG-KARN12-1 FG-MATS-1

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-KARN2-1	Karn Boiler #2 is a 2540 MMBTU/hr dry bottom wall coal-fired boiler with fuel oil startup capabilities and supplemental co-firing for flame stabilization and mill outages. Particulate emissions are controlled by a low-pressure high volume (LPHV) pulse jet fabric filter (PJFF) (installed in 2010). Additionally, Low NOx burners were installed in 1998. A Selective Catalytic Reduction (SCR) unit (installed in 2003), spray dry absorber (SDA) (installed in 2015), and sorbent injection (installed in 2015) are utilized for NOx, SO₂, and other acid gases, and Hg control, respectively. (PTI No. 40-15)	07-01-1956 / 06-26-2014	FG-KARN12-1, FG-MATS-1
EU-PARTSCLEANERS12-1	Cold parts cleaner at Karn 1 and 2 plants.	01-18-1980	FG-PARTSCLEANERS-1
EU-KARN12DCGEN-1	Karn 1 and 2 DC shared emergency diesel generators. The maximum design capacity of the generator is less than 500 horsepower.	07-01-1956	FG-EMERGENCYCIGEN-1
EU-KARN12ACGEN-1	Karn 1 and 2 AC shared emergency diesel generator. The maximum design capacity of the generator is less than 500 horsepower.	07-01-1956	FG-EMERGENCYCIGEN-1
EU-GUARDHSEGEN1-1	An existing propane-fired emergency generator to provide emergency power to the guard house. The maximum design capacity of the generator is 12 horsepower.	2005	FG-EMERGENCYSIGEN-1
EU-GUARDHSEGEN2-1	A new propane-fired emergency generator to provide emergency power to the guard house. The maximum design capacity is 45.5 horsepower.	10-17-2013	NA
EU-FISHBARGEN-1	An existing propane-fired emergency generator to provide emergency power to the energized fish barrier net. The maximum design capacity of the generator is 10.7 horsepower.	2005	FG-EMERGENCYSIGEN-1
EU-WDKPMP(5765)-1	A new stationary non-emergency diesel-fired compression ignition (CI) internal combustion engine with a maximum rating of 173 horsepower (1.21 MMBTU/hr). Serial # (PE4045U115765).	2021	FG-NON-EMERGENCYCIENG-1

Consumers Energy Company
Section 1 – Karn 1 and Karn 2

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2022
PTI No: MI-PTI-B2840-2022

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-WDKPMP(6284)-1	A new stationary non-emergency diesel-fired compression ignition (CI) internal combustion engine with a maximum rating of 173 horsepower (1.21 MMBTU/hr). Serial # (PE4045U116248).	2021	FG-NON-EMERGENCYCIENG-1

—EU-LIMEPREP-1
EMISSION UNIT CONDITIONS

DESCRIPTION

Lime preparation operations consisting of lime storage silos for truck unloading, lime detention slakers and lime slurry transfer and product tanks. Emissions from the silos are controlled by bin vent filters and the lime slakers are controlled by spray scrubbers. Both bin vent filters (LSABV-1 and LSBBV-2) and both of the dust/spray scrubbers (LSADVS-5 and LSBDVS-6) are subject to 40 CFR Part 64 Compliance Assurance Monitoring (CAM). (PTI No. 224-10A)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

- Lime Storage Silos (A & B) are each controlled by an individual dust collector (LSABV-1 & LSBBV-2), respectively.
- Lime Slackers (A & B) are each controlled by an individual dust/vapor spray scrubber (LSADVS-5 & LSBDVS-6), respectively.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	5 percent ²	Per 6-minute time period	Each bin vent filter in EU-LIMEPREP-1 for unloading (LSABV-1, LSBBV-2)	SC-VI.2	R 336.1301(1)(c)
2. Opacity	5 percent ²	Per 6-minute time period	Each spray scrubber in EU-LIMEPREP-1 for unloading (LSADVS-5, LSBDVS-6)	SC-VI.2	R 336.1301(1)(c)
3. PM	0.004 gr/dscf of exhaust gases ²	Hourly	Each bin vent filter in EU-LIMEPREP-1 for unloading (LSABV-1, LSBBV-2) (CAM Subject)	SC-IV.1, V.1	R 336.1331(1)(c)
4. PM	0.04 gr/dscf of exhaust gases ²	Hourly	Each spray scrubber in EU-LIMEPREP-1 (LSADVS-5, LSBDVS-6) (CAM Subject)	SC-IV.1, V.1	R 336.1331(1)(c)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
5. PM10	0.04 pph ²	Hourly	Each bin vent filter in EU-LIMEPREP- 1 for unloading (LSABV-1, LSBBV-2) (CAM Subject)	SC-IV.1, V.1	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
6. PM2.5	0.04 pph ²	Hourly	Each bin vent filter in EU-LIMEPREP- 1 for unloading (LSABV-1, LSBBV-2) (CAM Subject)	SC-IV.1, V.1	R 336.2804, 40 CFR 52.21(d)
7. PM10	0.05 pph ²	Hourly	Each spray scrubber in EU-LIMEPREP- 1 (LSADVS-5, LSBDVS-6) (CAM Subject)	SC-IV.1, V.1	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
8. PM2.5	0.05 pph ²	Hourly	Each spray scrubber in EU-LIMEPREP- 1 (LSADVS-5, LSBDVS-6) (CAM Subject)	SC-IV.1, V.1	R 336.2804, 40 CFR 52.21(d)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall maintain a program for continuous fugitive dust control for all material handling operations. The program shall be updated as necessary and kept at the facility. If at any time the fugitive dust control program fails to address or inadequately addresses an event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 90 days if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the amended fugitive dust control program shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emissions limits.² (**R 336.1372, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d), Act 451 Section 324.5524**)
- The permittee shall not operate EU-LIMEPREP-1 unless a Malfunction Abatement Plan (MAP) as described in Rule 911(2) for operation of the emission control equipment is implemented, updated as necessary, and kept at the facility. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 90 days if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective

~~procedures or operational changes to achieve compliance with all applicable emission limits.² (R 336.1910, R 336.1911)~~

IV. DESIGN/EQUIPMENT PARAMETER(S)

- ~~1. The permittee shall not operate any portion of EU-LIMEPREP-1 unless the associated bin vent filters and spray scrubbers are installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for EU-LIMEPREP-1 as required in SC III.2.² (R 336.1901, R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))~~

V. TESTING/SAMPLING

~~Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(iii))~~

- ~~1. Upon request of the AQD District Supervisor, the permittee shall verify PM, PM2.5 and PM10 emission rates from EU-LIMEPREP-1 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:~~

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

~~An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)~~

- ~~2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. (R 336.1213(3))~~

VI. MONITORING/RECORDKEEPING

~~Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(iii))~~

- ~~1. The permittee shall complete all required records in a format acceptable to the AQD District Supervisor and make them available by the 30th day of the calendar month for the previous calendar month unless otherwise specified in any monitoring/recordkeeping special condition.² (R 336.1205, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))~~
- ~~2. The permittee shall perform and document non-certified visible emissions observations as an indicator of compliance with SC I.1 and I.2 on a daily basis when EU-LIMEPREP-1 is operating. If during the observation there are any visible emissions detected from an emission point, then corrective procedures as defined in the MAP shall be implemented. Records of the non-certified visible emissions observations, USEPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD.² (R 336.1301(1)(c))~~
- ~~3. The permittee shall conduct and record non-certified visible emissions observations for each bin vent filter (LSABV-1 and LSBBV-2) and each spray dry scrubber (LSADVS-5 and LSBDVS-6) exhaust point once daily, when operating, as an indicator of proper functioning of the bin vent filter and spray dry scrubber. If visible emissions are observed, the permittee shall document the visible emissions, including the duration, and continue to observe the source of the visible emissions until no visible emissions are observed. The permittee shall initiate corrective actions as quickly as possible upon the detection of visible emissions. If there is a break in the visible emissions observations, it will be assumed that visible emissions continue to occur during any break in observations. (40 CFR 64.6(c)(1)(i) and (ii))~~

4. ~~An excursion is the observation of visible emissions from the bin vent filters (LSABV-1 and LSBBV-2) and spray dry scrubber (LSADVS-5 and LSBDVS-6) exhaust points servicing EU-LIMEPREP for a duration exceeding one (1) hour. (40 CFR 64.6(c)(2))~~
5. ~~Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). (40 CFR 64.7(d))~~
6. ~~Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 64.6(c)(3), 40 CFR 64.7(c))~~
7. ~~The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. (40 CFR 64.7(b))~~
8. ~~The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. (40 CFR 64.9(b)(1))~~

Formatted: Indent: Left: 0", Hanging: 0.25"

Formatted: Indent: Left: 0", Hanging: 0.25"

Formatted: Indent: Left: 0", Hanging: 0.25"

VII. REPORTING

1. ~~Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(iii))~~
2. ~~Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))~~
3. ~~Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))~~
4. ~~Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. (40 CFR 64.9(a)(2)(i))~~
5. ~~Each semiannual report of monitoring and deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. (40 CFR 64.9(a)(2)(ii))~~

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-BV-1	16 ²	100 ²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
2. SV-BV-2	16 ²	100 ²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
3. SV-SS-5	9 ²	20 ²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
4. SV-SS-6	9 ²	20 ²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**
2. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the ROP and CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. **(40 CFR 64.7(e))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**—EU-BPRECYCLE-1
EMISSION UNIT CONDITIONS**

DESCRIPTION

Byproduct (ash, spent lime, and sorbent) recycle system for Karn 1 and 2 consisting of byproduct recycle storage bins, byproduct vacuum transport blowers, and byproduct recycle slurry mix tanks. Emissions generated by the vacuum transport blowers pulling byproduct collected by either the EU-KARN1 or the EU-KARN2 pulse jet fabric filter (PJFF) route through one of four filter separators that exhaust back to the fabric filter baghouses on either EU-KARN1 or EU-KARN2 PJFF. Emissions from the recycle storage bins are controlled by bin vent filters and emissions from the recycle slurry mix tanks are controlled by spray scrubbers. The recycle storage bin vent filters (R2ADVS-17 and R2BDVS-18) are subject to 40 CFR Part 64 Compliance Assurance Monitoring (CAM). (PTI No. 224-10A)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

- The vacuum transport blowers (RA1AVB & RA1BVB) related emissions are routed to a single filter separator (either R1AFSA-11 or R1BFSA-12) and then to EUKARN1 PJFF before discharge to the atmosphere. The vacuum transport blowers (RA2AVB & RA2BVB) related emissions are routed to a single filter separator (either R2AFSA-13 or R2BFSA-14) and then to EUKARN2 PJFF before discharge to the atmosphere.
- The (K1 & K2) recycle ash storage bins have dedicated bin vent filters (R1BV-8 & R2BV-10), respectively.
- The recycle slurry mix tanks (K1 Mix Tank A, K1 Mix Tank B, K2 Mix Tank A, & K2 Mix Tank B) are each controlled by a dedicated spray scrubber (R1ADVS-15, R1BDVS-16, R2ADVS-17, & R2BDVS-18), respectively.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	5 percent ²	Per 6-minute time period	Each bin vent filter in EU-BPRECYCLE-1 (R1BV-8, R2BV-10)	SC-VI.2	R 336.1301(1)(c)
2. Opacity	5 percent ²	Per 6-minute time period	Each spray scrubber in EU-BPRECYCLE-1 (R1ADVS-15, R1BDVS-16, R2ADVS-17, R2BDVS-18)	SC-VI.2	R 336.1301(1)(c)
3. PM	0.004 gr/dscf of exhaust gases ²	Hourly	Each filter separator in EU-BPRECYCLE-1 exhausting to the fabric filter baghouses on either EU-KARN1-1 or EU-KARN2-1 (R1AFSA-11, R1BFSA-12, R2AFSA-13, R2BFSA-14)	SC-IV.1, V.1	R 336.1331(1)(c)
4. PM	0.004 gr/dscf of exhaust gases ²	Hourly	Each bin vent filter in EU-BPRECYCLE-1 (R1BV-8, R2BV-10)	SC-IV.1, V.1	R 336.1331(1)(c)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
5. PM	0.01-gr/dscf-of exhaust gases ²	Hourly	Each spray scrubber in EU-BPRECYCLE-1 (R1ADVS-15, R1BDVS-16, R2ADVS-17, R2BDVS-18)	SC-IV.1, V.1	R 336.1331(1)(c)
6. PM10	0.21 pph ²	Hourly	Each filter separator in EU-BPRECYCLE-1 exhausting to the fabric filter baghouses on either EU-KARN1- 1 or EU-KARN2-1 (R1AFSA-11, R1BFSA-12, R2AFSA-13, R2BFSA-14)	SC-IV.1, V.1	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
7. PM2.5	0.21 pph ²	Hourly	Each filter separator in EU-BPRECYCLE-1 exhausting to the fabric filter baghouses on either EU-KARN1- 1 or EU-KARN2-1 (R1AFSA-11, R1BFSA-12, R2AFSA-13, R2BFSA-14)	SC-IV.1, V.1	R 336.2804, 40 CFR 52.21(d)
8. PM10	0.03 pph ²	Hourly	Each bin vent filter in EU-BPRECYCLE-1 (R1BV-8, R2BV-10) (CAM Subject)	SC-IV.1, V.1	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
9. PM2.5	0.03 pph ²	Hourly	Each bin vent filter in EU-BPRECYCLE-1 (R1BV-8, R2BV-10) (CAM Subject)	SC-IV.1, V.1	R 336.2804, 40 CFR 52.21(d)
10. PM10	0.05 pph ²	Hourly	Each spray scrubber in EU-BPRECYCLE-1 (R1ADVS-15, R1BDVS-16, R2ADVS-17, R2BDVS-18) (CAM Subject)	SC-IV.1, V.1	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
11. PM2.5	0.05 pph ²	Hourly	Each spray scrubber in EU-BPRECYCLE-1 (R1ADVS-15, R1BDVS-16, R2ADVS-17, R2BDVS-18) (CAM Subject)	SC-IV.1, V.1	R 336.2804, 40 CFR 52.21(d)

II. MATERIAL LIMIT(S)

NA

III. ~~PROCESS/OPERATIONAL RESTRICTION(S)~~

- ~~1. The permittee shall maintain a program for continuous fugitive dust control for all material handling operations. The program shall be updated as necessary and kept at the facility. If at any time the fugitive dust control program fails to address or inadequately addresses an event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 90 days if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the amended fugitive dust control program shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emissions limits.² (R 336.1372, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d), Act 451 Section 324.5524)~~
- ~~2. The permittee shall not operate EU-BPRECYCLE-1 unless a Malfunction Abatement Plan (MAP) as described in Rule 911(2) for operation of the emission control equipment is implemented, updated as necessary, and kept at the facility. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 90 days if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² (R 336.1910, R 336.1911)~~
- ~~3. The permittee shall not operate the byproduct vacuum transport blowers (RA1AVB, RA1BVB, RA2AVB, and RA2BVB) unless the associated exhaust gases discharge to the fabric filter baghouses on either EU-KARN1-1 or EU-KARN2-1 for EU-BPRECYCLE-1.² (R 336.1205, R 336.1331, R 336.12803, R 336.2804, 40 CFR 52.21(c) and (d))~~

IV. ~~DESIGN/EQUIPMENT PARAMETER(S)~~

- ~~1. The permittee shall not operate any portion of EU-BPRECYCLE-1 unless the associated filter separators, bin vent filters and spray scrubbers are installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for EU-BPRECYCLE-1 as required in SC III.2.² (R 336.1901, R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))~~

V. ~~TESTING/SAMPLING~~

~~Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(iii))~~

- ~~1. Upon request of the AQD District Supervisor, the permittee shall verify PM, PM2.5 and PM10 emission rates from EU-BPRECYCLE-1 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:~~

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

~~An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)~~

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. ~~(R 336.1213(3))~~

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. ~~(R 336.1213(3)(b)(iii))~~

1. The permittee shall complete all required records in a format acceptable to the AQD District Supervisor and make them available by the 30th day of the calendar month for the previous calendar month unless otherwise specified in any monitoring/recordkeeping special condition.² ~~(R 336.1205, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))~~
2. The permittee shall perform and document non-certified visible emissions observations as an indicator of compliance with SC I.1 and I.2 on a daily basis when EU-BPRECYCLE-1 is operating. If during the observation there are any visible emissions detected from an emission point, then corrective actions as defined in the MAP shall be implemented. Records of the non-certified visible emissions observations, USEPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD.² ~~(R 336.1301(1)(c))~~
3. The permittee shall conduct and record non-certified visible emissions observations for each bin vent filter (R1BV-8 and R2BV-10) and each spray dry scrubber (R1ADVS-15, R2ADVS-16, R2ADVS-17, and R2BDVS-18) exhaust point once daily, when operating, as an indicator of proper functioning of the bin vent filter and spray dry scrubber. If visible emissions are observed, the permittee shall document the visible emissions, including the duration, and continue to observe the source of the visible emissions until no visible emissions are observed. The permittee shall initiate corrective actions as quickly as possible upon the detection of visible emissions. If there is a break in the visible emissions observations, it will be assumed that visible emissions continue to occur during any break in observations. ~~(40 CFR 64.6(c)(1)(i) and (ii))~~
4. An excursion is the observation of visible emissions from the bin vent filters (R1BV-8 and R2BV-10) and spray dry scrubber (R1ADVS-15, R2ADVS-16, R2ADVS-17, and R2BDVS-18) exhaust points servicing EU-BPRECYCLE-1 for a duration exceeding one (1) hour. ~~(40 CFR 64.6(c)(2))~~
5. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). ~~(40 CFR 64.7(d))~~
6. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. ~~(40 CFR 64.6(c)(3), 40 CFR 64.7(c))~~
7. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. ~~(40 CFR 64.7(b))~~
8. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and

~~other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. (40 CFR 64.9(b)(1))~~

VII. REPORTING

- ~~1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))~~
- ~~2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))~~
- ~~3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))~~
- ~~4. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. (40 CFR 64.9(a)(2)(i))~~

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-BV-8	13²	100²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
2. SV-BV-10	13²	100²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
3. SV-SS-15	8²	20²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
4. SV-SS-16	8²	20²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
5. SV-SS-17	8²	20²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
6. SV-SS-18	8²	20²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
7. SVKARN1-1 (Vents R1AFSA-11 & R1BFSA-12)	216²	350²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
8. SVKARN2-1 (Vents R2AFSA-13 & R2BFSA-14)	216²	350²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

- ~~1. The permittee shall comply with all applicable requirements of 40 CFR Part 64. (40 CFR Part 64)~~
- ~~2. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or~~

Consumers Energy Company
Section 1 – Karn 1 and Karn 2

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2022
PTI No: MI-PTI-B2840-2022

~~the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the ROP and CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (40 CFR 64.7(e))~~

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**—EU-BPDISPOSAL-1
EMISSION UNIT CONDITIONS**

DESCRIPTION

Byproduct (ash, spent lime, and sorbent) disposal system for Karn 1 and 2 consisting of byproduct disposal storage silos and byproduct vacuum transport blowers to silos. Emissions generated by the vacuum transport blowers pulling byproduct collected by the EU-KARN1 and EU-KARN2 PJFFS are controlled by filter separators and emissions from the disposal storage silos are controlled by bin vent filters. The filter separators (K1ABPFSA-23, K1BBPFSA-24, K2ABPFSA-25, and K2BBPFSA-26) for the vacuum transport blowers and the bin vent filters (K1BPPBV-19 and K2BPPBV-20) for the disposal storage silos are both subject to CAM. (PTI No. 224-10A)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

- The emissions generated by vacuum transport blowers (BP1AVB, BP1BVB, BP2AVB, & BP2BVB) are routed to one of the four filter separators (K1ABPFSA-23, K1BBPFSA-24, K2ABPFSA-25, & K2BBPFSA-26) before discharge to the atmosphere.
- The (K1& K2) disposal storage silos have dedicated bin vent filters (K1BPPBV-19 & K2BPPBV-20), respectively.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	5 percent ²	Per 6-minute time period	Each filter separator in EU-BPDISPOSAL-1 (K1ABPFSA-23, K1BBPFSA-24, K2ABPFSA-25, K2BBPFSA-26)	SC VI.2	R 336.1301(1)(c)
2. Opacity	5 percent ²	Per 6-minute time period	Each bin vent filter for storage silos in EU-BPDISPOSAL-1 (K1BPPBV-19, K2BPPBV-20)	SC VI.2	R 336.1301(1)(c)
3. PM	0.004 gr/dscf of exhaust gases ²	Hourly	Each filter separator in EU-BPDISPOSAL-1 (K1ABPFSA-23, K1BBPFSA-24, K2ABPFSA-25, K2BBPFSA-26) (CAM SUBJECT)	SC IV.1, V.1	R 336.1331(1)(c)
4. PM	0.004 gr/dscf of exhaust gases ²	Hourly	Each bin vent filter for storage silos in EU-BPDISPOSAL-1 (K1BPPBV-19, K2BPPBV-20) (CAM SUBJECT)	SC IV.1, V.1	R 336.1331(1)(c)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
5. PM10	0.25 pph ²	Hourly	Each filter separator in EU-BPDISPOSAL-1 (K1ABPFSA-23, K1BBPFSA-24, K2BPFS-25, K2BBPFSA-26) (CAM SUBJECT)	SC IV.1, V.1	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
6. PM2.5	0.25 pph ²	Hourly	Each filter separator in EU-BPDISPOSAL-1 (K1ABPFSA-23, K1BBPFSA-24, K2ABPFSA-25, K2BBPFSA-26) (CAM SUBJECT)	SC IV.1, V.1	R 336.2804, 40 CFR 52.21(d)
7. PM10	0.15 pph ²	Hourly	Each bin-vent filter for storage silos in EU-BPDISPOSAL-1 (K1BPBV-19, K2BPBV-20) (CAM SUBJECT)	SC IV.1, V.1	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
8. PM2.5	0.15 pph ²	Hourly	Each bin-vent filter for storage silos in EU-BPDISPOSAL-1 (K1BPBV-19, K2BPBV-20) (CAM SUBJECT)	SC IV.1, V.1	R 336.2804, 40 CFR 52.21(d)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall maintain a program for continuous fugitive dust control for all material handling operations. The program shall be updated as necessary and kept at the facility. If at any time the fugitive dust control program fails to address or inadequately addresses an event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 90 days if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the amended fugitive dust control program shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emissions limits.² **(R 336.1372, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d), Act 451 Section 324.5524)**
- The permittee shall not operate EU-BPDISPOSAL-1 unless a Malfunction Abatement Plan (MAP) as described in Rule 911(2) for operation of the emission control equipment is implemented, updated as necessary, and kept at the facility. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 90 days if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit any amendments to the MAP to the AQD District Supervisor.

for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² ~~(R 336.1910, R 336.1914)~~

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any portion of EU-BPDISPOSAL-1 unless the associated filter separators and bin vent filters are installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for EU-BPDISPOSAL-1 as required in SC III.2.² ~~(R 336.1901, R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))~~

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. ~~(R 336.1213(3)(b)(iii))~~

1. Upon request of the AQD District Supervisor, the permittee shall verify PM, PM2.5 and PM10 emission rates from EU-BPDISPOSAL-1 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. ~~(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)~~

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. ~~(R 336.1213(3))~~

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. ~~(R 336.1213(3)(b)(iii))~~

1. The permittee shall complete all required records in a format acceptable to the AQD District Supervisor and make them available by the 30th day of the calendar month for the previous calendar month unless otherwise specified in any monitoring/recordkeeping special condition.² ~~(R 336.1205, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))~~
2. The permittee shall perform, and document non-certified visible emissions observations as an indicator of compliance with SC I.1 and I.2 on a daily basis when EU-BPDISPOSAL-1 is operating. If during the observation there are any visible emissions detected from an emission point, then corrective actions as defined in the MAP shall be implemented. Records of the non-certified visible emissions observations, USEPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD.² ~~(R 336.1301(1)(c))~~
3. The permittee shall conduct and record non-certified visible emissions observations for each bin vent filter (K1BPPV-19 and K2BPPV-20) and each of the exhaust points associated with the vacuum transport blowers and the filter separators (K1ABPFSA-23, K1BBPFSA-24, K2ABPFSA-25, and K2BPFSA-26) once daily when operating as an indicator of proper functioning of the bin vent filters and filter separators. If visible emissions are observed, the permittee shall document the visible emissions, including the duration, and continue to observe the source of the visible emissions until no visible emissions are observed. The permittee shall initiate corrective actions as quickly as possible upon the detection of visible emissions. If there is a break in the visible emissions

~~observations, it will be assumed that visible emissions continue to occur during any break in observations. (40 CFR 64.6(c)(1)(i) and (ii))~~

- ~~4. An excursion is the observance of visible emissions from the bin vent filters (K1BPPV-19 and K2BPPV-20) and/or filter separators (K1ABPFSA-23, K1BBPFSA-24, K2ABPFSA-25, and K2BPFSA-26) exhaust points servicing EU-BPDISPOSAL-1 for a duration exceeding one (1) hour. (40 CFR 64.6(c)(2))~~
- ~~5. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). (40 CFR 64.7(d))~~
- ~~6. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 64.6(c)(3), 40 CFR 64.7(c))~~
- ~~7. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. (40 CFR 64.7(b))~~
- ~~8. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. (40 CFR 64.9(b)(1))~~

VII. REPORTING

- ~~1. Prompt reporting of deviations pursuant to General Conditions 24 and 22 of Part A. (R 336.1213(3)(c)(ii))~~
- ~~2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))~~
- ~~3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))~~
- ~~4. Each semiannual report of monitoring and deviations shall include summary information on the number, duration, and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. (40 CFR 64.9(a)(2)(i))~~

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-FS-23	24 ²	15 ²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
2. SV-FS-24	24 ²	15 ²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
3. SV-FS-25	24 ²	15 ²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
4. SV-FS-26	24 ²	15 ²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
5. SV-BV-19	16 ²	134 ²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
6. SV-BV-20	16 ²	134 ²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**
2. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the ROP and CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. **(40 CFR 64.7(e))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EU-SORBENT-1
EMISSION UNIT CONDITIONS

DESCRIPTION

Two (2) sorbent storage silos controlled by bin vent filters. (PTI No. 224-10A)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

The sorbent storage silos for (K1 & K2) have dedicated bin vent filters (K1ACIBV-30 & K2ACIBV-31), respectively.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	5 percent ²	Per 6-minute time period	Each bin vent filter for storage silos in EU-SORBENT-1 (K1ACIBV-30, K2ACIBV-31)	SC-VI.2	R 336.1301(1)(c)
2. PM	0.004 gr dsccf of exhaust gases ²	Hourly	Each bin vent filter for storage silos in EU-SORBENT-1 (K1ACIBV-30, K2ACIBV-31)	SC-IV.1, V.1	R 336.1331(1)(c)
3. PM10	0.04 pph ²	Hourly	Each bin vent filter for storage silos in EU-SORBENT-1 (K1ACIBV-30, K2ACIBV-31)	SC-IV.1, V.1	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
4. PM2.5	0.04 pph ²	Hourly	Each bin vent filter for storage silos in EU-SORBENT-1 (K1ACIBV-30, K2ACIBV-31)	SC-IV.1, V.1	R 336.2804, 40 CFR 52.21(d)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall maintain a program for continuous fugitive dust control for all material handling operations. The program shall be updated as necessary and kept at the facility. If at any time the fugitive dust control program fails to address or inadequately addresses an event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 90 days if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the amended fugitive dust control program shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve

~~compliance with all applicable emissions limits.² (R 336.1372, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d), Act 451 Section 324.5524)~~

- ~~2. The permittee shall not operate EU-SORBENT-1 unless a Malfunction Abatement Plan (MAP) as described in Rule 911(2) for operation of the emission control equipment is implemented, updated as necessary, and kept at the facility. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 90 days if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² (R 336.1910, R 336.1911)~~

IV. DESIGN/EQUIPMENT PARAMETER(S)

- ~~1. The permittee shall not operate any portion of EU-SORBENT-1 unless the associated bin vent filters are installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for EU-SORBENT-1 as required in SC III.2.² (R 336.1901, R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))~~

V. TESTING/SAMPLING

~~Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))~~

- ~~1. Upon request of the AQD District Supervisor, the permittee shall verify PM, PM2.5 and PM10 emission rates from EU-SORBENT-1 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:~~

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

~~An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)~~

- ~~2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. (R 336.1213(3))~~

VI. MONITORING/RECORDKEEPING

~~Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(iii))~~

- ~~1. The permittee shall complete all required records in a format acceptable to the AQD District Supervisor and make them available by the 30th day of the calendar month for the previous calendar month unless otherwise specified in any monitoring/recordkeeping special condition.² (R 336.1205, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))~~
- ~~2. The permittee shall perform and document non-certified visible emissions observations as an indicator of compliance with SC I.1 on a daily basis when EU-SORBENT-1 is operating. If during the observation there are any visible emissions detected from an emission point, then corrective actions as defined in the MAP shall be implemented. Records of the non-certified visible emissions observations, USEPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD.² (R 336.1301(1)(c))~~

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. ~~(R 336.1213(3)(c)(ii))~~
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. ~~(R 336.1213(3)(c)(i))~~
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for the previous calendar year. ~~(R 336.1213(4)(c))~~

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-BV-30	16 ²	55 ²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
2. SV-BV-31	16 ²	55 ²	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EU-COALHAND-1

EMISSION UNIT CONDITIONS

DESCRIPTION

Coal handling activities for Karn 1 and Karn 2. The Dumper Building dust collector is subject to CAM, and it is equipped with two exhaust stacks (SVDBC1 & SVDBC2).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Dust collectors, water sprinkling system, radial stacker with telescopic chute, dust suppression chemicals.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate Matter	0.10 pounds per 1000 pounds of exhaust gases, calculated on a dry-gas basis ²	Hourly	EU-COALHAND-1 (The dumper building dust collector only is subject to CAM)	SC-VI.1	R-336.1331(1)(a), Table 31(j)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

~~Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))~~

NA

VI. MONITORING/RECORDKEEPING

~~Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))~~

~~1. The permittee shall perform and record the results of a non-certified visible emissions check on the coal handling system dust collector discharges at least once daily during periods of equipment operation. The visible emissions check shall verify the presence of any visible emissions and need not follow the procedures in USEPA Method 9; therefore, multiple stacks may be observed simultaneously. The date (time only if visible emissions are observed), name (or initials) of visible emissions observer, and whether any visible emissions were observed shall be recorded. If any visible emissions are observed, the permittee shall immediately initiate corrective actions and document the corrective actions taken based upon the initial non-certified visible emissions check that indicated the presence of any visible emissions (R 336.1213(3), R 336.1301)~~

~~2. The permittee shall conduct and record non-certified visible emissions observations for the dust collector associated with the Dumper Building (SVDBC1 and SVDBC2) exhaust point once daily on days the dumper building operates as an indicator of proper functioning of the dust collector. If visible emissions are observed, the permittee shall document the visible emissions, including the duration, and continue to observe the source of the visible emissions until no visible emissions are observed. The permittee shall initiate corrective actions as quickly as possible upon the detection of visible emissions. If~~

~~there is a break in the visible emissions observations, it will be assumed that visible emissions continue to occur during any break in observations. (40 CFR 64.6(c)(1)(i) and (ii))~~

~~3. The permittee shall utilize visible emissions as the primary indicator of the proper functioning of the dumper building fabric filter baghouse. The appropriate range of visible emissions defining proper functioning of the fabric filter baghouse is no visible emissions. (40 CFR 64.6(c)(1)(i and ii))~~

~~4. An excursion is the observance of visible emissions from any of the exhaust points associated with the dust collector associated with the Dumper Building (SVDBC1 and SVDBC2) servicing EU-COALHAND-1 for a duration exceeding one (1) hour. (40 CFR 64.6(c)(2))~~

~~5. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 64.6(c)(3), 40 CFR 64.7(c))~~

~~6. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emission unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). (40 CFR 64.7(d))~~

~~7. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy or monitoring, or records of monitoring, maintenance, or corrective actions. (40 CFR 64.9(b)(1))~~

~~8. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. (40 CFR 64.7(b))~~

~~9. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality~~

Consumers Energy Company
Section 1 – Karn 1 and Karn 2

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2022
PTI No: MI-PTI-B2840-2022

~~improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. (40 CFR 64.9(b)(1))~~

~~10. The permittee shall keep records as specified in the most current version of the Fugitive Dust Control Program. This information shall be made available to the Michigan Department of Environment, Great Lakes, and Energy upon written or verbal request. (R 336.1213(3), R 336.1371)~~

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. ~~(R 336.1213(3)(c)(ii))~~
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. ~~(R 336.1213(3)(c)(i))~~
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for the previous calendar year. ~~(R 336.1213(4)(c))~~
4. Each semiannual report of monitoring and deviations shall include summary information on the number, duration, and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. ~~(40 CFR 64.9(a)(2)(i))~~

See Appendix 8-1

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Requirements	Applicable
1. SVBTTEF1* (Karn Bunkers and Transfer Tower exhaust fan, dust collector)	32 x 43	95	NA	
2. SVTREF1* (Karn Tripper exhaust fan, dust collector)	46 x 25	124	NA	
3. SVBHEF1* (Karn Breaker House dust collector)	26 x 35	77	NA	
4. SVREF1 (Karn Reclaim Hoppers dust collector)	44 x 48	21	NA	
5. SVDBC1* (Dumper Bldg dust collector — East exhaust)	72 (round exhaust)	33	NA	
6. SVDBC2* (Dumper Bldg dust collector — West exhaust)	72 (round exhaust)	33	NA	

*Discharges unobstructed horizontally

*The dumper building dust collector is the only unit subject to the 40 CFR Part 64 regulation and visible emissions observations shall be conducted on a daily basis, during periods of equipment operation.

IX. OTHER REQUIREMENT(S)

1. The permittee shall fully comply with the terms and conditions of the most current approvable version of the Fugitive Dust Control Program (FDCP). The FDCP shall be consistent with the requirements stated in R 336.1371 and R 336.1372 (Rules 371 and 372) and shall address all sources of fugitive dust (particulate matter) emissions from the coal handling operation. Revisions and updates to the program will be submitted to the Air Quality Division (AQD) District Supervisor. ~~(R 336.1371)~~
2. The permittee shall comply with all applicable requirements of 40 CFR Part 64. ~~(40 CFR Part 64)~~

Formatted: Indent: Left: 0", First line: 0"

Formatted: Right: 0"

Formatted: Justified

Formatted: Justified

Formatted: Justified, Indent: Left: 0", First line: 0", Right: 0"

Formatted: Justified, Right: 0"

Formatted: Justified, Indent: Left: 0", First line: 0", Right: 0"

Formatted: Justified, Right: 0"

Formatted: Justified, Indent: Left: 0", First line: 0", Right: 0"

Formatted: Justified, Right: 0"

Formatted: Justified, Indent: Left: 0", First line: 0", Right: 0"

Formatted: Justified, Right: 0"

Formatted: Justified, Indent: Left: 0", First line: 0", Right: 0"

Formatted: Justified, Right: 0"

Formatted: Justified, Indent: Left: 0", First line: 0", Right: 0"

Formatted: Justified, Right: 0"

Formatted: Justified

Formatted: No bullets or numbering

Formatted: Indent: Left: 0", First line: 0"

Consumers Energy Company
Section 1 – Karn 1 and Karn 2

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2022
PTI No: MI-PTI-B2840-2022

~~3. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the ROP and CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (40 CFR 64.7(e))~~

Formatted: Indent: Left: 0", First line: 0"

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EU-GUARDHSEGEN2-4 EMISSION UNIT CONDITIONS

DESCRIPTION

A new propane-fired emergency generator to provide emergency power to the guard house. The maximum design capacity is 45.5 horsepower.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall burn ~~only pipeline quality natural gas~~ Liquefied Petroleum Gas (propane), in EU-GUARDHSDGEN2-1. **(40 CFR 60.4241)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee may operate EU-GUARDHSEGEN2-4 for no more than 100 hours per calendar year as determined at the end of each calendar month for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per year. EU-GUARDHSEGEN2-4 may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply non-emergency power as part of a financial arrangement with another entity, except as provided in paragraph 40 CFR 60.4243(d)(3)(i). **(40 CFR 60.4243)**
2. The permittee shall operate and maintain EU-GUARDHSEGEN2-4 such that it meets the emission limits in 40 CFR 60 Subpart JJJJ ~~SC-1.1, 1.2, and 1.3~~ over the entire life of the engine. **(40 CFR 60.4234)**
3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60, Subpart JJJJ, for the same model year, the permittee shall meet the following requirements for EU-GUARDHSEGEN2-4: **(40 CFR 60.4243(b)(1))**
 - a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions;
 - b. Keep a maintenance plan and the permittee may only change those engine settings that are permitted by the manufacturer. If you do not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine; and
 - c. Meet the requirements as specified in 40 CFR 1068 Subparts A through D.
4. If the permittee purchased a non-certified engine and control device or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for each engine in EU-GUARDHSEGEN2-4 and

Commented [MG3]: The engine is certified to burn both natural gas and liquid petroleum gas (LPG/Propane), but at Karn Site it only burns Propane. Therefore, to clarify please make the suggested edits.

shall, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4243(b)(2))**

5. There is no time limit on the use of emergency stationary ICE in emergency situations. **(40 CFR 60.4243(d)(1))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EU-GUARDHSEGEN2-~~1~~ with a non-resettable hour meter to track the operating hours. **(40 CFR 60.4237)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1201(3))**
2. The permittee shall keep, in a satisfactory manner, manufacturer certification records documenting that EU-GUARDHSEGEN2-~~1~~ meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60, Subpart JJJJ. The permittee shall keep all records on file and make them available to the Department upon request. If EU-GUARDHSEGEN2-~~1~~ is or becomes uncertified then the permittee must also keep records of a maintenance plan and maintenance activities. The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4245)**
3. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for EU-GUARDHSEGEN2-~~1~~, on a monthly, and calendar year basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation of each engine in EU-GUARDHSEGEN2-~~1~~, including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(40 CFR 60.4243, 40 CFR 60.4245)**
4. The permittee shall keep records of the following information for EU-GUARDHSEGEN2-~~1~~: **(40 CFR 60.4245(a))**
- All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification;
 - Maintenance conducted on EU-GUARDHSEGEN2-~~1~~;
 - If EU-GUARDHSEGEN2-1 is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable;
 - If any EU-GUARDHSEGEN2-~~1~~ is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards.

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

Consumers Energy Company
Section 1 – Karn 1 and Karn 2

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2022
PTI No: MI-PTI-B2840-2022

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.
(R 336.1213(4)(c))

See Appendix 8-1

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and JJJJ, as they apply to EU-GUARDHSEGEN2-~~4~~.
(40 CFR Part 60, Subparts A & JJJJ)
2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and ZZZZ, as they apply to EU-GUARDHSEGEN2-~~4~~, upon startup.
(40 CFR Part 63, Subparts A and ZZZZ, 40 CFR 63.6590)

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

D. FLEXIBLE GROUP SPECIAL CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-KARN12-1	Common requirements for Karn boiler 1 and Karn boiler 2. (PTI No. 40-15)	EU-KARN1-1 EU-KARN2-1
FG-MATS-1	40 CFR Part 63, Subpart UUUUU (Mercury and Air Toxics Standards or MATS) requirements for existing coal-fired electric utility steam generating unit(s) (EGU) rated more than 25 megawatts electric (MWe) that serve(s) a generator producing electricity for sale and designed to burn coal that is not low-rank virgin coal (calorific value of $\geq 8,300$ BTU/pound).	EU-KARN1-1 EU-KARN2-1
FG-PARTSCLEANERS-1	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EU-PARTSCLEANERS12-1
FG- EMERGENCYCIGEN-1	40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, compression ignition (CI) RICE equal to or less than 500 brake hp. A RICE is existing if the date of installation is before June 12, 2006. Karn 1 and Karn 2 AC and DC emergency diesel generators. The maximum design capacity of each generator is less than 500 horsepower.	EU-KARN12DCGEN-1 EU-KARN12ACGEN-1
FG-EMERGENCYSIGEN-1	40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, spark ignition (SI) RICE equal to or less than 500 bhp. A RICE is existing if the date of installation is before June 12, 2006. Two (2) emergency propane generators with one of the generators located at the guard house, and one generator is located at the fish barrier control room. The maximum design capacity of each generator is no greater than 40 horsepower.	EU-GUARDHSEGEN1-1 EU-FISHBARGEN-1

Consumers Energy Company
Section 1 – Karn 1 and Karn 2

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2022
PTI No: MI-PTI-B2840-2022

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-NON-EMERGENCYCIENG-4	New diesel-fired non-emergency engines subject to 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion engines. These emission units are also subject to the provisions of 40 CFR Part 63, Subpart ZZZZ for Reciprocating Internal Combustion Engines.	EU-FHPUMP-4 EU-WDKPMP(5765)-4 EU-WDKPMP(6284)-4

—FG-KARN12-1
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Common requirements for Karn boiler 1 and Karn boiler 2. (PTI No. 40-15A)

Emission Units: EUKARN1-1, EUKARN2-1

POLLUTION CONTROL EQUIPMENT

Pulse Jet Fabric Filter (PJFF), Selective Catalytic Reduction (SCR), Spray Dry Absorbent (SDA), and sorbent injection for each boiler. Low NO_x burners are installed on EU-KARN2.

I. EMISSION LIMIT

Pollutant	Limit**	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. SO ₂	1.67 lbs/MMBTU heat input ^{2*}	Monthly calendar average	EU-KARN1-1, EU-KARN2-1	SC-VI.3 (Appendix 3-A- S4)	R 336.1401(1)
2. SO ₂	0.090 lb/MMBTU heat input ^{2,3,4}	Based on a 30-day rolling average emission rate	EU-KARN1-1, EU-KARN2-1	VI.4	“U.S. V CONSUMERS ENERGY COMPANY, CIVIL ACTION 14-13580, E.D. MICH., 2014” paragraphs 117 & 118, Act 451 324.5503(b)
3. SO ₂	0.075 lb/MMBTU heat input ^{2,3,4}	Based on a 365- day rolling average emission rate	EU-KARN1-1, EU-KARN2-1	VI.4	“U.S. V CONSUMERS ENERGY COMPANY, CIVIL ACTION 14-13580, E.D. MICH., 2014” paragraphs 117 & 118, Act 451 324.5503(b)
4. PM	0.16 lb/1000 lb of exhaust gas corrected to 50% excess air ²	Hourly	EU-KARN1-1, EU-KARN2-1	SC-V.1	R 336.1331(1)(c)
5. PM	0.015 lb/MMBTU heat input ^{2,3,4}	3-hour Rolling Average	EU-KARN1-1, EU-KARN2-1	V.4 (Appendices 5-1 and 3-B-1)	“U.S. V CONSUMERS ENERGY COMPANY, CIVIL ACTION 14-13580, E.D. MICH., 2014” paragraphs 147 & 148, Act 451 324.5503(b)

Pollutant	Limit**	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
6. NOx	0.080 lb/MMBTU heat input ^{2,3}	30-day Rolling Average Emission Rate	EU-KARN1-1, EU-KARN2-1	SC-VI.4	"U.S. V CONSUMERS ENERGY COMPANY, CIVIL ACTION 14-13580, E.D. MICH., 2014" paragraph 85 & 87, Act 451-324.5503(b)
7. Opacity	20 percent ^{2,3,4}	Per 6-minute time period except for one 6-minute period per hour of not more than 27%	EU-KARN1-1, EU-KARN2-1	SC-VI.2	"U.S. V CONSUMERS ENERGY COMPANY, CIVIL ACTION 14-13580, E.D. MICH., 2014" paragraph 151, Act 451-324.5503(b)

* 1.0 percent sulfur by weight in coal at 12,000 BTU per pound is equivalent to 1.67 pounds per million BTU heat input. Compliance with this emission limitation shall be based upon the monthly average of continuous emission monitoring data. ~~(R 336.1401(1))~~

** Limits are applicable to each emission unit.

See Appendices 3-A-1, 3-B-1, and 5-1

II. MATERIAL LIMIT

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the applicable emission unit (EU-KARN1-1, EU-KARN2-1) unless a Malfunction Abatement Plan (MAP) as described in Rule 911(2), for the emission control equipment is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement;
 - b. An identification of the source and air cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures;
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 90 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² ~~(R 336.1910, R 336.1914)~~

2. The permittee shall Continuously Operate the PJFF and use good air pollution control practices to maximize the PM emission reductions at all times when the Unit is in operation. The requirements of Appendix 3-C-1 shall be

Formatted: Indent: Left: 0"

Formatted: Normal, Indent: Left: 0", Hanging: 0.25", No bullets or numbering

Formatted: Indent: Hanging: 0.25"

Formatted: Indent: Left: 0", Hanging: 0.25", No bullets or numbering, Tab stops: Not at 0.25"

~~met.^{2,3,4} (“U.S. V CONSUMERS ENERGY COMPANY, CIVIL ACTION 14-13580, E.D. MICH., 2014” – paragraph 141, Act 451-324.5503(b))~~

See Appendix 3-C-1

IV. DESIGN/EQUIPMENT PARAMETER(S)

- ~~1. The permittee shall not operate EU-KARN1-1 or EU-KARN2-1 unless the SCR, PJFF, SDA, and the sorbent injection (for mercury control) are installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for EU-KARN1-1 and EU-KARN2-1 as required in SC III.1.1.² (R 336.1901, R 336.1910)~~
- ~~2. The permittee shall not operate EU-KARN1-1 or EU-KARN2-1 unless the SCR, SDA, and PJFF are continuously operated.^{2,3,4} (“U.S. V CONSUMERS ENERGY COMPANY, CIVIL ACTION 14-13580, E.D. MICH., 2014” paragraphs 84, 86, 117, 118, 147 and 148 Act 451-324.5503(b))~~

V. TESTING/SAMPLING

~~Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(iii))~~

- ~~1. Once every three years from the date of the last testing, or more frequently upon request of the AQD, permittee shall verify the PM emission rates from each boiler in FG-BOILER12-1 by testing, utilizing USEPA Reference Method 17 (Determination of Particulate Emissions from Stationary Sources(In-stack Filtration Method)) or other AQD approved test method, at permittee's expense, and in accordance with department requirements. Verification of emission rates includes the submittal of a complete report of the test results within 60 days of test completion.² (R 336.1331(1)(c), R 336.2001, R 336.2003, R 336.2004)~~
- ~~2. The permittee shall submit a complete test protocol to the AQD for approval at least 30 days prior to the anticipated test date.² (R 336.2001(3))~~
- ~~3. The permittee shall notify the AQD no less than 7 days prior to the anticipated test date.² (R 336.2001(3))~~
- ~~4. Continuous compliance with SC I.5 PM filterable emission limit is demonstrated with a PM CEMS pursuant to conditions contained in Appendix 5-1: PM Emissions Testing and Monitoring Requirements.^{2,3,4} (“U.S. V CONSUMERS ENERGY COMPANY, CIVIL ACTION 14-13580, E.D. MICH., 2014” – paragraph 157, Act 451-324.5503(b))~~

See Appendix 5-1

VI. MONITORING/RECORDKEEPING

~~Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(iii))~~

- ~~1. The permittee shall monitor and record the parameters specified in the applicable MAPs.² (R 336.1910, R 336.1911)~~
- ~~2. The permittee shall monitor and record the opacity from the boiler using a Continuous Opacity Monitoring System (COMS), installed, operated, and maintained in accordance with 40 CFR Part 60, Appendix B, and Appendix 3-A-1.² (R 336.2101(1)(a), R 336.2150(1)(a), R 336.2152(1), R 336.2153(1)(a) and (b), R 336.2154, R 336.2155(1), R 336.2190)~~
- ~~3. The permittee shall install, calibrate, maintain, and operate a continuous emission monitoring system for the measurement of gas flow, SO₂, CO₂, and NO_x, in accordance with the provisions of 40 CFR Part 75.² (R 336.1401(1), 40 CFR 52.21(c) and (d))~~
- ~~4. For purposes of determining compliance with the Rolling Average Emission Rates for NO_x and SO₂ as found in SC I.2, I.3, and I.6, the permittee shall install and operate CEMS in accordance with the procedures of 40 CFR Part 75, except that the NO_x and SO₂ emissions data need not be bias adjusted and the missing data substitution~~

~~procedures of 40 CFR Part 75 shall not apply. If applicable, diluent capping (i.e., 5% CO₂) will be applied to the NO_x emission rate for any hours where the measured CO₂ concentration is less than 5% following the procedures in 40 CFR Part 75, Appendix F, Section 3.3.4.1.^{2,3,4} (“U.S. V CONSUMERS ENERGY COMPANY, CIVIL ACTION 14-13580, E.D. MICH., 2014” paragraphs 99 and 130, Act 451-324.5503(b))~~

- ~~5. The permittee shall install, correlate, maintain, and Continuously Operate a PM-CEMS pursuant to the conditions contained in Appendix 3-B-1: PM-CEMS.^{2,3,4} (“U.S. V CONSUMERS ENERGY COMPANY, CIVIL ACTION 14-13580, E.D. MICH., 2014” paragraphs 159, 160, 163, Act 451-324.5503(b))~~

See Appendix 3-B-1

VII. REPORTING

- ~~1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))~~
- ~~2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD’s District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))~~
- ~~3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD’s District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))~~
- ~~4. The permittee shall submit to the District Supervisor, and Technical Programs Unit (TPU) Supervisor, in a format similar Figure 1 in 40 CFR 60.7), to the AQD, within 30 days of the end of the calendar quarter, a written report for each calendar quarter shall include all of the following information:
 - ~~a. Excess emissions and the nature and cause of the excess emissions, if known, as follows: for opacity measurements, the report shall consist of the magnitude, in actual percent opacity, of all 6-minute averages of opacity more than the applicable opacity standard for each hour of operation. Average values shall be obtained by integration over the averaging period or by arithmetically averaging a minimum of 24 equally spaced, instantaneous opacity measurements per 6 minutes.~~
 - ~~b. The date and time identifying each period during which the continuous monitoring system was inoperative, except for daily zero and span checks, and the nature of repairs or adjustments made.~~
 - ~~c. If the monitoring system has not been inoperative, repaired, or adjusted, and if no excess emissions occurred, a statement attesting to this fact. (R 336.2170(1)(a), (b) and (c), R 336.1401, and R 336.1213(3))~~~~
- ~~5. The permittee shall submit to the District Supervisor and Technical Programs Unit (TPU) Supervisor (Summary Report only, in a format similar to Figure 1 in 40 CFR 60.7), Air Quality Division, within 30 days of the end of the calendar quarter, a written report for each calendar quarter which shall include sulfur dioxide excess emissions and the nature and cause of the excess emissions. This report shall also include the date and time identifying each period during which the continuous monitoring system was inoperative, except for daily zero and span checks, and the nature of repairs or adjustments made. See Appendix 3-2, Section 3.2-2. (R 336.1213(3))~~
- ~~6. The permittee shall report sulfur dioxide, nitrogen oxide and carbon dioxide emissions, and volumetric flow data in accordance with 40 CFR Part 75 (Continuous Emission Monitoring). (R 336.1213(3))~~

See Appendices 3-A-1 and 8-1

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVKARN1	216 ²	350 ²	R 336.1201(3)
2. SVKARN2	216 ²	350 ²	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

- The permittee shall comply with the acid rain permitting provisions of 40 CFR 72.1 to 72.94 as outlined in a complete Phase II Acid Rain Permit issued by the AQD. Phase II Acid Rain Permit No. MI-AR-1702-2022 is hereby incorporated into this ROP as Appendix 9-1. **(R 336.1902(1)(q))**
- The permittee shall not allow the emission of an air pollutant to exceed the amount of any emission allowances that an affected source lawfully holds as of the allowance transfer deadline pursuant to R 336.1902(1)(q) and 40 CFR 72.9(c)(1)(i). **(R 336.1213(10))**
- The permittee shall comply with the System-Wide Annual NO_x Tonnage Limitations and System-Wide Annual SO₂ Tonnage Limitations listed in Appendix 11-A-1: System-Wide Tonnage Limitations. Emissions from EUKARN1-1 shall be counted toward the system-wide total emissions.² **(“U.S. V CONSUMERS ENERGY COMPANY, CIVIL ACTION 14-13580, E.D. MICH., 2014” paragraphs 98, 129, Act 451-324.5503(b))**
- The permittee shall comply with the SO₂ and NO_x allowance surrender and super-compliance allowance provisions listed in Appendix 11-B-1: Allowance Provisions.^{2,3} **(“U.S. V CONSUMERS ENERGY COMPANY, CIVIL ACTION 14-13580, E.D. MICH., 2014” paragraphs 101-109 and 132-140, Act 451-324.5503(b))**
- The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_x Annual Trading Program, as specified in 40 CFR Part 97, Subpart AAAAA, and identified in Appendix 10-1. **(40 CFR Part 97, Subpart AAAAA)**
- The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_x Ozone Season Group 3 Trading Program, as specified in 40 CFR Part 97, Subpart GGGGG, and identified in Appendix 10-1. **(40 CFR Part 97, Subpart GGGGG)**
- The permittee shall comply with the provisions of the Cross-State Air Pollution Rule SO₂ Group 1 Trading Program, as specified in 40 CFR Part 97, Subpart CCCCC, and identified in Appendix 10-1. **(40 CFR Part 97, Subpart CCCCC)**

See Appendices 9-1, 10-1, and 11-1

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

³This condition is federally enforceable and was originally established in the consent decree settling, “U.S. V CONSUMERS ENERGY COMPANY, CIVIL ACTION 14-13580, E.D. MICH., 2014” and also pursuant to Act 451, Section 324.5503(b), and will remain in effect after termination of the consent decree.

⁴Definitions specific to this condition may be found in Appendix 1-B-1: Definitions Applicable to Specified Permit Conditions.

**FG-MATS-1
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

40 CFR Part 63, Subpart UUUUU (Mercury and Air Toxics Standards or MATS) requirements for existing coal-fired electric utility steam generating unit(s) (EGU) rated more than 25 megawatts electric (MWe) that serve(s) a generator producing electricity for sale and designed to burn coal that is not low-rank virgin coal (calorific value of $\geq 8,300$ BTU/pound).

Emission Unit: EUKARN1-1, EUKARN2-1

POLLUTION CONTROL EQUIPMENT

PJFF, SCR, SDA, and sorbent injection for both EU-KARN1, and EU-KARN2. EU-KARN2 also has Low-NO_x Burners.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Filterable PM	0.030 lb/MMBTU*	30-boiler operating-day rolling-average	EU-KARN1-1, EU-KARN2-1	SC-VI.4	40 CFR 63.9991, 40 CFR Part 63, Subpart UUUUU, Table 2.1.a
2. SO ₂	0.20 lb/MMBTU*	30-boiler operating-day rolling arithmetic average updated at the end of each new boiler operating day	EU-KARN1-1, EU-KARN2-1	SC-VI.6	40 CFR 63.9991, 40 CFR Part 63, Subpart UUUUU, Table 2.1.b
3. Mercury (Hg)	1.2 lb/TBTU*	30-boiler-boiler operating-day rolling-weighted average emission rate, updated at the end of each new boiler operating day	EU-KARN1-1, EU-KARN2-1	SC-VI.5	40 CFR 63.9991, 40 CFR Part 63, Subpart UUUUU, Table 2.1.c

* The emission limits apply at all times except during startup and shutdown.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall conduct a tune-up of each emission unit of FG-MATS-1 burner(s) and combustion controls, as applicable, at least every 36 calendar months, as specified in 40 CFR 63.10021(e).

Formatted: Heading 2, Left

Formatted: Heading 2, Border: Box: (Single solid line, Auto, 0.5 pt Line width)

Formatted: Heading 2, Indent: Left: 0", First line: 0", Border: Box: (Single solid line, Auto, 0.5 pt Line width), Tab stops: Not at 0.56"

Formatted: Heading 2, Right: 0", Border: Box: (Single solid line, Auto, 0.5 pt Line width), Tab stops: Not at 0" + 0.14"

Formatted: Heading 2, Border: Box: (Single solid line, Auto, 0.5 pt Line width), Tab stops: Not at 0.14"

Formatted: Heading 2, Left, Border: Box: (Single solid line, Auto, 0.5 pt Line width)

~~(40 CFR 63.10000(e),
40 CFR 63.10006(i), 40 CFR 63.10021(e))~~

~~2. For the startup of any emission unit of FG-MATS-1 which will comply using paragraph (1) of the definition of “startup” in 40 CFR 63.10042, the permittee must use clean fuels as defined in 40 CFR 63.10042 for ignition. Once the emission unit(s) of FG-MATS-1 convert(s) to firing coal, the permittee must engage all the applicable control technologies except dry scrubber and SCR. The permittee must start the dry scrubber and SCR systems, if present, appropriately to comply with relevant standards applicable during normal operation. The permittee must comply with all applicable emission limits at all times except for periods that meet the applicable definitions of startup and shutdown in 40 CFR Part 63, Subpart UUUUU. (40 CFR 63.10042, 40 CFR Part 63, Subpart UUUUU, Table 3)~~

~~3. During shutdown of any emission unit of FG-MATS-1 while firing coal, the permittee must vent emissions to the main stack(s) and operate all applicable control devices and continue to operate those control devices after the cessation of coal being fed into the applicable emission unit(s) of FG-MATS-1 and for as long as possible thereafter considering operational and safety concerns. In any case, the permittee must operate their controls when necessary to comply with other standards made applicable to the FG-MATS-1 by a permit limit or a rule other than 40 CFR Part 63, Subpart UUUUU and that require operation of the control devices. If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel must be one or a combination of the clean fuels defined in 40 CFR 63.10042 and must be used to the maximum extent possible, taking into account considerations such as not compromising boiler or control device integrity. (40 CFR 63.10042, 40 CFR Part 63, Subpart UUUUU, Table 3)~~

~~4. The emission limits and operating limits in 40 CFR Part 63, Subpart UUUUU apply at all times except during periods of startup and shutdown; however, the applicable work practice requirements, which are specified in items 3 and 4 of Table 3 of 40 CFR Part 63, Subpart UUUUU must be met during periods of startup or shutdown. (40 CFR 63.10000(a), 40 CFR Part 63, Subpart UUUUU, Table 3)~~

~~5. The permittee shall operate and maintain all associated air pollution control equipment and monitoring equipment necessary for compliance with 40 CFR Part 63, Subpart UUUUU in a manner consistent with safety and good air pollution control practices for minimizing emissions. (40 CFR 63.10000(b))~~

IV. DESIGN/EQUIPMENT PARAMETER(S)

~~1. The permittee shall install, calibrate, maintain, and operate a device to monitor and record the PM concentration of the exhaust gas from each emission unit on a continuous basis. The permittee shall install and operate the PM CEMS to meet the timelines, requirements and reporting detailed in Appendix C of 40 CFR Part 63, Subpart UUUUU. (40 CFR 63.10010(i), 40 CFR Part 63, Subpart UUUUU, Table 5)~~

V. TESTING/SAMPLING

~~Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(iii))~~

NA

VI. MONITORING/RECORDKEEPING

~~Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(iii))~~

~~1. During startup, as defined by paragraph (1) of the definition of “startup” in 40 CFR 63.10042, the permittee must operate all Continuous Monitoring Systems (CMS). Startup means either the first ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on site use). The permittee must comply with the applicable emission limits at all times except for startup and shutdown periods. The~~

~~permittee must collect monitoring data during startup periods, as specified in 40 CFR 63.10020(a) and (b). The permittee must keep records during startup periods, as provided in 40 CFR 63.10032 and 40 CFR 63.10021(h). Any fraction of an hour in which startup occurs constitutes a full hour of startup. (40 CFR Part 63, Subpart UUUUU, Table 3.3)~~

~~2. The permittee must operate all CMS during shutdown. The permittee must also collect appropriate data, and the permittee must calculate the pollutant emission rate for each hour of shutdown for those pollutants for which a CMS is used. The permittee must collect monitoring data during shutdown periods, as specified in 40 CFR 63.10020(a). The permittee must keep records during shutdown periods, as provided in 40 CFR 63.10032 and 40 CFR 63.10021(h). Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown. (40 CFR Part 63, Subpart UUUUU, Table 3.4)~~

~~3. If using a CMS to demonstrate continuous compliance, whether through quarterly testing and parametric monitoring or by CEMS, with an emission limit or operating limit, the permittee must develop a site-specific monitoring plan and submit this site-specific monitoring plan, if requested, at least 60 days before the initial performance evaluation (where applicable) of the CMS. This requirement also applies to the permittee if the permittee petitions the Administrator for alternative monitoring parameters under 40 CFR 63.8(f). This requirement to develop and submit a site-specific monitoring plan does not apply to affected sources with existing monitoring plans that apply to CEMS and CPMS prepared under Appendix B of 40 CFR Part 60 or 40 CFR Part 75, and that meet the requirements of 40 CFR 63.10010. Using the process described in 40 CFR 63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in this paragraph of this section and, if approved, include those in the site-specific monitoring plan. The monitoring plan must address the following provisions: (40 CFR 63.10000(d), 40 CFR 63.10010)~~

~~a. Installation of the CMS or sorbent trap monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device). See 40 CFR 63.10010(a) for further details. For PM CPMS installations, follow the procedures in 40 CFR 63.10010(h).~~

~~b. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems.~~

~~c. Schedule for conducting initial and periodic performance evaluations.~~

~~d. Performance evaluation procedures and acceptance criteria (e.g., calibrations), including the quality control program in accordance with the general requirements of 40 CFR 63.8(d).~~

~~e. On-going operation and maintenance procedures, in accordance with the general requirements of 40 CFR 63.8(c)(1)(ii), (c)(3), and (c)(4)(iii).~~

~~f. Conditions that define a CMS that is out of control consistent with 40 CFR 63.8(c)(7)(i) and for responding to out of control periods consistent with 40 CFR 63.8(c)(7)(ii) and (c)(8).~~

~~g. On-going recordkeeping and reporting procedures, in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i), or as specifically required under 40 CFR Part 63, Subpart UUUUU.~~

~~h. Alternatively, the requirements are considered to be met for a particular CMS or sorbent trap monitoring system if:~~

~~i. The CMS or sorbent trap monitoring system is installed, certified, maintained, operated, and quality-assured either according to 40 CFR Part 75, or Appendix A or B of 40 CFR Part 63, Subpart UUUUU; and~~

~~ii. The recordkeeping and reporting requirements of 40 CFR Part 75, or Appendix A, or B of 40 CFR Part 63, Subpart UUUUU, which pertain to the CMS, are met.~~

~~4. If the permittee elects to use a PM CEMS, the permittee shall keep, in a satisfactory manner, hourly and 30-day rolling average PM, total non-Hg HAP metals, or individual metals (as applicable) emission rate records for each emission unit excluding periods of startup and shutdown. (40 CFR 63.10010, 40 CFR 63.10021, 40 CFR Part 63, Subpart UUUUU, Table 7)~~

~~5. For any emission unit not relying on the LEE provisions for Hg, the permittee shall keep, in a satisfactory manner, hourly (if applicable) and 30-day rolling average Hg emission rate records for each~~

~~emission unit excluding periods of startup and shutdown. (40 CFR 63.10010, 40 CFR 63.10021, 40 CFR Part 63, Subpart UUUUU, Table 7)~~

~~6. The permittee shall keep, in a satisfactory manner, hourly and 30-day rolling average SO₂ emission rate records for each emission unit excluding periods of startup and shutdown. (40 CFR 63.10010, 40 CFR 63.10021,~~

~~40 CFR Part 63, Subpart UUUUU, Table 7)~~

~~7. The permittee must operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating, except for required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments, and any scheduled maintenance as defined in the site-specific monitoring plan. The permittee is required to affect monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable. (40 CFR 63.10020(b))~~

~~8. The permittee may not use data recorded during startup or shutdown in calculations used to report emissions, except as otherwise provided in 40 CFR 63.10000(c)(1)(vi)(B) and 40 CFR 63.10005(a)(2)(iii). In addition, data recorded during monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. The permittee must use all of the quality-assured data collected during all other periods in assessing the operation of the control device and associated control system. (40 CFR 63.10020(c))~~

~~9. Failure to collect required quality-assured data during monitoring system malfunctions, monitoring system out-of-control periods, or repairs associated with monitoring system malfunctions or monitoring system out-of-control periods is a deviation from the monitoring requirements. Periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods and required monitoring system quality assurance or quality control activities excluding zero and span checks must be reported as time the monitor was inoperative (downtime) under 63.10(c). (40 CFR 63.10020(d))~~

~~10. If the permittee uses CEMS to measure SO₂, PM, HCl, HF, or Hg emissions, except as otherwise provided in 40 CFR 63.10020(c), the permittee must demonstrate continuous compliance by using all quality-assured hourly data recorded by the CEMS and other required monitoring systems to calculate the arithmetic average emissions rate in units of the standard on a continuous 30-boiler operating day rolling average basis, updated at the end of each new boiler operating day. Use Equation 8 in 40 CFR 63.10021(b) to determine the 30-boiler operating day rolling average. (40 CFR 63.10021(a) and (b))~~

~~11. The permittee must keep the following records:~~

- ~~a. A copy of each notification and report that has been submitted to comply with 40 CFR Part 63, Subpart UUUUU, including all documentation supporting any Initial Notification or Notification of Compliance Status, semiannual compliance reports, or quarterly compliance reports that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv); (40 CFR 63.10032(a)(1))~~
- ~~b. Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations, as required in 40 CFR 63.10(b)(2)(viii). For each test completed on or after January 1, 2024, the permittee must keep records of the applicable data elements under 40 CFR 63.7(g); the~~

~~permittee must also keep records of all data elements and other information in appendix E of 40 CFR Part 63, Subpart UUUUU that applies; (40 CFR 63.10032(a))~~

~~c. For each CEMS and CPMS, the permittee must keep the following records:~~

~~i. Records described in 40 CFR 63.10(b)(2)(vi) through (xi); (40 CFR 63.10032(b)(1))~~

~~ii. Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3); (40 CFR 63.10032(b)(2))~~

~~iii. Request for alternatives to relative accuracy test for CEMS as required in 40 CFR 63.8(f)(6)(i); (40 CFR 63.10032(b)(3))~~

~~iv. The date and time that each deviation started and stopped and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period; (40 CFR 63.10032(b)(4))~~

~~v. If the permittee continuously monitors Hg and/or HCl and/or HF and/or PM emissions, or use a PM CPMS, the permittee must keep the records required under appendix A and/or appendix B and/or appendix C and/or appendix D of 40 CFR Part 63, Subpart UUUUU. (40 CFR 63.10032(a))~~

~~d. Records required in Table 7 of 40 CFR Part 63, Subpart UUUUU including records of all monitoring data and calculated averages for applicable PM-CPMS operating limits to show continuous compliance with each emission limit and operating limit that applies. (40 CFR 63.10032(c))~~

~~e. For each emission unit subject to an emission limit:~~

~~i. The permittee shall keep the monthly fuel use by each emission unit, including the type(s) of fuel and amount(s) used; (40 CFR 63.10032(d)(1))~~

~~ii. If the permittee combusts non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1), the permittee must keep a record which documents how the secondary material meets each of the legitimacy criteria. If the permittee combusts a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(2), the permittee must keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2. If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), the permittee must keep a record which documents how the fuel satisfies the requirements of the petition process. (40 CFR 63.10032(d)(2))~~

~~12. If required to convert measured pollutant concentrations to the units of the applicable mass per heat input emission limit(s), the permittee shall install, calibrate, maintain and operate a device to monitor and record the oxygen (O₂) or carbon dioxide (CO₂) exhaust gas content, exhaust gas flow rate and/or moisture from each emission unit on a continuous basis. The monitor shall be operated in accordance with procedures outlined in 40 CFR Part 75, Appendices A and B. As an alternative to moisture monitoring, the permittee may elect to use appropriate fuel-specific default moisture values from 40 CFR 75.11(b) for coal-fired units. (40 CFR 63.10010(b)-(d), 40 CFR Part 63, Subpart UUUUU, Table 5)~~

~~a. Regarding startup periods or shutdown periods:~~

~~i. If the permittee chooses to rely on paragraph (1) of the definition of “startup” in 40 CFR 63.10042 for the emission unit(s), the permittee shall keep records of the occurrence and duration of each startup or shutdown. (40 CFR 63.10032(f)(1))~~

~~ii. The type(s) and amount(s) of fuel used during each startup or shutdown. (40 CFR 63.10032(i))~~

~~b. The occurrence and duration of each malfunction of an operation (i.e., process equipment) or the air pollution control and monitoring equipment. (40 CFR 63.10032(g))~~

~~c. Actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.10032(h))~~

~~13. The permittee shall keep all records in a form suitable and readily available for expeditious review and for at least 5 years after the date of each occurrence, corrective action, report, or record. The records must be kept onsite for at least 2 years and may be kept offsite for the remaining three (3) years. (40 CFR 63.10(b)(1), 40 CFR 63.10033)~~

~~14. The permittee shall maintain on site and submit, if requested by the Administrator, an annual report of periodic performance tune-ups containing the information required by 40 CFR 63.10021(e)(8). The reports shall be in a format acceptable to the Administrator. If requested by the AQD District Supervisor,~~

~~the permittee shall also submit an annual report with the results of the performance tune-ups. (40 CFR 63.10021(e)(8))~~

VII. REPORTING

- ~~1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))~~
- ~~2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))~~
- ~~3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))~~
- ~~4. The permittee shall submit any performance test reports, including RATA reports, to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))~~
- ~~5. The permittee shall meet the electronic reporting requirements of appendix C of 40 CFR Part 63, Subpart UUUUU for each PM CEMS. Electronic reporting of hourly PM emissions data shall begin with the later of the first operating hour on or after January 1, 2024; or the first operating hour after completion of the initial PM CEMS correlation test. These reports are due no later than 30 days after the end of each calendar quarter. (40 CFR 63.10031(a)(3), 40 CFR Part 63, Subpart UUUUU, Table 8.3~~
- ~~6. The permittee shall use the ECMPS Client Tool to submit the following information to EPA (except where it is already required to be reported or has been previously provided under the Acid Rain Program or another emissions reduction program that requires the use of 40 CFR Part 75) and are due no later than 30 days after the end of each calendar quarter: (40 CFR 63.10031(a)(5), 40 CFR Part 63, Subpart UUUUU, Table 8.5)~~
 - ~~a. Monitoring plan information for the SO₂ CEMS and for any additional monitoring systems that are required to convert SO₂ concentrations to units of the emission standard, in accordance with 40 CFR 75.62 and 40 CFR 75.64(a)(4);~~
 - ~~b. Certification, recertification, quality assurance, and diagnostic test results for the SO₂ CEMS and for any additional monitoring systems that are required to convert SO₂ concentrations to units of the emission standard, in accordance with 40 CFR 75.64(a)(5); and~~
 - ~~c. Quarterly electronic emissions reports. The permittee must submit an electronic quarterly report within 30 days after the end of each calendar quarter, starting with a report for the calendar quarter in which the initial 30 boiler operating day performance test begins. Each report must include the following information:~~
 - ~~i. The applicable operating data specified in 40 CFR 75.57(b);~~
 - ~~ii. An hourly data stream for the unadjusted SO₂ concentration (in ppm, rounded to one decimal place), and separate unadjusted hourly data streams for the other parameters needed to convert the SO₂ concentrations to units of the standard. (Note: If a default moisture value is used in the emission rate calculations, an hourly data stream is not required for moisture; rather, the default value must be reported in the electronic monitoring plan);~~
 - ~~iii. An hourly SO₂ emission rate data stream, in units of the standard (i.e., lb/MMBTU or lb/MWh, as applicable), calculated according to 40 CFR 63.10007(e) and (f)(1), rounded to the same precision as the emission standard (i.e., with one leading non-zero digit and one decimal place), expressed in scientific notation.~~
 - ~~iv. The results of all required daily quality assurance tests of the SO₂ monitor and the additional monitors used to convert SO₂ concentration to units of the standard, as specified in appendix B to 40 CFR Part 75; and~~
 - ~~v. A compliance certification, which includes a statement, based on reasonable inquiry of those persons with primary responsibility for ensuring that all SO₂ emissions from the affected EGUs under 40 CFR Part 63,~~

~~Subpart UUUUU have been correctly and fully monitored, by a responsible official with that official's name, title, and signature, certifying that, to the best of his or her knowledge, the report is true, accurate, and complete. The permittee must submit such a compliance certification statement in support of each quarterly report.~~

~~7. Prior to January 1, 2024, the permittee shall submit semiannual reporting of the information required below. The report shall be postmarked or received by the Administrator by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. The final semiannual compliance report shall cover the period from July 1, 2023, through December 31, 2023. The report shall include the following: (40 CFR 63.10031(b), 40 CFR Part 63, Subpart UUUUU, Table 8.9)~~

- ~~a. The information required by the Continuous Monitoring Summary Report located in 40 CFR 63.10(e)(3)(vi); (40 CFR 63.10031(c)(1))~~
- ~~b. The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by EPA or the basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure; (40 CFR 63.10031(c)(2))~~
- ~~c. Indicate whether any emission unit in FGMATS burned new types of fuel during the reporting period. If new types of fuel were burned, include the date of the performance test where that fuel was in use; (40 CFR 63.10031(c)(3))~~
- ~~d. Include the date of the most recent tune-up for each emission unit. The date of the tune-up is the date the tune-up provisions specified in 40 CFR 63.10021(e)(6) and (7) were completed; (40 CFR 63.10031(c)(4))~~
- ~~e. A certification; (40 CFR 63.10031(c)(8))~~
- ~~f. If there is a deviation from any emission limit, work practice standard, or operating limit, the permittee must also submit a brief description of the deviation, the duration of the deviation, emissions point identification, and the cause of the deviation; (40 CFR 63.10031(c)(9), 40 CFR Part 63, Subpart UUUUU, Table 8)~~
- ~~g. If there is any process or control equipment malfunction(s) during the reporting period, the permittee must include the number, duration, and a brief description for each type of malfunction which occurred during the semiannual reporting period which caused or may have caused any applicable emission limitation to be exceeded. (40 CFR 63.10031(c)(10))~~

~~8. Prior to January 1, 2024, all reports and notifications shall be submitted to the EPA in the specified format and at the specified frequency, using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool. Each PDF version of a stack test report, CEMS RATA report, PM CEMS correlation test report, RRA report, and RCA report must include sufficient information to assess compliance and to demonstrate that the reference method testing was done properly. Note that EPA will continue to accept, as necessary, PDF reports that are being phased out at the end of 2023, if the submission deadlines for those reports extend beyond December 31, 2023. (40 CFR 63.10031(f)(4) and (6))~~

~~9. Starting with the first calendar quarter of 2024, the permittee must use the ECMPS Client Tool to submit quarterly electronic compliance reports. Each quarterly compliance report shall include the applicable data elements in sections 2 through 13 of appendix E of 40 CFR Part 63, Subpart UUUUU and submitted in XML format. For each stack test summarized in the compliance report, the permittee must also submit the applicable reference method information in sections 17 through 31 of appendix E of 40 CFR Part 63, Subpart UUUUU. The compliance reports and associated appendix E information must be submitted no later than 60 days after the end of each calendar quarter. The permittee shall include in the quarterly compliance reports the applicable data elements in section 13 of appendix E of 40 CFR Part 63, Subpart UUUUU for any "deviation" (as defined in 40 CFR 63.10042 and elsewhere in 40 CFR Part 63, Subpart UUUUU) that occurred during the calendar quarter. If there were no deviations, the permittee must include a statement to that effect in the quarterly compliance report. (40 CFR 63.10031(d), 40 CFR 63.10031(f)(4), 40 CFR 63.10031(g))~~

~~10. If an affected source submits a semiannual compliance report pursuant to 40 CFR Part 63.10031(c) and (d), or two quarterly compliance reports covering the appropriate calendar half pursuant to 40 CFR Part 63.10031(g), along with, or as part of, the semiannual monitoring report required by 40 CFR~~

~~70.6(a)(3)(iii)(A), and the compliance report(s) includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report(s) satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of the compliance report(s) does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. (40 CFR 63.10031(e))~~

~~11. Prior to January 1, 2024, for each performance stack test completed (including 30-day, the permittee must submit a PDF test report using the ECMPS Client Tool in accordance with 40 CFR Part 63.10031(f)(6), no later than 60 days after the date on which the testing is completed. (40 CFR 63.10031(f), 40 CFR Part 63, Subpart UUUUU, Table 8.6)~~

~~12. On or after January 1, 2024, for each performance stack test completed, the permittee shall submit the applicable reference method information required in sections 17 through 31 of appendix E of 40 CFR Part 63, Subpart UUUUU along with the quarterly compliance report for the calendar quarter in which the test was completed. (40 CFR 63.10031(f), 40 CFR Part 63, Subpart UUUUU, Table 8.6)~~

~~13. Prior to January 1, 2024, for each RATA of an Hg, HCl, HF, or SO₂ monitoring system completed and for each PM CEMS correlation test, each relative response audit (RRA) and each response correlation audit (RCA) of a PM CEMS completed prior to that date, the permittee must submit a PDF test report in accordance with 40 CFR Part 63.10031(f)(6), no later than 60 days after the date on which the test is completed. (40 CFR 63.10031(f)(1), 40 CFR Part 63, Subpart UUUUU, Table 8.7)~~

~~14. On or after January 1, 2024, for each SO₂ or Hg RATA completed the permittee must submit the applicable reference method information in sections 17 through 31 of appendix E of 40 CFR Part 63, Subpart UUUUU prior to or concurrent with the relevant quarterly emissions report. For HCl or HF RATAs, and for correlation tests, RRAs, and RCAs of PM CEMS that are completed on or after January 1, 2024, submit the appendix E reference method information together with the summarized electronic test results, in accordance with section 11.4 of appendix B of 40 CFR Part 63, Subpart UUUUU or section 7.2.4 of appendix C of 40 CFR Part 63, Subpart UUUUU, as applicable. (40 CFR 63.10031(f)(1), 40 CFR Part 63, Subpart UUUUU, Table 8.7)~~

~~15. Prior to January 1, 2024, for each PM CEMS, an approved HAP metals CEMS, or a PM CPMS, the permittee must submit quarterly PDF reports in accordance with 40 CFR Part 63.10031(f)(6), which include all the 30-boiler operating day rolling average emission rates derived from the CEMS data or the 30-boiler operating day rolling average responses derived from the PM CPMS data (as applicable). The quarterly reports are due within 60 days after the reporting periods ending on March 31st, June 30th, September 30th, and December 31st. Submission of these quarterly reports in PDF files shall end with the report that covers the fourth calendar quarter of 2023. (40 CFR 63.10031(f)(2), 40 CFR Part 63, Subpart UUUUU, Table 8.8)~~

~~16. Beginning with the first calendar quarter of 2024, for each PM CEMS, an approved HAP metals CEMS, or a PM CPMS, the compliance averages shall no longer be reported separately, but shall be incorporated into the quarterly compliance reports. In addition to the compliance averages for PM CEMS, PM CPMS, and/or HAP metals CEMS, the quarterly compliance reports must also include the 30- (or, if applicable 90-) boiler operating day rolling average emission rates for Hg, HCl, HF, and/or SO₂, if the permittee has elected to (or are required to) continuously monitor these pollutants. Further, if the EGU or common stack is in an averaging plan, the quarterly compliance reports must identify all of the EGUs or common stacks in the plan and must include all of the 30-group boiler operating day rolling weighted average emission rates (WAERs) for the averaging group. (40 CFR 63.10031(f)(2), 40 CFR Part 63, Subpart UUUUU, Table 8.8)~~

~~17. For PM CEMS correlation tests completed on or after November 9, 2020, but prior to January 1, 2024, the permittee shall submit the report, in a PDF file using the ECMPS Client Tool, no later than 60 days~~

~~after the date on which the test is completed. (40 CFR 63.10031(j), 40 CFR Part 63, Subpart UUUUU, Table 8.13)~~

~~18. For PM CEMS correlation tests completed on or after January 1, 2024, the permittee submit the test results electronically, according to section 7.2.4 of appendix C of 40 CFR Part 63, Subpart UUUUU, together with the applicable reference method data in sections 17 through 31 of appendix E of 40 CFR Part 63, Subpart UUUUU. The applicable data elements in 40 CFR Part 63.10031(f)(6)(i) through (xii) must be entered into ECMPs with the PDF report. (40 CFR 63.10031(j), 40 CFR Part 63, Subpart UUUUU, Table 8.13)~~

~~19. On and after January 1, 2024, the permittee shall report the tune-up date electronically in the quarterly compliance report, in accordance with 40 CFR 63.10031(g) and section 10.2 of appendix E of 40 CFR Part 63, Subpart UUUUU. The tune-up report date is the date when tune-up requirements in 40 CFR 63.10021(e)(6) and (7) are completed. (40 CFR 63.10021(e)(9))~~

See Appendix 8-1

~~VIII. STACK/VENT RESTRICTION(S)~~

NA

~~IX. OTHER REQUIREMENT(S)~~

- ~~1. For each emission unit or emissions averaging group complying with an emission limit as specified in Table 2 of 40 CFR Part 63, Subpart UUUUU, the permittee may request to switch from a mass per heat input to a mass per gross output limit (or vice versa).~~
 - ~~a. The permittee may switch from a mass per heat input to a mass per gross output limit (or vice versa), provided that:~~
 - ~~i. The permittee submits a request that identifies for each emission unit or emissions averaging group involved in the proposed switch both the current and proposed emission limit. (40 CFR 63.10030(e)(7)(iii)(A)(1))~~
 - ~~ii. The request arrives to the Administrator at least 30 calendar days prior to the date that the switch is proposed to occur; (40 CFR 63.10030(e)(7)(iii)(A)(2))~~
 - ~~iii. The request demonstrates through performance stack test results or valid CMS data, obtained within 45 days prior to the date of the submission, demonstrating that each EGU or EGU emissions averaging group is in compliance with both the mass per heat input limit and the mass per gross output limit; (40 CFR 63.10030(e)(7)(iii)(A)(3))~~
 - ~~iv. The permittee revises and submits all other applicable plans, e.g., monitoring and emissions averaging, with the request; (40 CFR 63.10030(e)(7)(iii)(A)(4))~~
 - ~~v. The permittee maintains records of all information regarding the choice of emission limits. (40 CFR 63.10030(e)(7)(iii)(A)(5))~~
 - ~~b. The permittee may begin to use the revised emission limits starting in the next reporting period, after receipt of written acknowledgement from the Administrator of the switch. (40 CFR 63.10030(e)(7)(iii)(B))~~
 - ~~c. From the submission of the request until start of the next reporting period after receipt of written acknowledgement from the Administrator of the switch, the permittee shall demonstrate compliance with~~

~~both the mass per heat input and mass per gross output emission limits for each pollutant for each emission unit or emissions averaging group. (40 CFR 63.10030(e)(7)(iii)(C))~~

- ~~2. The permittee may switch from paragraph (1) of the definition of "startup" in 40 CFR 63.10042 to paragraph (2) of the definition of "startup" (or vice-versa), provided that:
 - a. The permittee submits a request that identifies for each emission unit or emissions averaging group involved in the proposed switch both the current definition of "startup" relied on and the proposed definition the permittee plans to rely on; (40 CFR 63.10030(e)(8)(iii)(A))
 - b. The request arrives to the Administrator at least 30 calendar days prior to the date that the switch is proposed to occur; (40 CFR 63.10030(e)(8)(iii)(B))
 - c. The permittee revises and submits all other applicable plans, e.g., monitoring and emissions averaging, with the submission; (40 CFR 63.10030(e)(8)(iii)(C))
 - d. The permittee maintains records of all information regarding the choice of the definition of "startup"; (40 CFR 63.10030(e)(8)(iii)(D))
 - e. The permittee begins to use the revised definition of "startup" in the next reporting period after receipt of written acknowledgement from the Administrator of the switch. (40 CFR 63.10030(e)(8)(iii)(E))~~
- ~~3. If any emission unit(s) cease(s) to operate in a manner that causes the unit(s) to meet the definition of an EGU subject to 40 CFR Part 63, Subpart UUUUU, the permittee must submit the notification in 40 CFR 63.10000(i)(2) no less than 30 days prior to when the EGU will cease complying with 40 CFR Part 63, Subpart UUUUU. (40 CFR 63.10000(i)(2), 40 CFR 63.10030(f))~~
- ~~4. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and UUUUU. (40 CFR Part 63, Subparts A and UUUUU)~~

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FG-PARTSCLEANERS-1 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

Emission Unit: EU-PARTSCLEANERS12-1

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than five percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. **(R 336.1213(2))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. **(R 336.1611(2)(b), R 336.1707(3)(b))**
2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements:
 - a. The air/vapor interface of the cold cleaner is no more than ten square feet; **(R 336.1281(2)(h))**
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(2)(r)(iv))**
2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**
4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**
5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:
 - a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7; **(R 336.1707(2)(a))**

- b. ~~The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. (R 336.1707(2)(b))~~
- c. ~~The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. (R 336.1707(2)(c))~~

V. TESTING/SAMPLING

~~Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(iii))~~

NA

VI. MONITORING/RECORDKEEPING

~~Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(iii))~~

1. ~~For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. (R 336.1213(3))~~
2. ~~The permittee shall maintain the following information on file for each cold cleaner: (R 336.1213(3))~~
 - a. ~~A serial number, model number, or other unique identifier for each cold cleaner;~~
 - b. ~~The date the unit was installed, manufactured or that it commenced operation;~~
 - c. ~~The air/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h);~~
 - d. ~~The applicable Rule 201 exemption;~~
 - e. ~~The Reid vapor pressure of each solvent used;~~
 - f. ~~If applicable, the option chosen to comply with Rule 707(2).~~
3. ~~The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. (R 336.1611(3), R 336.1707(4))~~
4. ~~As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. (R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))~~

VII. REPORTING

1. ~~Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(iii))~~
2. ~~Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))~~
3. ~~Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))~~

See Appendix 8-4

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Consumers Energy Company
Section 1 – Karn 1 and Karn 2

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2022
PTI No: MI-PTI-B2840-2022

Footnotes:

~~¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).~~

~~²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).~~

**FG-EMERGENCYCIGEN-1
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

~~40 CFR Part 63, Subpart ZZZZ— National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, compression-ignition (CI) RICE equal to or less than 500 brake hp. A RICE is existing if the date of installation is before June 12, 2006. Karn 1 (AC) and Karn 2 (DC) emergency diesel generators, which were installed prior to June 12, 2006. The maximum design capacity of each generator is less than 500 horsepower.~~

Emission Units: EU-KARN12DCGEN-1, EU-KARN12ACGEN-1

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

- ~~1. The permittee shall burn only diesel fuel in each engine with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. (40 CFR 63.6604(b), 40 CFR 1090.305)~~

III. PROCESS/OPERATIONAL RESTRICTION(S)

- ~~1. The permittee must comply with the requirements in Item 1 of Table 2c of 40 CFR Part 63, Subpart ZZZZ which apply to each engine in FG-EMERGENCYCIGEN-1 as specified in the following:~~
- ~~a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.2;~~
 - ~~b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and~~
 - ~~c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.~~

~~If the emergency engine is being operated during an emergency and it is not possible to shut down the engine to perform the management practice requirements on the schedule required, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has been abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State, or local law or which the risk was deemed unacceptable. (40 CFR 63.6602, 40 CFR Part 63, Subpart ZZZZ, Table 2c.1)~~

- ~~2. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement in SC III.1. The oil analysis must be performed at the same frequency specified for changing the oil in SC III.1. (40 CFR 63.6625(i))~~
- ~~3. The permittee shall operate and maintain each engine in FG-EMERGENCYCIGEN-1 and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance~~

~~plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 63.6605, 40 CFR 63.6625(e), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6.9)~~

- ~~4. For each engine in FG-EMERGENCYCIGEN-1, the permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. (40 CFR 63.6625(h))~~
- ~~5. The permittee may operate each engine in FG-EMERGENCYCIGEN-1 for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. (40 CFR 63.6640(f)(2))~~
- ~~6. Each engine in FG-EMERGENCYCIGEN-1 may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in SC III.5. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (40 CFR 63.6640(f)(3))~~

IV. DESIGN/EQUIPMENT PARAMETER(S)

- ~~1. The permittee shall equip and maintain each engine in FG-EMERGENCYCIGEN-1 with non-resettable hours meters to track the operating hours. (40 CFR 63.6625(f))~~

V. TESTING/SAMPLING

~~Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))~~

- ~~1. If using the oil analysis program, the permittee must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30% of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20% from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (40 CFR 63.6625(i))~~

VI. MONITORING/RECORDKEEPING

~~Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))~~

- ~~1. For each engine in FG-EMERGENCYCIGEN-1, the permittee shall keep in a satisfactory manner the following:
 - ~~a. A copy of each notification and report that was submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted;~~
 - ~~a. Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment;~~
 - ~~b. Records of performance tests and performance evaluations;~~
 - ~~c. Records of all required maintenance performed on the air pollution control and monitoring equipment;~~~~

~~d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.~~

~~The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(a), 40 CFR 63.6660)~~

~~2. For each engine in FG-EMERGENCYCIGEN-1, the permittee shall keep in a satisfactory manner, records to demonstrate continuous compliance with the operation and maintenance of the engine according to the manufacturer's emission-related operation and maintenance instructions; or of a maintenance plan that provides to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(d), 40 CFR 63.6660, 40 CFR Part 63, Subpart ZZZZ, Table 6.9)~~

~~3. For each engine in FG-EMERGENCYCIGEN-1, the permittee shall keep in a satisfactory manner, records of the maintenance conducted to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the developed maintenance plan. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(e), 40 CFR 63.6660)~~

~~4. The permittee shall monitor and record, the total hours of operation for each engine in FG-EMERGENCYCIGEN-1 on a monthly basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hour meter for each engine in FG-EMERGENCYCIGEN-1 on a calendar year basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(f), 40 CFR 63.6660)~~

~~5. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FG-EMERGENCYCIGEN-1, demonstrating that the fuel meets the requirement of SC II.1.1. The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. The permittee shall keep all records on file and make them available to the department upon request. (R 336.1213(3), 40 CFR 1090.305)~~

~~6. The permittee's records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). (40 CFR 63.6660(a))~~

~~7. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.6660(b))~~

See Appendix 8-1

VII. REPORTING

~~1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))~~

~~2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))~~

~~3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))~~

See Appendix 8-1

Consumers Energy Company
Section 1 – Karn 1 and Karn 2

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2022
PTI No: MI-PTI-B2840-2022

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. ~~The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ for Stationary Reciprocating Internal Combustion Engines. (40 CFR Part 63, Subparts A and ZZZZ)~~

Footnotes:

¹~~This condition is state only enforceable and was established pursuant to Rule 201(1)(b).~~

²~~This condition is federally enforceable and was established pursuant to Rule 201(1)(a).~~

FG-EMERGENCYSIGEN-4
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, spark ignition (SI) RICE equal to or less than 500 bhp. A RICE is existing if the date of installation is before June 12, 2006. Two (2) emergency propane generators with one of the generators located at the guard house, and one generator is located at the fish barrier control room. The maximum design capacity of each generator is no greater than 40 horsepower.

Emission Unit: EU-GUARDHSEGEN1-4, EU-FISHBARGEN-4

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must comply with the requirements in Item 6 of Table 2c of 40 CFR Part 63, Subpart ZZZZ which apply to each engine in FG-EMERGENCYSIGEN-4 as specified in the following:
 - a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.2;
 - b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If the emergency engine is being operated during an emergency and it is not possible to shut down the engine to perform the management practice requirements on the schedule required, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice standard can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has been abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State, or local law under which the risk was deemed unacceptable. **(40 CFR 63.6602, 40 CFR Part 63, Subpart ZZZZ, Table 2c.6)**

2. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement in SC III.1. The oil analysis must be performed at the same frequency specified for changing the oil in SC III.1. **(40 CFR 63.6625(j))**
3. The permittee shall operate and maintain each engine in FG-EMERGENCYSIGEN-1 and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner

consistent with good air pollution control practice for minimizing emissions. **(40 CFR 63.6605, 40 CFR 63.6625(e), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6.9)**

4. For each engine in FG-EMERGENCYSIGEN-4, the permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. **(40 CFR 63.6625(h))**
5. The permittee may operate each engine in FG-EMERGENCYSIGEN-4 for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. **(40 CFR 63.6640(f)(2))**
6. Each engine in FG-EMERGENCYSIGEN-4 may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in SC III.5. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 63.6640(f)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine in FG-EMERGENCYSIGEN-4 with non-resettable hours meters to track the operating hours. **(40 CFR 63.6625(f))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. If using the oil analysis program, the permittee must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within two business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within two business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. **(40 CFR 63.6625(j))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. For each engine in FG-EMERGENCYSIGEN-4, the permittee shall keep in a satisfactory manner the following:
 - a. A copy of each notification and report that was submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted;
 - b. Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment;
 - c. Records of performance tests and performance evaluations;
 - d. Records of all required maintenance performed on the air pollution control and monitoring equipment;

- e. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(a), 40 CFR 63.6660)**

- 2. For each engine in in FG-EMERGENCYSIGEN-4, the permittee shall keep in a satisfactory manner, records to demonstrate continuous compliance with the operation and maintenance of the engine according to the manufacturer's emission-related operation and maintenance instructions; or of a maintenance plan that provides to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(d), 40 CFR 63.6660, 40 CFR Part 63, Subpart ZZZZ, Table 6.9)**
- 3. For each engine in in FG-EMERGENCYSIGEN-4, the permittee shall keep in a satisfactory manner, records of the maintenance conducted to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the developed maintenance plan. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(e), 40 CFR 63.6660)**
- 4. The permittee shall monitor and record, the total hours of operation for each engine in FG-EMERGENCYSIGEN-4 on a monthly basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hour meter for each engine in FG-EMERGENCYSIGEN-4 on a calendar year basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(40 CFR 63.6655(f), 40 CFR 63.6660)**
- 5. The permittee's records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). **(40 CFR 63.6660(a))**
- 6. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5-years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.6660(b))**

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8-1

VIII. STACK/VENT RESTRICTIONS

NA

Consumers Energy Company
Section 1 – Karn 1 and Karn 2

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2022
PTI No: MI-PTI-B2840-2022

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ for Stationary Reciprocating Internal Combustion Engines. **(40 CFR Part 63, Subparts A and ZZZZ)**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FG-NON-EMERGENCYCIENG-4 EMISSION UNIT CONDITIONS

DESCRIPTION

New diesel-fired non-emergency engines subject to 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion engines. These emission units are also subject to the provisions of 40 CFR Part 63, Subpart ZZZZ for Reciprocating Internal Combustion Engines.

Emission Unit: EU-FHPUMP-4, EU-WDKPMP(5765)-4, and EU-WDKPMP(6284)-4

POLLUTION CONTROL EQUIPMENT

EU-WDKPMP(5765)-4 and EU-WDKPMP(6284)-4: Selective Catalytic Reduction (SCR), Ammonia Slip Catalyst, Oxidation Catalyst, Exhaust Gas Recirculation

EU-FHPMP: No controls

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel in each engine in FG-NON-EMERGENCYCIENG-4 with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. **(40 CFR 60.4207(b), 40 CFR 80.510(b))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate and maintain each engine in FG-NON-EMERGENCYCIENG-4 according to the manufacturer's emission-related instructions. The permittee may only change those emission-related settings that are permitted by the manufacturer. **(40 CFR 60.4211(a))**
2. If the permittee does not install, configure, operate, and maintain each engine FG-NON-EMERGENCYCIENG-4 according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance pursuant to 40 CFR 60.4211(g). **(40 CFR 60.4211(g))**
3. The permittee shall operate and maintain each engine in FG-NON-EMERGENCYCIENG-4 over the entire life of the engine. **(40 CFR 60.4206)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Each engine in FG-NON-EMERGENCYCIENG-4 shall be certified to the emission standards in 40 CFR 60.4204(b), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in SC III.2. **(40 CFR 60.4211(c))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain a complete record of fuel oil specifications and/or fuel analysis for each delivery, or storage tank, of fuel oil. Purchase records for ASTM specification fuel oil, specifications or analyses provided by the vendor at the time of delivery, analytical results from laboratory testing, or other records adequate to demonstrate compliance with the percent sulfur limit in fuel oil must be kept. **(R 336.1213(3))**
2. The permittee shall maintain documentation of the engine certification and maintenance records. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
6. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
7. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District office in a format approved by the AQD. **(R 336.1213(3)(c))**

See Appendix 8-1

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for Stationary Compression Ignition Internal Combustion Engines as specified in 40 CFR Part 60, Subparts A and IIII, as they apply to each engine in FG-NON-EMERGENCYCIENG. **(40 CFR Part 60, Subpart IIII)**
2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to each engine in FG-NON-EMERGENCYCIENG¹. **(40 CFR Part 63, Subparts A and ZZZZ, 40 CFR 63.6595)**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that the requirements identified in the table below are not applicable to the specified emission unit(s) and/or flexible group(s). This determination is incorporated into the permit shield provisions set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii). If the permittee makes a change that affects the basis of the non-applicability determination, the permit shield established as a result of that non-applicability decision is no longer valid for that emission unit or flexible group.

Emission Unit/Flexible Group ID	Non-Applicable Requirement	Justification
EU-KARN12DCGEN-1 EU-KARN12ACGEN-1	40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	The existing engines were in operation prior to the regulatory applicability date, and neither engine has been modified or reconstructed after July 11, 2005, therefore neither engine is currently subject to this rule.
EU-GUARDHSEGEN-4 EU-FISHBARGEN-4	40 CFR Part 60, Subpart JJJJ - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	The existing engines were in operation prior to the regulatory applicability date, and neither engine has been modified or reconstructed after July 11, 2005, therefore neither engine is currently subject to this rule.

APPENDICES

Appendix 1-A-1. Acronyms and Abbreviations

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

AQD	Air Quality Division	MM	Million
acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	MW	Megawatts
BTU	British Thermal Unit	NA	Not Applicable
°C	Degrees Celsius	NAAQS	National Ambient Air Quality Standards
CAA	Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAM	Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environment, Great Lakes, and Energy	PM-10	Particulate Matter less than 10 microns in diameter
dscf	Dry standard cubic foot	pph	Pound per hour
dscm	Dry standard cubic meter	ppm	Parts per million
EGLE	Michigan Department of Environment, Great Lakes, and Energy	ppmv	Parts per million by volume
EPA	United States Environmental Protection Agency	ppmw	Parts per million by weight
EU	Emission Unit	PS	Performance Specification
°F	Degrees Fahrenheit	PSD	Prevention of Significant Deterioration
FG	Flexible Group	psia	Pounds per square inch absolute
GACS	Gallon of Applied Coating Solids	psig	Pounds per square inch gauge
GC	General Condition	PeTE	Permanent Total Enclosure
gr	Grains	PTI	Permit to Install
HAP	Hazardous Air Pollutant	RACT	Reasonable Available Control Technology
Hg	Mercury	ROP	Renewable Operating Permit
Hr	Hour	SC	Special Condition
HP	Horsepower	scf	Standard cubic feet
H ₂ S	Hydrogen Sulfide	sec	Seconds
HVLP	High Volume Low Pressure *	SCR	Selective Catalytic Reduction
ID	Identification (Number)	SO ₂	Sulfur Dioxide
IRSL	Initial Risk Screening Level	SRN	State Registration Number
ITSL	Initial Threshold Screening Level	TAC	Toxic Air Contaminant
LAER	Lowest Achievable Emission Rate	Temp	Temperature
Lb	Pound	THC	Total Hydrocarbons
M	Meter	tpy	Tons per year
MACT	Maximum Achievable Control Technology	µg	Microgram
MAERS	Michigan Air Emissions Reporting System	VE	Visible Emissions
MAP	Malfunction Abatement Plan	VOC	Volatile Organic Compounds
Mg	Milligram	yr	Year
Mm	Millimeter		

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 pounds per square inch gauge (psig).

Appendix 1-B-1. Definitions Applicable to Specified Permit Conditions.

The following definitions apply to permit conditions originally established in the consent decree settling, “U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014.” This Appendix is also federally enforceable pursuant to Section 324.5503(b) of the Natural Resources and Environmental Protection Act, 1994 Act 451, as amended, Rule 201(1)(a), and Rule 214a, and will remain in effect after termination of the consent decree. (Act 451, Section 324.5503(b))

- For the purposes of the Consent Decree, every term expressly defined by this Appendix shall have the meaning given that term herein. Every other term used in the Consent Decree that is also a term used under the Act or in a federal regulation implementing the Act shall mean in the Consent Decree what such term means under the Act or those regulations. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 4)
- A “30-Day Rolling Average Emission Rate” for a Unit shall be expressed in lb/mmBTU and calculated in accordance with the following procedure: first, sum the total pounds of NOx or SO₂ emitted from the Unit during the current Unit Operating Day and the previous 29 Unit Operating Days; second, sum the total heat input to the Unit in mmBTU during the current Unit Operating Day and the previous 29 Unit Operating Days; and third, divide the total number of pounds of NOx or SO₂ emitted during the 30 Unit Operating Days by the total heat input during the 30 Unit Operating Days. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Unit Operating Day. Each 30-Day Rolling Average Emission Rate shall include all emissions that occur during all periods within any Unit Operating Day, including emissions from startup, shutdown, and Malfunction. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 5)
- A “90-Day Rolling Average Emission Rate” for a Unit shall be expressed in lb/mmBTU and calculated in accordance with the following procedure: first, sum the total pounds of NOx or SO₂ emitted from the Unit during the current Unit Operating Day and the previous 89 Unit Operating Days; second, sum the total heat input to the Unit in mmBTU during the current Unit Operating Day and the previous 89 Unit Operating Days; and third, divide the total number of pounds of NOx or SO₂ emitted during the 90 Unit Operating Days by the total heat input during the 90 Unit Operating Days. A new 90-Day Rolling Average Emission Rate shall be calculated for each new Unit Operating Day. Each 90-Day Rolling Average Emission Rate shall include all emissions that occur during all periods within any Unit Operating Day, including emissions from startup, shutdown, and Malfunction. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 6)
- A “365-Day Rolling Average Emission Rate” for a Unit shall be expressed in lb/mmBTU and calculated in accordance with the following procedure: first, sum the pounds of the pollutant in question emitted from the Unit during the most recent Unit Operating Day and the previous 364 Unit Operating Days; second, sum the total heat input to the Unit in mmBTU during the most recent Unit Operating Day and the previous 364 Unit Operating Days; and third, divide the total number of pounds of the pollutant emitted during the 365 Unit Operating Days by the total heat input during the 365 Unit Operating Days. A new 365-Day Rolling Average Emission Rate shall be calculated for each new Unit Operating Day. Each 365-Day Rolling Average Emission Rate shall include all emissions that occur during all periods of operation, including startup, shutdown, and Malfunction. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 7)
- “Baghouse” means a full stream (fabric filter or membrane) particulate emissions control device. Full stream is defined as capturing the entire stream of exhaust gas with no concurrent by-pass. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 8)
- “Campbell” means Consumers’ J.H. Campbell Generating Plant consisting of three electric utility steam-generating units designated as Unit 1 (260 MW), Unit 2 (360 MW), and Unit 3 (835 MW) and related equipment, located in West Olive, Ottawa County, Michigan. Campbell Unit 3 is co-owned by Consumers (approximately 93%) along with Wolverine Power Supply Cooperative and the Michigan Public Power Association. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 10)

- ~~“CEMS” or “Continuous Emission Monitoring System,” means, for obligations involving the monitoring of NO_x and SO₂ emissions under the Consent Decree, the devices defined in 40 CFR 72.2 and installed and maintained as required by 40 CFR Part 75. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 12)~~
- ~~“Clean Air Act” or “CAA” or “Act” means the federal Clean Air Act, 42 U.S.C. §§ 7401-7671q, and its implementing regulations. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 13)~~
- ~~“Cobb” means, for purposes of the Consent Decree, Consumers’ B.C. Cobb Generating Plant consisting of two electric-utility steam-generating units designated as Unit 4 (160 MW) and Unit 5 (160 MW) and related equipment, located in Muskegon, Muskegon County, Michigan. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 14)~~
- ~~“Consent Decree” means Consent Decree (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014”) and its Appendices. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 15)~~
- ~~“Consumers” means Consumers Energy Company. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 16)~~
- ~~“Consumers System” means the Campbell, Cobb, Karn, Weadock, and Whiting facilities as defined herein. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 17)~~
- ~~“Continuously Operate” or “Continuous Operation” means that when a pollution control technology or combustion control is required to be used at a Unit pursuant to the Consent Decree (including, but not limited to, SCR, FGD, DSI, ESP, Baghouse, or Low NO_x Combustion System), it shall be operated at all times that the Unit it serves is in operation, consistent with the technological limitations, manufacturers’ specifications, good engineering and maintenance practices, and good air pollution control practices for minimizing emissions (as defined in 40 CFR 60.11(d)), as applicable, for such equipment and the Unit. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 18)~~
- ~~“Date of Entry” means the date the Consent Decree was signed by the United States District Court Judge (i.e. November 4, 2014). (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 19)~~
- ~~“Day” means calendar day unless otherwise specified in the Consent Decree. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 21)~~
- ~~“Dry Sorbent Injection” or “DSI” means a process in which a sorbent is pneumatically injected into the ducting downstream of where the coal is combusted and flue gas is produced, and upstream of the PM Control Device. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 22)~~
- ~~“Emission Rate” for a given pollutant means the number of pounds of that pollutant emitted per million British Thermal Units of heat input (lb/mmBTU), calculated in accordance with the Consent Decree. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 24)~~
- ~~“Flue Gas Desulfurization System” or “FGD” means a pollution control device that employs flue gas desulfurization technology, including an absorber or absorbers utilizing lime or limestone, or a sodium based material, for the reduction of SO₂ emissions. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 27)~~
- ~~“Fossil Fuel” means any hydrocarbon fuel, including coal, petroleum coke, petroleum oil, or natural gas. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 29)~~
- ~~“Full Stream Operation” is defined as the design configuration of a control device such that it captures the entire stream of exhaust gas with no concurrent by-pass. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 30)~~
- ~~“Karn,” for purposes of the Consent Decree, means Consumers’ D.E. Karn Generating Plant consisting of two electric-utility steam-generating units designated as Unit 1 (255 MW) and Unit 2 (260 MW) and related~~

Formatted: Tab stops: 1.08", Left + Not at 1.05"

Formatted: Normal, Space After: 6 pt, Tab stops: 1.08", Left + Not at 1.05" + 6.15"

Formatted: Tab stops: 1.08", Left + Not at 1.05"

Formatted: Tab stops: 1.08", Left + Not at 1.05"

Formatted: Normal, Space After: 6 pt, Tab stops: 1.08", Left + Not at 1.05" + 6.15"

Formatted: Normal, Space Before: Auto, After: 6 pt, Tab stops: 1.08", Left + Not at 1.05" + 6.15"

Formatted: Tab stops: 1.08", Left + Not at 1.05"

Formatted: Tab stops: 1.08", Left + Not at 1.04"

~~equipment, located in Essexville, Bay County, Michigan. Karn does not include the oil-fired electricity generating units designated as Karn Units 3 and 4, also located in Essexville, Bay County, Michigan. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 34)~~

- ~~“Karn Units 3 and 4” means Consumers’ oil-fired Units 3 and 4, in Essexville, Bay County, Michigan. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 35)~~
- ~~“KW” means Kilowatt or one thousand watts net. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 36)~~
- ~~“lb/mmBTU” means one pound per million British Thermal Units. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 37)~~
- ~~“Low NOx Combustion System” means burners and associated combustion air control equipment, including Over Fire Air if specified, which control mixing characteristics of Fossil Fuel and oxygen, thus restraining the formation of NOx during combustion of fuel in the boiler. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 38)~~
- ~~“Malfunction” means a failure to operate in a normal or usual manner by any air pollution control equipment, process equipment, or a process, which is sudden, infrequent, and not reasonably preventable. Failures that are caused in part by poor maintenance or careless operation are not Malfunctions. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 39)~~
- ~~“Michigan SIP” means the Michigan State Implementation Plan, and any amendments thereto, as approved by EPA pursuant to Section 110 of the Act, 42 U.S.C. § 7410. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 40)~~
- ~~“MW” means a megawatt or one million watts net. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 41)~~
- ~~“NOx” means oxides of nitrogen, measured in accordance with the provisions of the Consent Decree. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 45)~~
- ~~“NOx Allowance” means an authorization to emit a specified amount of NOx that is allocated or issued under an emissions trading or marketable permit program of any kind established under the Clean Air Act or the Michigan SIP; provided, however, that with respect to any such program that first applies to emissions occurring after December 31, 2011, a “NOx Allowance” shall include an allowance created and allocated to a Consumers System Unit under such program only for control periods starting on or after the fourth anniversary of the Date of Entry of the Consent Decree. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 46)~~
- ~~“Operating Day” means any calendar day on which a Unit fires Fossil Fuel. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 49)~~
- ~~“Over Fire Air” or “OFA” mean an in-furnace staged combustion control to reduce NOx emissions. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 51)~~
- ~~“PM” means total filterable particulate matter, measured in accordance with the provisions of the Consent Decree. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 53)~~
- ~~“PM Continuous Emission Monitoring System” or “PM CEMS” means, for obligations involving the monitoring of PM emissions under the Consent Decree, the equipment that samples, analyzes, measures, and provides, by readings taken at frequent intervals, an electronic and/or paper record of PM emissions. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 54)~~
- ~~“PM Control Device” means any device, including an ESP or Baghouse, which reduces emissions of PM. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 55)~~
- ~~“PM Emission Rate” means the number of pounds of PM emitted per million BTU of heat input (lb/mmBTU). (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 56)~~
- ~~“Selective Catalytic Reduction” or “SCR” means an air pollution control device for reducing NOx emissions in which ammonia (“NH3”) is added to the flue gas and then passed through layers of a catalyst material.~~

Formatted: Tab stops: 1.08", Left + Not at 1.04"

Formatted: Tab stops: 1.08", Left + Not at 1.04"

Formatted: Normal, Space After: 6 pt, Tab stops: 1.08", Left + Not at 1.03"

Formatted: Tab stops: 1.08", Left + Not at 1.03"

Formatted: Tab stops: 1.08", Left + Not at 1.04"

~~The ammonia and NO_x in the flue gas stream react on the surface of the catalyst, forming nitrogen (“N₂”) and water vapor. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 61)~~

- ~~• “SO₂” means sulfur dioxide, measured in accordance with the provisions of the Consent Decree. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 62)~~
- ~~• “SO₂ Allowance” means an authorization to emit a specified amount of SO₂ that is allocated or issued under an emissions trading or marketable permit program of any kind established under the Clean Air Act or the Michigan SIP; provided, however, that with respect to any such program that first applies to emissions occurring after December 31, 2011, an “SO₂ Allowance” shall include an allowance created and allocated to a Consumers System Unit under such program only for control periods starting on or after the fourth anniversary of the Date of Entry of the Consent Decree. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 63)~~
- ~~• “State Implementation Plan” or “SIP” means regulations and other materials promulgated by a state for purposes of meeting the requirements of the Act that have been approved by EPA pursuant to Section 110 of the Act, 42 U.S.C. § 7410. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 65)~~
- ~~• “Surrender” or “Surrender of Allowances” means, for purposes of SO₂ or NO_x allowances, permanently surrendering allowances from the accounts administered by EPA and Michigan for all Units in the Consumers System, so that such allowances can never be used thereafter to meet any compliance requirements under the Act, a SIP, or the Consent Decree. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 66)~~
- ~~• “System-Wide Annual NO_x Tonnage Limitation” means the limitations, as specified in the Consent Decree, on the number of tons of NO_x that may be emitted from Campbell, Cobb, Kam, Weadock, and Whiting, collectively, during the relevant calendar year (i.e., January 1 through December 31), and shall include all emissions of NO_x during all periods of operations, including startup, shutdown, and Malfunction. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 67)~~
- ~~• “System-Wide Annual SO₂ Tonnage Limitation” means the limitations, as specified in the Consent Decree, on the number of tons of SO₂ that may be emitted from Campbell, Cobb, Kam, Weadock, and Whiting, collectively, during the relevant calendar year (i.e., January 1 through December 31), and shall include all emissions of SO₂ during all periods of operations, including startup, shutdown, and Malfunction. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 68)~~
- ~~• “Title V Permit” means the permit required of Consumers’ major sources pursuant to Subchapter V of the Act, 42 U.S.C. §§ 7661-7661e. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 69)~~
- ~~• “Unit” means collectively, the coal pulverizer, stationary equipment that feeds coal to the boiler, the boiler that produces steam for the steam turbine, the steam turbine, the generator, the equipment necessary to operate the generator, steam turbine, and boiler, and all ancillary equipment, including pollution control equipment and systems necessary for production of electricity. An electric steam generating station may comprise one or more Units. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 70)~~
- ~~• “Weadock” means, for purposes of the Consent Decree, Consumers’ J.C. Weadock Generating Plant consisting of two electric utility steam generating Units designated as Unit 7 (155 MW) and Unit 8 (155 MW) and related equipment, located in Essexville, Bay County, Michigan. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 72)~~
- ~~• “Whiting” means, for purposes of the Consent Decree, Consumers’ Whiting Generation Station consisting of three electric utility steam generating Units designated as Unit 1 (102 MW), Unit 2 (102 MW), and Unit 3 (124 MW) and related equipment, located in Luna Pier, Monroe County, Michigan. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 73)~~

Appendix 2-1. Schedule of Compliance

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. ~~(R 336.1213(4)(a), R 336.1119(a)(ii))~~

Appendix 3-A-1. Monitoring Requirements

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in TABLES: EU-KARN1-1 and EU-KARN2-1:

Section 3.1-A-1

1. Continuous monitoring systems for measuring opacity shall comply with Performance Specification 1 of Appendix B to 40 CFR Part 60 (2000, or as amended). ~~(R 336.2150(1)(a))~~
2. Continuous monitoring systems for measuring opacity shall complete a minimum of 1 cycle of sampling and analyzing for each successive 10-second period and 1 cycle of data recording for each successive 6-minute period. ~~(R 336.2152(1))~~
3. The permittee shall subject the instruments to the manufacturer's recommended zero and span check at least once daily, unless the manufacturer has recommended adjustments at shorter intervals, in which case such recommendations shall be followed. ~~(R 336.2153(1)(a))~~
4. The permittee shall adjust the zero and span when the 24-hour zero drift or 24-hour calibration drift limits of the applicable performance specifications in Appendix B of 40 CFR Part 60 (2000 or as amended), are exceeded. ~~(R 336.2153(1)(b))~~
5. Instrument span shall be approximately 200% of the expected instrument data display output corresponding to the emission standard for the source. ~~(R 336.2154)~~
6. The permittee shall install the continuous monitoring systems such that representative measurements of emissions from the affected facility are obtained. ~~(R 336.2155(1))~~
7. Monitoring requirements shall not apply during any period of monitoring system malfunction if the source owner or operator demonstrates both of the following to the satisfaction of the District Supervisor, Air Quality Division:
 - a. That the cause of the malfunction could not have been avoided by any course of action that could have reasonably been expected of the owner or operator;
 - b. The necessary repairs are being made as expeditiously as practicable. ~~(R 336.2190)~~

Section 3.2-A-1

The CEMS performance specifications defined in 40 CFR Part 75, Appendix A, are adopted.

Methods of measurement, frequency of measurement and recordkeeping methods for CEMS required under 40 CFR Part 75 are outlined in the most recent version of the Acid Rain Program — Dan E. Karn Plant Monitoring Plan, originally dated August 17, 1994.

Data Reporting: The District Supervisor of the Air Quality Division may approve alternative data reporting or reduction procedures if it can be demonstrated that such procedures are at least as accurate as the procedures identified in R 336.2175.

Section 3.3-A-1

~~The Continuous Emissions Monitoring Systems (CEMS) performance specifications defined in 40 CFR Part 75, Appendix A, are adopted. The certified SO₂ and CO₂ monitors will be used to determine sulfur dioxide emissions. The data reduction procedures defined in R 336.2175 will be used to determine SO₂ lbs/MMBTU. Compliance with the SO₂ emission limitation specified in R 336.1401 shall be based upon a monthly calendar average of continuous emission monitoring data~~

Appendix 3-B-1. PM-CEMS

~~This Appendix is federally enforceable and was established pursuant to Rule 201(1)(a). This Appendix was originally established in the consent decree settling, "U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014" and also pursuant Section 324.5503(b) of the Natural Resources and Environmental Protection Act, 1994 Act 451, as amended, and will remain in effect after termination of the consent decree. Definitions specific to this Appendix may be found in Appendix 1-B: Definitions. (Act 451, Section 324.5503(b))~~

- ~~Consumers shall install, correlate, maintain, and operate two PM-CEMS as specified below. The PM-CEMS shall comprise a continuous particle mass monitor measuring particulate matter concentration, directly or indirectly, on an hourly average basis and a diluent monitor used to convert the concentration to units expressed in lb/mmBTU. The PM-CEMS installed at each Unit must be appropriate for the anticipated stack conditions and capable of measuring PM concentrations on an hourly average basis. Consumers shall maintain, in an electronic database, the hourly average emission values of all PM-CEMS in lb/mmBTU. Except for periods of monitor malfunction, maintenance, calibration, or repair, Consumers shall continuously operate the PM-CEMS at all times when the Unit it serves is operating. ("U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014" paragraph 159)~~
- ~~In developing both the plan for installation and correlation of the PM-CEMS and the QA/QC protocol, Consumers shall use the criteria set forth in 40 CFR Part 60, Appendix B, Performance Specification 11, and Appendix F, Procedure 2. Following EPA's approval of the plan described in Paragraph 160 of the Consent Decree, and the QA/QC protocol described in Paragraph 161, Consumers shall thereafter operate the PM-CEMS in accordance with the approved plan and QA/QC protocol. Notwithstanding any other provision of the Consent Decree, exceedances of the PM Emission Rate that occur as a result of de-optimizing emission controls and/or spiking the exhaust gas with excess particulate required to achieve the high level PM test runs during the correlation testing shall not be a violation of the requirements of the Consent Decree (or credible evidence thereof); provided, however, that Consumers shall make best efforts to keep the high level PM test runs during such correlation testing below the applicable PM Emission Rate. ("U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014" paragraph 162)~~
- ~~Except as approved pursuant to paragraph 157 of the Consent Decree, stack testing shall be used to determine compliance with the PM Emission Rates established by the Consent Decree. Data from PM CEMS shall be used, at a minimum, to provide information to operators on PM emissions rate trends on a continuous basis. ("U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014" paragraph 164)~~
- ~~The data recorded by the PM-CEMS shall be expressed in lb/MMBTU on a rolling average 3-hour basis to identify any PM emission rates in excess of the applicable PM Emission Rate and shall be available in electronic format. ("U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014" paragraph 163)~~

Appendix 3-C-1. Optimization of Baghouses

~~This Appendix is federally enforceable and was established pursuant to Rule 201(1)(a). This Appendix was originally established in the consent decree settling, "U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014" and also pursuant Section 324.5503(b) of the Natural Resources and Environmental Protection Act, 1994 Act~~

~~451, as amended, and will remain in effect after termination of the consent decree. Definitions specific to this Appendix may be found in Appendix 1-B: Definitions. (Act 451, Section 324.5503(b))~~

Consumers shall:

- ~~a. At a minimum, to the extent practicable: (i) operate each compartment of the Baghouse as designed for Full Stream Operation for each Unit, where applicable (regardless of whether those actions are needed to comply with opacity limits); (ii) maintain and replace bags on each Baghouse as needed to maximize collection efficiency, where applicable; and~~
- ~~b. during the next planned Unit outage (or unplanned outage of sufficient length), optimize the PM controls on that Unit by inspecting for and repairing any failed Baghouse compartment.~~

The above requirements are found in **“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 141.**

Appendix 4-1. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 5-1. Testing Procedures

PM Emissions Testing and Monitoring Requirements

- ~~As an alternative to the PM testing required in this Appendix 5-S1: PM Emissions Testing and Monitoring Requirements, following the installation and operation of PM CEMS as required by Appendix 3-B-1: PM CEMS, Consumers, at its sole discretion, may seek EPA approval pursuant to Section XIII (Review and Approval of Submittals; beginning at paragraph 193 of the Consent Decree) to forego stack testing and instead demonstrate continuous compliance with an applicable filterable PM Emission Rate by using the PM CEMS data on a 3-hour rolling average basis. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 157)~~
- Note: Units EU-KARN1 and EU-KARN2 were both approved by USEPA to use the PM CEMS alternative to testing per letter dated January 20, 2020 and mailed on February 3, 2020. This PM CEMS approval letter is available upon request.

Appendix 6-1. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B2840-2014. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B2840-2014c is being re-issued as Source-Wide PTI No. MI-PTI-B2840-2022.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	2010000023	Correction of SC VI.1 for EU-KARN1-1 and EU-KARN2-1. Removal of EU-ASHHAND12; equipment has been removed.	EU-KARN1-1 EU-KARN2-1 EU-ASHHAND12

Consumers Energy Company
Section 1 – Karn 1 and Karn 2

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2022
PTI No: MI-PTI-B2840-2022

224-10A	201400120	Incorporate wording from PTI modification approved July 2, 2014 to ROP Renewal.	EU-KARN1-1 EU-KARN2-1 EU-LIMEPREP-1 EU-BPRECYCLE-1 EU-BPDISPOSAL-1 EU-SORBENT-1
---------	-----------	---	--

The following ROP amendments or modifications were issued after the effective date of ROP No. MI-ROP-B2840-2014.

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	201600024/ June 16, 2016	Reopening to update from CAIR to CSAPR.	EU-KARN1-1 EU-KARN2-1
40-15	201500062/ July 16, 2018	<p>Incorporate PTI No. 40-15 which included the Conditions of the Federal Consent Decree (U.S. V. CONSUMERS ENERGY COMPANY, CIVIL ACTION 14-13580, E.D. MICH., 2014). This is to meet Paragraph 235 of the Consent Decree that requires certain parts from the consent decree to be incorporated into a construction permit (PTI). The following must be included in the permit: a schedule for all Unit-specific, plant-specific, and system-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, any (a) 30-Day, 90-Day, and 365-Day Rolling Average Emission Rates, (b) System-Wide Annual NOx and SO₂ Tonnage Limitations, (c) the requirements pertaining to the Surrender of NOx and SO₂ Allowances, (d) PM Emission Rate and annual stack test requirements, and (e) PM CEMS monitoring requirements.</p> <p>There was no New Source Review (NSR) associated with the PTI application review.</p> <p>Additionally, the JC Weadock facility and the Natural Gas Fired Combustion Turbine are no longer in operation and have been permanently removed from the Stationary Source, therefore AQD removed Section 3 – JC Weadock and Section 5 – Natural Gas Fired Combustion Turbine from the ROP.</p> <p>During Consumers Energy Company's review of the minor modification, a request was submitted to remove Section 5 from the ROP since the natural gas turbine was removed from the site in June 2016. Consumers Energy Company also requested to remove emission units EU-ASHKARN1&2, EU-ASHSILO-1 and FG-ASHMAP-1, since these emission units and flexible group were replaced with the new handling system covered under</p>	EU-KARN1-1 EU-KARN2-1 EU-BPRECYCLE-1 EU-BPDISPOSAL-1

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Change	Corresponding Emission Unit(s) or Flexible Group(s)
		EUBPRECYCLE-1 and EU-DISPOSAL to accommodate adding air pollution control systems to the existing coal-fired boilers. The ash handling systems associated with EU-ASHKARN1&2, EU-ASHSILO-1, and FG-ASHMAP-1 have been removed from the ROP.	
40-15A	20210097*/2021	Incorporate PTI No. 40-15A which was to update the conditions related to the Federal Consent Decree (U.S. v CONSUMERS ENERGY COMPANY, CIVIL ACTION 14-13580, E.D. MICH., 2014), and its termination and the approval of the use of the PM CEMS to demonstrate compliance with the filterable PM emission limits.	EU-KARN1-1 EU-KARN2-1
NA	20210224*/2021	Incorporation of two (2) non-emergency diesel-fired EPA-certified engines subject to the provisions of 40 CFR Part 60, Subpart IIII and to 40 CFR Part 63, Subpart ZZZZ.	EU-WDKPMP(5765)-1 EU-WDKPMP(6284)-1

Appendix 7-1. Emission Calculations

Specific emission calculations to be used with monitoring, testing or recordkeeping data are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible group Special Conditions. Therefore, this appendix is not applicable.

Appendix 8-1. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the EGLE, AQD, Report Certification form (EQP 5736) and EGLE, AQD, Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.

Appendix 9-1. Phase II Acid Rain Permit

PHASE II ACID RAIN PERMIT
Permit No. MI-AR-1702-2022

Permittee	Consumers Energy — Dan E Karn Plant
Address	2742 N. Weadock Highway, Essexville, MI
SRN	B2840
Plant Code	1702
Issue Date	July 27, 2022
Effective	Issuance date of this facility's Renewable Operating Permit at the facility in accordance with 40 CFR 72.73.
Expiration	This permit shall expire when the facility's Renewable Operating Permit expires, in accordance with 40 CFR 72.73.
ROP No.	MI-ROP-B2840-2022

The Acid Rain Permit Contents

1. A statement of basis prepared by the Air Quality Division (AQD) containing:

References to statutory and regulatory authorities, and with comments, notes, and justification that apply to the source in general;

2. Terms and conditions including:

A table of sulfur dioxide allowances to be allocated during the term of the permit, if applicable, authorized by this permit during Phase II. Unless they are subject to Sections 405(g)(2) or (3) of the federal Clean Air Act, new units are not allocated allowances in 40 CFR Part 73 and must obtain allowances by other means (Section 403(e) of the federal Clean Air Act);

Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements; and,

Any applicable nitrogen oxides compliance plan. Unless they are coal fired utility units regulated pursuant to Sections 404, 405, or 409 of the federal Clean Air Act, new units are not subject to the acid rain nitrogen oxides requirements (40 CFR 76.1(a)).

3. The permit application that this source submitted, as corrected by the AQD. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

Consumers Energy Company
Section 1 – Karn 1 and Karn 2

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2022
PTI No: MI-PTI-B2840-2022

~~Statement of Basis~~

~~Statutory and Regulatory Authorities~~

~~In accordance with the Natural Resources and Environmental Protection Act, 1994 PA 451 and Titles IV and V of the federal Clean Air Act, the Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division (AQD), issues this permit pursuant to the provisions of R 336.1210 to R 336.1218, and R 336.1902(1)(g).~~

~~_____ For further information contact:~~

~~_____ Mr. Brian Carley
_____ Environmental Quality Specialist
_____ Michigan Department of Environment, Great Lakes, and Energy
_____ Air Quality Division, Jackson District Office
_____ State Office Building, 4th Floor
_____ 301 East Louis B. Click Highway
_____ Jackson, Michigan 49201-1556
_____ Telephone: 517-416-4634
_____ Facsimile: 517-780-7855~~

~~There are no comments, notes and/or justification that apply to the source in general for this section.~~

Terms and Conditions:

Phase II Sulfur Dioxide Allowance Allocation and Nitrogen Oxides Requirements for each affected unit.

		2022	2023	2024	2025	2026
Unit 1	SO ₂ allowances	7825	7825	7825	7825	7825
	NOx Limit	<p>Pursuant to 40 CFR part 76, the State of Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division approves a NOx standard emissions limitation compliance plan for Unit 1. The NOx compliance plan is effective beginning 2017. Under the NOx compliance plan, this unit's annual average NOx emissions rate for each year, determined in accordance with 40 CFR part 76, shall not exceed the applicable emission limitation, under 40 CFR 76.7(a)(2), of 0.40 lb/MMBTU for Phase II tangentially fired boilers.</p> <p>In addition to the described NOx compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions.</p>				

		2022	2023	2024	2025	2026
Unit 2	SO ₂ allowances	8582	8582	8582	8582	8582
	NOx Limit	<p>Pursuant to 40 CFR part 76, the State of Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division approves a NOx standard emissions limitation compliance plan for Unit 2. The NOx compliance plan is effective beginning 2017. Under the NOx compliance plan, this unit's annual average NOx emissions rate for each year, determined in accordance with 40 CFR part 76, shall not exceed the applicable emission limitation, under 40 CFR 76.7(a)(2), of 0.46 lb/MMBTU for Phase II dry bottom wall-fired boilers.</p> <p>In addition to the described NOx compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions.</p>				

Terms and Conditions (cont.):

		2022	2023	2024	2025	2026
Unit 3	SO ₂ allowances	1,023	1,023	1,023	1,023	1,023

		2022	2023	2024	2025	2026
Unit 4	SO ₂ allowances	949	949	949	949	949

~~Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process: None.~~

Permit Application: (attached)

~~Acid Rain Permit Application submitted April 16, 2019~~
~~NOx Compliance Plan submitted June 29, 2017~~



United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2018

Acid Rain Permit Application

For more information, see Instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ new ☐ revised ☒ for ARP permit renewal

STEP 1

Identify the facility name,
State, and plant (ORIS) code.

Dan E. Karn	MI	1702
Facility (Source) Name	State	Plant Code

STEP 2

Enter the unit ID# for every
affected unit at the affected
source in column "a."

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
1	Yes
2	Yes
3	Yes
4	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

Dan E. Karn
Facility (Source) Name (from STEP 1)

Acid Rain - Page 2

STEP 3

Read the standard requirements.

Permit Requirements

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Dan E. Karn
Facility (Source) Name (from STEP 1)

Acid Rain - Page 3

STEP 3, Cont'd.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) ~~The certificate of representation for the designated representative for the~~ source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Dan E. Karn
Facility (Source) Name (from STEP 1)

Acid Rain - Page 4

STEP 3, Cont'd.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

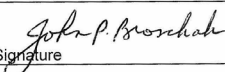
- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- ~~(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.~~

STEP 4
Read the
certification
statement, sign,
and date.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

John P. Broschak, Designated Representative
Name

Signature 

04-01-2019
Date



United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2018

Acid Rain NO_x Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

Page 1

This submission is: ☐ New ☒ Revised

Page 1 of 1

STEP 1
Indicate plant name, State,
and Plant code from the current
Certificate of Representation
covering the facility.

Plant Name Dan E. Karn	State MI	Plant Code 1702
-------------------------------	-----------------	------------------------

STEP 2

Identify each affected Group 1 and Group 2 boiler using the unit IDs from the current Certificate of Representation covering the facility. Also indicate the boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom, and select the compliance option for each unit by making an 'X' in the appropriate row and column.

	ID# 1	ID# 2	ID#	ID#	ID#	ID#
	Type T	Type DBW	Type	Type	Type	Type
(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)						
(b) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase I tangentially fired boilers)						
(c) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)		X				
(d) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)	X					
(e) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)						
(f) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)						
(g) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)						
(h) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)						
(i) NO _x Averaging Plan (include NO _x Averaging form)						
(j) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)						
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO _x Averaging (check the NO _x Averaging Plan box and include NO _x Averaging Form)						
(l) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17(a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)						

Dan E. Karn Plant Name (from Step 1)

NO_x Compliance - Page 2
Page 1 of 1

STEP 3
Identify the first calendar year in
which this plan will apply.

January 1, 2017

STEP 4
Read the special provisions and
certification, enter the name of the
designated representative, sign
and date.

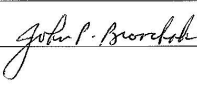
Special Provisions

General

This source is subject to the standard requirements in 40 CFR 72.9. These requirements are listed in this source's Acid Rain Permit.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name John P. Broschak	
Signature 	Date 6/29/17

Appendix 10-1. Transport Rule (TR) Trading Program Title V Requirements

Description of CSAPR Monitoring Provisions

The CSAPR subject units, and the unit-specific monitoring provisions, at this source are identified in the following tables. These units are subject to the requirements for the CSAPR NO_x Annual Trading Program, CSAPR NO_x Ozone Season Group 3 Trading Program, and CSAPR SO₂ Group 1 Trading Program, which are included below as Sections I, II, and III, respectively.

Each unit will use one of the following as the monitoring methodology for each parameter as provided below and shall comply with the general monitoring, recordkeeping, reporting and other requirements in conditions 1 through 5 below and in paragraph (b) of Sections I, II, and III:

- Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart B (for SO₂ monitoring) or 40 CFR Part 75, Subpart H (for NO_x monitoring)
- Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
- Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR Part 75, Appendix E
- Low Mass Emissions (LME) excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19
- EPA-approved alternative monitoring system requirements pursuant to 40 CFR Part 75, Subpart E

Unit ID: 1 (EU-KARN1)	
Parameter	Monitoring Methodology
SO ₂	CEMS requirements pursuant to 40 CFR Part 75, Subpart B
NO _x	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	CEMS requirements pursuant to 40 CFR Part 75, Subpart B (for SO ₂ monitoring) or 40 CFR Part 75, Subpart H (for NO _x monitoring)

Unit ID: 2 (EU-KARN2)	
Parameter	Monitoring Methodology
SO ₂	CEMS requirements pursuant to 40 CFR Part 75, Subpart B
NO _x	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	CEMS requirements pursuant to 40 CFR Part 75, Subpart B (for SO ₂ monitoring) or 40 CFR Part 75, Subpart H (for NO _x monitoring)

Unit ID: 3 (EU-KARN3)	
Parameter	Monitoring Methodology
SO ₂	CEMS requirements pursuant to 40 CFR Part 75, Subpart B
NO _x	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	CEMS requirements pursuant to 40 CFR Part 75, Subpart B (for SO ₂ monitoring) or 40 CFR Part 75, Subpart H (for NO _x monitoring)

Unit ID: 4 (EU-KARN4)	
Parameter	Monitoring Methodology
SO ₂	CEMS requirements pursuant to 40 CFR Part 75, Subpart B
NO _x	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	CEMS requirements pursuant to 40 CFR Part 75, Subpart B (for SO ₂ monitoring) or 40 CFR Part 75, Subpart H (for NO _x monitoring)

- The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (CSAPR NO_x Annual Trading Program), 97.1030 through 97.1035 (CSAPR NO_x Ozone Season Group 3 Trading Program), and 97.630 through 97.635 (CSAPR SO₂ Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading programs.

- ~~2. Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <https://www.epa.gov/airmarkets/monitoring-plans-part-75-sources>.~~
- ~~3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR 75.66 and 97.435 (CSAPR NO_x Annual Trading Program), 97.1035 (CSAPR NO_x Ozone Season Group 3 Trading Program), and/or 97.635 (CSAPR SO₂ Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.~~
- ~~4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (CSAPR NO_x Annual Trading Program), 97.1030 through 97.1034 (CSAPR NO_x Ozone Season Group 3 Trading Program), and/or 97.630 through 97.634 (CSAPR SO₂ Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (CSAPR NO_x Annual Trading Program), 97.1035 (CSAPR NO_x Ozone Season Group 3 Trading Program), and/or 97.635 (CSAPR SO₂ Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.~~
- ~~5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (CSAPR NO_x Annual Trading Program), 97.1030 through 97.1034 (CSAPR NO_x Ozone Season Group 3 Trading Program), and 97.630 through 97.634 (CSAPR SO₂ Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add or change this unit's monitoring system description.~~

SECTION I: CSAPR NO_x Annual Trading Program requirements (40 CFR 97.406)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- ~~(1) The owners and operators, and the designated representative, of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).~~
- ~~(2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of CSAPR NO_x Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the CSAPR NO_x Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.~~

(c) NO_x emissions requirements.

(1) CSAPR NO_x Annual emissions limitation.

- (i). ~~As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall hold, in the source's compliance account, CSAPR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Annual units at the source.~~
- (ii). ~~If total NO_x emissions during a control period in a given year from the CSAPR NO_x Annual units at a CSAPR NO_x Annual source are in excess of the CSAPR NO_x Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:~~
 - ~~(A). The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall hold the CSAPR NO_x Annual allowances required for deduction under 40 CFR 97.424(d); and~~
 - ~~(B). The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.~~

(2) CSAPR NO_x Annual assurance provisions.

- (i). ~~If total NO_x emissions during a control period in a given year from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state and Indian country within the borders of such State exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state and Indian country within the borders of such state for such control period exceed the state assurance level.~~
- (ii). ~~The owners and operators shall hold the CSAPR NO_x Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.~~
- (iii). ~~Total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the State and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).~~
- (iv). ~~It shall not be a violation of 40 CFR Part 97, Subpart AAAAA or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the State and Indian country within the borders of such State during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state and Indian country within the borders of such state during a control period exceeds the common designated representative's assurance level.~~
- (v). ~~To the extent the owners and operators fail to hold CSAPR NO_x Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,~~
 - ~~(A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and~~

~~(B).—Each CSAPR NO_x Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.~~

~~(3) Compliance periods.~~

- ~~(i).—A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.~~
- ~~(ii).—A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.~~

~~(4) Vintage of allowances held for compliance.~~

- ~~(i).—A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated for such control period or a control period in a prior year.~~
- ~~(ii).—A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.~~

~~(5) Allowance Management System requirements. Each CSAPR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart AAAAA.~~

~~(6) Limited authorization. A CSAPR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:~~

- ~~(i).—Such authorization shall only be used in accordance with the CSAPR NO_x Annual Trading Program; and~~
- ~~(ii).—Notwithstanding any other provision of 40 CFR Part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.~~

~~(7) Property right. A CSAPR NO_x Annual allowance does not constitute a property right.~~

(d) Title V permit revision requirements.

- ~~(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with 40 CFR Part 97, Subpart AAAAA.~~
- ~~(2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).~~

(e) Additional recordkeeping and reporting requirements.

- ~~(1) Unless otherwise provided, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.~~
 - ~~(i).—The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each CSAPR NO_x Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.~~
 - ~~(ii).—All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart AAAAA.~~

~~(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Annual Trading Program.~~

~~(2) The designated representative of a CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall make all submissions required under the CSAPR NO_x Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.~~

~~(f) Liability.~~

~~(1) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual source or the designated representative of a CSAPR NO_x Annual source shall also apply to the owners and operators of such source and of the CSAPR NO_x Annual units at the source.~~

~~(2) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual unit or the designated representative of a CSAPR NO_x Annual unit shall also apply to the owners and operators of such unit.~~

~~(g) Effect on other authorities.~~

~~No provision of the CSAPR NO_x Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Annual source or CSAPR NO_x Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.~~

~~(h) Effect on units in Indian country.~~

~~Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.~~

SECTION II: CSAPR NO_x Ozone Season Group 3 Trading Program Requirements (40 CFR 97.1006)

~~(a) Designated representative requirements.~~

~~The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.1013 through 97.1018.~~

~~(b) Emissions monitoring, reporting, and recordkeeping requirements.~~

~~(1) The owners and operators, and the designated representative, of each CSAPR NO_x Ozone Season Group 3 source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.1030 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.1031 (initial monitoring system certification and recertification procedures), 97.1032 (monitoring system out-of-control periods), 97.1033 (notifications concerning monitoring), 97.1034 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.1035 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).~~

~~(2) The emissions data determined in accordance with 40 CFR 97.1030 through 97.1035 shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 3 allowances under 40 CFR 97.1011(a)(2) and (b) and 97.1012 and to determine compliance with the CSAPR NO_x Ozone Season Group 3 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.1030 through 97.1035 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.~~

~~(c) NO_x emissions requirements.~~

~~(1) CSAPR NO_x Ozone Season Group 3 emissions limitation.~~

- ~~(i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Ozone Season Group 3 source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall hold, in the source's compliance account, CSAPR NO_x Ozone Season Group 3 allowances available for deduction for such control period under 40 CFR 97.1024(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Ozone Season Group 3 units at the source.~~
- ~~(ii). If total NO_x emissions during a control period in a given year from the CSAPR NO_x Ozone Season Group 3 units at a CSAPR NO_x Ozone Season Group 3 source are in excess of the CSAPR NO_x Ozone Season Group 3 emissions limitation set forth in paragraph (c)(1)(i) above, then:~~
 - ~~(A). The owners and operators of the source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall hold the CSAPR NO_x Ozone Season Group 3 allowances required for deduction under 40 CFR 97.1024(d); and~~
 - ~~(B). The owners and operators of the source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart GGGGG and the Clean Air Act.~~
- ~~(2) CSAPR NO_x Ozone Season Group 3 assurance provisions:~~
 - ~~(i). If total NO_x emissions during a control period in a given year from all CSAPR NO_x Ozone Season Group 3 units at CSAPR NO_x Ozone Season Group 3 sources in the state and Indian country within the borders of such state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Ozone Season Group 3 allowances available for deduction for such control period under 40 CFR 97.1025(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.1025(b), of multiplying—~~
 - ~~(A). The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and~~
 - ~~(B). The amount by which total NO_x emissions from all CSAPR NO_x Ozone Season Group 3 units at CSAPR NO_x Ozone Season Group 3 sources in the state and Indian country within the borders of such state for such control period exceed the state assurance level.~~
 - ~~(ii). The owners and operators shall hold the CSAPR NO_x Ozone Season Group 3 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.~~
 - ~~(iii). Total NO_x emissions from all CSAPR NO_x Ozone Season Group 3 units at CSAPR NO_x Ozone Season Group 3 sources in the state and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the State NO_x Ozone Season Group 3 trading budget under 40 CFR 97.1010(a) and the state's variability limit under 40 CFR 97.1010(b).~~
 - ~~(iv). It shall not be a violation of 40 CFR Part 97, Subpart GGGGG or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Ozone Season Group 3 units at CSAPR NO_x Ozone Season Group 3 sources in the state and Indian country within the borders of such state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Ozone Season Group 3 units at CSAPR NO_x Ozone Season Group 3 sources in the state and Indian country within the borders of such state during a control period exceeds the common designated representative's assurance level.~~
 - ~~(v). To the extent the owners and operators fail to hold CSAPR NO_x Ozone Season Group 3 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,~~

~~(A).—The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and~~

~~(B).—Each CSAPR NO_x Ozone Season Group 3 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart GGGGG and the Clean Air Act.~~

~~(3) Compliance periods.~~

~~(i).—A CSAPR NO_x Ozone Season Group 3 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.1030(b) and for each control period thereafter.~~

~~(ii).—A CSAPR NO_x Ozone Season Group 3 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.1030(b) and for each control period thereafter.~~

~~(4) Vintage of allowances held for compliance.~~

~~(i).—A CSAPR NO_x Ozone Season Group 3 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 3 allowance that was allocated for such control period or a control period in a prior year.~~

~~(ii).—A CSAPR NO_x Ozone Season Group 3 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 3 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.~~

~~(5) Allowance Management System requirements. Each CSAPR NO_x Ozone Season Group 3 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart GGGGG.~~

~~(6) Limited authorization. A CSAPR NO_x Ozone Season Group 3 allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:~~

~~(i).—Such authorization shall only be used in accordance with the CSAPR NO_x Ozone Season Group 3 Trading Program; and~~

~~(ii).—Notwithstanding any other provision of 40 CFR Part 97, Subpart GGGGG, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.~~

~~(7) Property right. A CSAPR NO_x Ozone Season Group 3 allowance does not constitute a property right.~~

~~(d) Title V permit revision requirements.~~

~~(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Ozone Season Group 3 allowances in accordance with 40 CFR Part 97, Subpart GGGGG.~~

~~(2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.1030 through 97.1035, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.1006(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).~~

~~(e) Additional recordkeeping and reporting requirements.~~

~~(1) Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 3 source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.~~

~~(i).—The certificate of representation under 40 CFR 97.1016 for the designated representative for the source and each CSAPR NO_x Ozone Season Group 3 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate~~

~~of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.1016 changing the designated representative.~~

~~(ii). All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart GGGGG.~~

~~(iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Ozone Season Group 3 Trading Program.~~

~~(2) The designated representative of a CSAPR NO_x Ozone Season Group 3 source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall make all submissions required under the CSAPR NO_x Ozone Season Group 3 Trading Program, except as provided in 40 CFR 97.1018. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.~~

~~(f) Liability.~~

~~(1) Any provision of the CSAPR NO_x Ozone Season Group 3 Trading Program that applies to a CSAPR NO_x Ozone Season Group 3 source or the designated representative of a CSAPR NO_x Ozone Season Group 3 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 3 units at the source.~~

~~(2) Any provision of the CSAPR NO_x Ozone Season Group 3 Trading Program that applies to a CSAPR NO_x Ozone Season Group 3 unit or the designated representative of a CSAPR NO_x Ozone Season Group 3 unit shall also apply to the owners and operators of such unit.~~

~~(g) Effect on other authorities.~~

~~No provision of the CSAPR NO_x Ozone Season Group 3 Trading Program or exemption under 40 CFR 97.1005 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Ozone Season Group 3 source or CSAPR NO_x Ozone Season Group 3 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.~~

~~(h) Effect on units in Indian country.~~

~~Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.~~

SECTION III: CSAPR SO₂ Group 1 Trading Program requirements (40 CFR 97.606)

~~(a) Designated representative requirements.~~

~~The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.~~

~~(b) Emissions monitoring, reporting, and recordkeeping requirements.~~

~~(1) The owners and operators, and the designated representative, of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).~~

~~(2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of CSAPR SO₂ Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the CSAPR SO₂ Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630~~

through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) SO₂ emissions requirements.

(1) CSAPR SO₂ Group 1 emissions limitation.

- (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall hold, in the source's compliance account, CSAPR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO₂ emissions for such control period from all CSAPR SO₂ Group 1 units at the source.
- (ii). If total SO₂ emissions during a control period in a given year from the CSAPR SO₂ Group 1 units at a CSAPR SO₂ Group 1 source are in excess of the CSAPR SO₂ Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source shall hold the CSAPR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and
 - (B). The owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.

(2) CSAPR SO₂ Group 1 assurance provisions.

- (i). If total SO₂ emissions during a control period in a given year from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO₂ emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—
 - (A). The quotient of the amount by which the common designated representative's share of such SO₂ emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such state for such control period, by which each common designated representative's share of such SO₂ emissions exceeds the respective common designated representative's assurance level; and
 - (B). The amount by which total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the CSAPR SO₂ Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total SO₂ emissions exceed the sum, for such control period, of the state SO₂ Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
- (iv). It shall not be a violation of 40 CFR Part 97, Subpart CCCCC or of the Clean Air Act if total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period exceed the state assurance level or if a common designated representative's share of total SO₂ emissions from the CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold CSAPR SO₂ Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,

~~(A).—The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and~~

~~(B).—Each CSAPR SO₂ Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.~~

~~(3) Compliance periods.~~

~~(i).—A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.~~

~~(ii).—A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.~~

~~(4) Vintage of allowances held for compliance.~~

~~(i).—A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year.~~

~~(ii).—A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR SO₂ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.~~

~~(5) Allowance Management System requirements. Each CSAPR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart CCCCC.~~

~~(6) Limited authorization. A CSAPR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:~~

~~(i).—Such authorization shall only be used in accordance with the CSAPR SO₂ Group 1 Trading Program; and~~

~~(ii).—Notwithstanding any other provision of 40 CFR Part 97, Subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.~~

~~(7) Property right. A CSAPR SO₂ Group 1 allowance does not constitute a property right.~~

~~(d) Title V permit revision requirements.~~

~~(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO₂ Group 1 allowances in accordance with 40 CFR Part 97, Subpart CCCCC.~~

~~(2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).~~

~~(e) Additional recordkeeping and reporting requirements.~~

~~(1) Unless otherwise provided, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.~~

~~(i).—The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each CSAPR SO₂ Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.~~

~~(ii).—All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart CCCCC.~~

~~(iii).—Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR SO₂ Group 1 Trading Program.~~

~~(2) The designated representative of a CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall make all submissions required under the CSAPR SO₂ Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.~~

~~(f) Liability.~~

~~(1) Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 source or the designated representative of a CSAPR SO₂ Group 1 source shall also apply to the owners and operators of such source and of the CSAPR SO₂ Group 1 units at the source.~~

~~(2) Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 unit or the designated representative of a CSAPR SO₂ Group 1 unit shall also apply to the owners and operators of such unit.~~

~~(g) Effect on other authorities.~~

~~No provision of the CSAPR SO₂ Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR SO₂ Group 1 source or CSAPR SO₂ Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.~~

~~(h) Effect on units in Indian country.~~

~~Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.~~

Appendix 11-A-1. System-Wide Tonnage Limitations

~~This Appendix is federally enforceable and was established pursuant to Rule 201(1)(a). Appendix 11-1-A and Appendix 11-1-B were originally established in the consent decree settling, “U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” and also pursuant Section 324.5503(b) of the Natural Resources and Environmental Protection Act, 1994 Act 451, as amended, and will remain in effect after termination of the consent decree. Definitions specific to this Appendix may be found in Appendix 1-B: Definitions. (Act 451, Section 324.5503(b))~~

System-Wide Annual NO_x Tonnage Limitations

~~The Consumers System, collectively, shall operate so as not to exceed the following System-Wide Annual NO_x Tonnage Limitations: (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 98)~~

For the Calendar Year Specified Below:	System-Wide Annual NO_x Tonnage Limitation:
2017 and continuing each calendar year thereafter	6,600

- ~~• For purposes of calculating the System-Wide Annual NO_x Tonnage Limitations, Consumers shall use CEMS in accordance with the procedures specified in 40 CFR Part 75, which includes the requirements associated with the concepts of bias adjustments and missing data substitution. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 100)~~

System-Wide Annual SO₂ Tonnage Limitations

~~The Consumers System, collectively, shall operate so as not to exceed the following System-Wide Annual SO₂ Tonnage Limitations: (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 129)~~

For the Calendar Year Specified Below:	System-Wide Annual SO₂ Tonnage Limitation:
2017 and continuing each calendar year thereafter	10,900

- ~~• For purposes of calculating the System-Wide Annual SO₂ Tonnage Limitations, Consumers shall use CEMS in accordance with the procedures specified in 40 CFR Part 75, which includes the requirements associated with the concepts of bias adjustments and missing data substitution. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 131)~~

Appendix 11-B-1. Allowance Provisions

~~This Appendix is federally enforceable and was established pursuant to Rule 201(1)(a). This Appendix was originally established in the consent decree settling, “U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” and also pursuant Section 324.5503(b) of the Natural Resources and Environmental Protection Act, 1994 Act 451, as amended, and will remain in effect after termination of the consent decree. Definitions specific to this Appendix may be found in Appendix 1-B: Definitions. (Act 451, Section 324.5503(b))~~

Use and Surrender of NOx Allowances

- Consumers shall not use NOx Allowances to comply with any requirement of the Consent Decree, as enumerated in this permit, including by claiming compliance with any emission limitation required by the Consent Decree, as provided in this permit, by using, tendering, or otherwise applying NOx Allowances to offset any excess emissions. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 104)
- Except as provided by Appendix 11-B-1: Allowance Provisions, Consumers shall not sell, bank, trade, or transfer any NOx Allowances allocated to the Consumers System Units. Nothing in the Consent Decree shall restrict Consumers’ ability to transfer NOx Allowances among its own facility or general accounts. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 102)
- Beginning with the year 2014 compliance period, and continuing each year thereafter, Consumers shall Surrender all NOx Allowances allocated to the Consumers System for that year’s compliance period that Consumers does not need in order to meet its own federal and/or state CAA regulatory requirements for the Consumers System Units. However, NOx Allowances allocated to the Consumers System may be used by Consumers to meet its own federal and/or state CAA regulatory requirements for such Units. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 103)
- Nothing in Appendix 11-B-1: Allowance Provisions, shall prevent Consumers from purchasing or otherwise obtaining NOx Allowances from another source for purposes of complying with federal and/or state CAA regulatory requirements to the extent otherwise allowed by law. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 104)

Super-Compliant NOx Allowances

- Beginning with the year 2014 and continuing in each calendar year thereafter, Consumers may sell, bank, use, trade, or transfer NOx Allowances made available in that year’s compliance period solely as a result of:
 - a. the installation and operation of any NOx pollution control that is not otherwise required by, or necessary to maintain compliance with, any provision of the Consent Decree as provided in this permit, and is not otherwise required by law;or
 - b. achievement and maintenance of an Emission Rate below a 365-Day Rolling Average Emission Rate for NOx at the following Units: (v) at Karn Unit 1: 0.070 lb/mmBTU; (vi) at Karn Unit 2: 0.070 lb/mmBTU;provided that Consumers is also in compliance for that calendar year with all emission limitations for NOx set forth in the Consent Decree, as provided in this permit. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 106)

Method for Surrender of NOx Allowances

- Consumers shall Surrender, or transfer to a non-profit third-party selected by Consumers for Surrender, all NOx Allowances required to be Surrendered pursuant to Appendix 11-B-1: Allowance Provisions, by June 30 of the immediately following calendar year. Such Surrender need not include the specific NOx Allowances that were allocated to Consumers System Units, so long as Consumers Surrenders NOx Allowances that are from the same year or an earlier year and that are equal to the number required to be Surrendered under the Consent Decree, as provided in this permit. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 107)
- If any NOx Allowances required to be Surrendered under Appendix 11-B-1: Allowance Provisions are transferred directly to a non-profit third-party, Consumers shall include a description of such transfer in the next report submitted to EPA pursuant to the Periodic Reporting provisions of the consent decree (beginning at paragraph 188) of the Consent Decree. Such report shall: (a) identify the non-profit third-party recipient(s) of the NOx Allowances and list the serial numbers of the transferred NOx Allowances; and (b) include a certification by the third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the NOx Allowances and will not use any of the NOx Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any NOx Allowances, Consumers shall include a statement that the third-party recipient(s) Surrendered the NOx Allowances for permanent Surrender to EPA in

~~accordance with the provisions of Appendix 11-B-1: Allowance Provisions within one year after Consumers transferred the NOx Allowances to them. Consumers shall not have complied with the NOx Allowance Surrender requirements of Appendix 11-B-1: Allowance Provisions until all third-party recipient(s) have actually Surrendered the transferred NOx Allowances to EPA. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 108)~~

- ~~• For all NOx Allowances required to be Surrendered, Consumers or the third-party recipient(s) (as the case may be) shall first submit a NOx Allowance transfer request to EPA’s Office of Air and Radiation’s Clean Air Markets Division directing the transfer of such NOx Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. Such NOx Allowance transfer requests may be made in an electronic manner using EPA’s Clean Air Markets Division Business System or similar system provided by EPA. As part of submitting these transfer requests, Consumers or the third-party recipient(s) shall irrevocably authorize the transfer of these NOx Allowances and identify — by name of account and any applicable serial or other identification numbers or station names — the source and location of the NOx Allowances being Surrendered. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 109)~~

Use and Surrender of SO₂ Allowances

- ~~• Consumers shall not use SO₂ Allowances to comply with any requirement of the Consent Decree, as enumerated in this permit, including by claiming compliance with any emission limitation required by the Consent Decree, as enumerated in this permit, by using, tendering, or otherwise applying SO₂ Allowances to offset any excess emissions. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 132)~~
- ~~• Except as provided in Appendix 11-B-1: Allowance Provisions, Consumers shall not sell, bank, trade, or transfer any SO₂ Allowances allocated to the Consumers System Units. Nothing in Appendix 11-B-1: Allowance Provisions, shall restrict Consumers’ ability to transfer SO₂ Allowances among its own facility or general accounts. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 133)~~
- ~~• Beginning with the year 2014 compliance period, and continuing each year thereafter, Consumers shall Surrender all SO₂ Allowances allocated to the Consumers System for that year’s compliance period that Consumers does not need in order to meet its own federal and/or state CAA regulatory requirements for the Consumers System Units. However, SO₂ Allowances allocated to the Consumers System Units may be used by Consumers to meet its own federal and/or state CAA regulatory requirements for such Units. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 134)~~
- ~~• Nothing in Appendix 11-B-1: Allowance Provisions shall prevent Consumers from purchasing or otherwise obtaining SO₂ Allowances from another source for purposes of complying with federal and/or state CAA regulatory requirements to the extent otherwise allowed by law. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 135)~~

Super-Compliant SO₂ Allowances

- ~~• Beginning with the year 2014 and continuing in each calendar year thereafter, Consumers may sell, bank, use, trade, or transfer SO₂ Allowances made available in that year’s compliance period solely as a result of:
 - a. the installation and operation of any SO₂ pollution control that is not otherwise required by, or necessary to maintain compliance with, any provision of the Consent Decree, and is not otherwise required by law;
 - or
 - b. achievement and maintenance of an Emission Rate below a 365-Day Rolling Average Emission Rate for SO₂ at the following Units: (iii) at Karn Unit 1: 0.075 lb/mmBTU, (iv) at Karn Unit 2: 0.075 lb/mmBTU;provided that Consumers is also in compliance for that calendar year with all emission limitations for SO₂ set forth in the Consent Decree, as provided in this permit. (“U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 137)~~

Method for Surrender of SO₂ Allowances

- ~~• Consumers shall Surrender, or transfer to a non-profit third party selected by Consumers for Surrender, all SO₂ Allowances required to be Surrendered pursuant to Appendix 11-B-1: Allowance Provisions by June 30 of the immediately following calendar year. Such Surrender need not include the specific SO₂ Allowances that were~~

allocated to Consumers System Units, so long as Consumers Surrenders SO₂ Allowances that are from the same year or an earlier year and that are equal to the number required to be Surrendered under Appendix 11-B-1: Allowance Provisions. (“**U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 138**)

- If any SO₂ Allowances required to be Surrendered under Appendix 11-B-1: Allowance Provisions are transferred directly to a non-profit third party, Consumers shall include a description of such transfer in the next report submitted to EPA pursuant to the Periodic Reporting provisions of the Consent Decree (beginning at paragraph 188 of the Consent Decree). Such report shall: (a) identify the non-profit third party recipient(s) of the SO₂ Allowances and list the serial numbers of the transferred SO₂ Allowances; and (b) include a certification by the non-profit third party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the SO₂ Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any SO₂ Allowances, Consumers shall include a statement that the non-profit third party recipient(s) Surrendered the SO₂ Allowances for permanent Surrender to EPA in accordance with the provisions of Appendix 11-B-1: Allowance Provisions within one year after Consumers transferred the SO₂ Allowances to them. Consumers shall not have complied with the SO₂ Allowance Surrender requirements of Appendix 11-B-1: Allowance Provisions until all third party recipient(s) have actually Surrendered the transferred SO₂ Allowances to EPA. (“**U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 139**)
- For all SO₂ Allowances required to be Surrendered, Consumers or the third party recipient(s) (as the case may be) shall first submit an SO₂ Allowance transfer request to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such SO₂ Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. Such SO₂ Allowance transfer requests may be made in an electronic manner using EPA's Clean Air Markets Division Business System or similar system provided by EPA. As part of submitting these transfer requests, Consumers or the third party recipient(s) shall irrevocably authorize the transfer of these SO₂ Allowances and identify — by name of account and any applicable serial or other identification numbers or station names — the source and location of the SO₂ Allowances being Surrendered. (“**U.S. v Consumers Energy Company, Civil Action 14-13580, E.D. Mich., 2014” paragraph 140**)

SECTION 2 – KARN 3 AND KARN 4

A. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state-only enforceable Source-Wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. **(R 336.1213(5)(a), R 336.1214a(5))**
- Those conditions that are hereby incorporated in a federally enforceable Source-Wide PTI pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: **(R 336.1213(1)(d))**
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2).² **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in Subrules 2, 3, and 4 of this rule, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following:"² **(R 336.1301(1))**
 - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b. A limit specified by an applicable federal new source performance standard.

The grading of visible emissions shall be determined in accordance with Rule 303.
12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(R 336.1901(b))**

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).² **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. **(R 336.1213(3)(b))**
- The date, location, time, and method of sampling or measurements.
 - The dates the analyses of the samples were performed.
 - The company or entity that performed the analyses of the samples.
 - The analytical techniques or methods used.
 - The results of the analyses.
 - The related process operating conditions or parameters that existed at the time of sampling or measurement.
17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
- For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
- Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that; "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete." The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.² **(R 336.1912)**

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
- The applicable requirements are included and are specifically identified in the ROP.
 - The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.
- Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.
27. Nothing in this ROP shall alter or affect any of the following:
- The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**

- e. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
- f. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
 - g. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
 - h. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
 - i. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
 - j. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**
32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(10))**
33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
- a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
 - c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
 - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(9))**

Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR Part 68)**

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. **(R 336.1213(12))**

Permit to Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.² **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.² **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.² **(R 336.1219)**
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.² **(R 336.1201(4))**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

B. SOURCE-WIDE CONDITIONS

Part B outlines the Source-Wide Terms and Conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the general conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no Source-Wide Conditions, this section will be left blank.

C. EMISSION UNIT SPECIAL CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-FOTANKA-2	Fuel oil storage tank (Tank A) equipped with an internal floating roof and polyurethane vapor seal. The tank has a capacity of less than 225,000 barrels of oil.	01-01-1972	NA
EU-KARN3-2	Karn Boiler #3 is a 7290 million BTU per hour natural gas and fuel oil fired boiler (i.e. dual fuel). Sulfur dioxide (SO ₂) emissions from the boiler are controlled via fuel blending. The boiler is equipped with low NOx burner technology. (PTI No. 354-99)	11-01-1971 06-01-2000	FG-KARN34-2
EU-KARN4-2	Karn boiler #4 is an 8030 million BTU per hour natural gas and fuel oil fired boiler (i.e. dual fuel). Sulfur dioxide (SO ₂) emissions from Karn boiler #4 are controlled via fuel blending. The boiler is equipped with low NOx burner technology. (PTI No. 354-99)	11-01-1971 06-01-2000	FG-KARN34-2
EU-AUXBLRA-2	Auxiliary boiler A is natural gas fired and has a maximum rated capacity of 300 million BTU per hour. The boiler is equipped with low NOx burner technology. (PTI No. 354-99)	11-01-1971 06-01-2000	FG-KARN34-2 FG-AUXBLRSAB-2
EU-AUXBLRB-2	Auxiliary boiler B is natural gas fired and has a maximum rated capacity of 300 million BTU per hour. The boiler is equipped with low NOx burner technology. (PTI 354-99)	11-01-1971 06-01-2000	FG-KARN34-2 FG-AUXBLRSAB-2
EU-KARN34GEN-2	Karn 3 emergency diesel-fired generator with a maximum design capacity of greater than 500 brake horsepower (less than 9 MMBTU/hr).	11-01-1971	NA
EU-TANKFARMBLR1-2	Natural gas fired tank farm boiler, 5.23 million BTU per hour for heating the fuel oil transmission lines.	1972	FG-TANKFARMBLRS-2

Commented [MEGI4]: Emission Units in the existing Section 2 should be combine with the few emission units and flexible groups from the existing Section 1 that are not currently flagged for deletion. The reissued Karn ROP after this Minor Modification Update should not have any sections.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-TANKFARMBLR2-2	Natural gas fired tank farm boiler, 5.23 million BTU per hour for heating the fuel oil transmission lines.	1976	FG-TANKFARMBLRS-2
EU-PARTSCLEANER34-2	Cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	01-18-1980	FG-PARTSCLEANER34-2
EU-PAINTROOM34-2	Paint room located at the DE Karn 3 and 4 Plant.	03-01-1990	FG-PAINTROOM34-2
<u>EU-K34HEAT1</u>	<u>14.66 million BTU natural gas fire Cleaver Brooks Boiler equipped with Low NOx Burners, with Flue Gas Recirculation, and dedicated Stack not equipped with O2 trim system</u>		<u>FG-K34HEAT1&2-2</u>
<u>EU-K34HEAT2</u>	<u>Nebraska Boiler 50 million BTU/hr equipped with Low NOx Burners, Flue Gas Recirculation and dedicated Stack. Boiler not equipped with O2 trim system</u>		<u>FG-K34HEAT1&2-2</u>

EU-FOTANKA-2
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Fuel oil storage tank (Tank A) equipped with an internal floating roof and polyurethane vapor seal. The tank has a capacity of less than 225,000 barrels of oil.

Flexible Group: NA

POLLUTION CONTROL EQUIPMENT

Internal floating roof, polyurethane vapor seal

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. If the true vapor pressure of the petroleum liquid, as stored, is equal to or greater than 1.5 psia but not greater than 11.1 psia, then the following conditions shall be met:
 - a. Each vessel shall be equipped and maintained with a floating cover or roof which rests upon, and is supported by, the liquid being contained and has a closure seal or seals to reduce the space between the cover or roof edge and the vessel wall. The seal or any seal fabric shall have no visible holes, tears, or other nonfunctional openings. **(R 336.1604(1)(b))**
 - b. All openings, except stub drains, in any stationary vessel shall be equipped with covers, lids, or seals such that all of the following conditions are met:
 - i. The cover, lid, or seal is in the closed position at all times, except when in actual use;
 - ii. Automatic bleeder vents are closed at all times, except when the roof is floated off, or landed on, the roof leg supports;
 - iii. Rim vents, if provided, are set at the manufacturer's recommended setting or are set to open when the roof is being floated off the roof leg supports. **(R 336.1604(2)(a), (b) and (c))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain a record of the true vapor pressure of the stored petroleum liquid when the tank is in use and make it available to the Department upon request. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8-2

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EU-KARN34GEN-2
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Requirements for diesel-fired emergency generators with a maximum design capacity of greater than 500 brake horsepower (less than 9 MMBTU per hour)

Emission Unit: EU-KARN34GEN-2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur	1.0 percent by weight*	NA	EU-KARN34GEN-2	SC VI.1	R 336.1401(1)

*The sulfur content shall be calculated on the basis of 18,000 BTU per pound for liquid fuels. Liquid fuels include distillate oil (No. 1 and No. 2), heavy oil (No. 4, No. 5 and No.6) and crude oil.

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall maintain a complete record of fuel oil specifications and/or fuel analysis for each delivery, or storage tank, of fuel oil. Purchase records for ASTM specification fuel oil, specifications or analyses provided by the vendor at the time of delivery, analytical results from laboratory testing, or any other records adequate to demonstrate the sulfur content of the fuel oil must be kept. (R 336.1213(3))
2. The permittee shall maintain a record of the applicability determination for EU-KARN34GEN-2¹ relative to the requirements of 40 CFR Part 63, Subparts A and ZZZZ. (40 CFR Part 63, Subpart A, Section 63.10(b)(3))

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8-2

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the federal National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, promulgated in 40 CFR Part 63, Subparts A and ZZZZ.

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

D. FLEXIBLE GROUP SPECIAL CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-KARN34-2	Common requirements for Karn Boiler #3 and #4 are 7290 and 8030 million BTU per hour natural gas and oil fired boilers (i.e. dual fuel), respectively, with low NOx burner technology. Sulfur dioxide (SO ₂) emissions from the boilers are controlled via fuel blending. Auxiliary Boilers A and B are 300 million BTU per hour natural gas fired boilers. Nitrogen oxide (NOx) emissions are controlled via low NOx burner technology. Auxiliary Boilers A and B share a common stack with Karn Boilers 3 and 4. (PTI No. 354-99)	EU-KARN3-2 EU-KARN4-2 EU-AUXBLRA-2 EU-AUXBLRB-2
FG-AUXBLRSAB-2	Requirements for existing boilers and process heaters that are designed to burn gas 1 subcategory fuel with a heat input capacity of 10 MMBTU/hr or greater at major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). Units designed to burn gas 1 subcategory fuels include boilers or process heaters that burn only natural gas, refinery gas, and/or Other Gas 1 fuels. Units that burn liquid fuel for testing or maintenance purposes for less than a total of 48 hours per year, or that burn liquid fuel during periods of curtailment or supply interruptions are included in this definition.	EU-AUXBLRA-2 EU-AUXBLRB-2
FG-TANKFARMBLRS-2	Requirements for existing boilers and process heaters with a heat input capacity of <10 MMBTU/hr for major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). These boilers or process heaters are designed to burn gaseous fuels.	EU-TANKFARMBLR1S EU-TANKFARMBLR2
FG-PARTSCLEANER34-2	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EU-PARTSCLEANER34

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-PAINTROOM	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 287(2)(c). Emission units installed/modified before December 20, 2016, may show compliance with Rule 287 in effect at the time of installation/modification.	EU-PAINTROOM34-2
<u>FG-K34HEAT1&2-2</u>	<u>Requirements for existing boilers and process heaters that are designed to burn gas 1 subcategory fuel with a heat input capacity of 10 MMBTU/hr or greater at major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). Units designed to burn gas 1 subcategory fuels include boilers or process heaters that burn only natural gas, refinery gas, and/or Other Gas 1 fuels. Units that burn liquid fuel for testing or maintenance purposes for less than a total of 48 hours per year, or that burn liquid fuel during periods of curtailment or supply interruptions are included in this definition.</u>	<u>EU-K34HEAT1-2</u> <u>EU-K34HEAT2-2</u>

Formatted Table

Formatted: Indent: First line: 0.5"

FG-KARN34-2
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Common requirements for Karn Boiler #3 and #4 are 7290 and 8030 million BTU per hour natural gas- and oil-fired boilers (i.e., dual fuel), respectively, with low NOx burner technology. Sulfur dioxide (SO₂) emissions from the boilers are controlled via fuel blending. Auxiliary Boilers A and B are 300 million BTU per hour natural gas fired boilers. Nitrogen oxide (NOx) emissions are controlled via low NOx burner technology. Auxiliary Boilers A and B share a common stack with Karn Boilers 3 and 4. (PTI No. 354-99)

Emission Unit: EU-KARN3-2₁, EU-KARN4-2₁, EU-AUXBLRA-2₁, EU-AUXBLRB-2₁

POLLUTION CONTROL EQUIPMENT

Low NOx burner technology

I. EMISSION LIMIT(S)

Pollutant	Limit*	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. SO ₂	1.11 lb/MMBTU heat input ²	Monthly calendar average, based upon those hours when EUKARN3-2 ₁ and/or EUKARN4-2 ₁ are in operation	FG-KARN34-2	SC VI.2	R 336.1401(1)
2. NOx	0.45 lb/MMBTU heat input ²	Daily average	FG-KARN34-2	SC VI.2	40 CFR 52.21(b)(2)(iii)(h)
3. PM*	0.10 lb/1,000 lb of exhaust gases ^{2,a}	Hourly	EU-KARN3-2 ₁ , EU-KARN4-2 ₁	SC V.1	R 336.1331(1)(c)

* Limits are applicable to each emission unit

^a Corrected to 50% excess air

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Fully reclaimed used oil fuel (i.e., fully reclaimed on-spec fuel and specification used oil fuel)	40,000,000 gallons (in addition to virgin fuels) ²	Calendar year	FG-KARN34-2	SC VI.4, VI.5	R 336.1201(3)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Fully reclaimed used oil fuel shall meet the regulatory specifications described in Appendix 11-2.² (R 336.1201(3))

2. Fully reclaimed used oil fuel to be fired shall not contain any PCB's greater than 1 part per million, by weight.² **(R 336.1201(3))**
3. Fully reclaimed used oil fuel shall not be mixed with any substances other than used oil and fuel oil.² **(R 336.1201(3))**
4. The permittee shall not operate the applicable emission unit (i.e. EU-KARN3-~~2~~, EU-KARN4-~~2~~) unless a Malfunction Abatement Plan (MAP) as described in Rule 911(2), for the emission control equipment is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 90 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1910, R 336.1911)**

5. The permittee shall maintain a quality control program for the fully reclaimed used oil. Revisions and updates to the program will be submitted to the District Supervisor, Air Quality Division. **(R 336.1201(3))**
6. The permittee shall conduct a tune-up of EU-KARN3-~~2~~₁ and EU-KARN4-~~2~~₁ burners and combustion controls, as applicable, at least every 36 calendar months, as specified in 40 CFR 63.10021(e). **(40 CFR 63.10000(c)(2)(iv), 40 CFR 63.10006(i), 40 CFR 63.10021(e))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Upon request, the permittee shall verify the PM emission rates from FG-KARN34-~~2~~₁ by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 5-2

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall monitor and record the opacity from FG-KARN34-2 when EU-KARN3-2 and/or EU-KARN4-2 are in operation using a Continuous Opacity Monitoring System (COMS), installed, operated and maintained in accordance with 40 CFR Part 60, Appendix B.² **(40 CFR 75.14)**
2. The permittee shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of gas flow, SO₂, CO₂, and NO_x in accordance with the provisions of 40 CFR Part 75 and ROP Appendix 3.1-S. **(40 CFR Part 75)**
3. The permittee shall maintain a record of fuel oil specifications that includes PCB analysis for each delivery, or storage tank, of fully reclaimed on-spec used fuel oil. Analyses provided by the vendor at the time of delivery, analytical results from laboratory testing, or any other records adequate to demonstrate that the fully reclaimed on-spec used oil does not contain PCB concentrations of not greater than 1 ppm, by weight, shall be maintained on file. **(R 336.1213(3))**
4. The permittee shall record total quantity of used fuel oil used on a monthly and calendar year total basis. **(R 336.1213(3))**
5. The permittee shall document that fully reclaimed used oil is not mixed with any substances other than used oil and fuel oil. **(R 336.1213(3))**
6. The permittee shall maintain documentation that the gas burned in EU-AUXBLRA and EU-AUXBLRB is natural gas or pipeline natural gas, as defined under 40 CFR 72.2. **(R 336.1213(3))**
7. The permittee shall maintain on-site and submit, if requested by the USEPA Administrator, an annual report containing the MATS Tune-Up information in paragraphs 40 CFR 63.10021(e)(1) through (e)(9) for EU-KARN3-2 and EU-KARN4-2. **(40 CFR 63.10021(e)(8))**
8. The permittee shall maintain records of the type(s) and amount(s) of fuel use in each calendar quarter in EU-KARN3-2 and EU-KARN4-2 to document that the capacity factor limitation for limited-use oil-fired EGU subcategory is met. **(40 CFR 63.10032(j))**

See Appendices 3-2

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

5. Prior to January 1, 2024, the permittee shall submit semiannual reporting of the information required below. The report shall be postmarked or received by the Administrator by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. The final semiannual compliance report shall cover the period from July 1, 2023, through December 31, 2023. The report shall include the following: **(40 CFR 63.10031(b), 40 CFR Part 63, Subpart UUUUU, Table 8.9)**
 - a. The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by EPA or the basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure; **(40 CFR 63.10031(c)(2))**
 - b. Indicate whether any emission unit in FG-MATS burned new types of fuel during the reporting period. If new types of fuel were burned, include the date of the performance test where that fuel was in use; **(40 CFR 63.10031(c)(3))**
 - c. Include the date of the most recent tune-up for each emission unit. The date of the tune-up is the date the tune-up provisions specified in 40 CFR 63.10021(e)(6) and (7) were completed; **(40 CFR 63.10031(c)(4))**
 - d. A certification; **(40 CFR 63.10031(c)(8))**
 - e. If there is a deviation from any emission limit, work practice standard, or operating limit, the permittee must also submit a brief description of the deviation, the duration of the deviation, emissions point identification, and the cause of the deviation; **(40 CFR 63.10031(c)(9), 40 CFR Part 63, Subpart UUUUU, Table 8)**
6. Prior to January 1, 2024, all reports and notifications shall be submitted to the EPA in the specified format and at the specified frequency, using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool. Note that EPA will continue to accept, as necessary, PDF reports that are being phased out at the end of 2023, if the submission deadlines for those reports extend beyond December 31, 2023. **(40 CFR 63.10031(f)(4) and (6))**
7. Starting with the first calendar quarter of 2024, the permittee must use the ECMPS Client Tool to submit quarterly electronic compliance reports. Each quarterly compliance report shall include the applicable data elements in sections 2 through 13 of appendix E of 40 CFR Part 63, Subpart UUUUU and submitted in XML format. For each stack test summarized in the compliance report, the permittee must also submit the applicable reference method information in sections 17 through 31 of appendix E of 40 CFR Part 63, Subpart UUUUU. The compliance reports and associated appendix E information must be submitted no later than 60 days after the end of each calendar quarter. The permittee shall include in the quarterly compliance reports the applicable data elements in section 13 of appendix E of 40 CFR Part 63, Subpart UUUUU for any "deviation" (as defined in 40 CFR 63.10042 and elsewhere in 40 CFR Part 63, Subpart UUUUU) that occurred during the calendar quarter. If there were no deviations, the permittee must include a statement to that effect in the quarterly compliance report. There is an approved alternative electronic format for submittals until EPA has fully developed ECMPS 2.0 the permittee can continue to submit MATS Appendix E data elements 1-16 as PDF files to ECMPS instead of XML files per EGLE email approval on 5/2/2024 as allowed by 40 CFR 63.10(f)(2). **(40 CFR 63.10031(d), 40 CFR 63.10031(f)(4), 40 CFR 63.10031(g), 40 CFR 63.10(f)(2))**
8. If an affected source submits a semiannual compliance report pursuant to 40 CFR Part 63.10031(c) and (d), or two quarterly compliance reports covering the appropriate calendar half pursuant to 40 CFR Part 63.10031(g), along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A), and the compliance report(s) includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report(s) satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of the compliance report(s) does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. **(40 CFR 63.10031(e))**
9. On and after January 1, 2024, the permittee shall report the tune-up date electronically in the quarterly compliance report, in accordance with 40 CFR 63.10031(g) and section 10.2 of appendix E of 40 CFR Part 63, Subpart UUUUU. The tune-up report date is the date when tune-up requirements in 40 CFR 63.10021(e)(6) and (7) are completed. **(40 CFR 63.10021(e)(9))**

10. The permittee shall submit to the District Supervisor, and Technical Programs Unit (TPU) Supervisor (Summary Report only, in a format similar to Figure 1 in 40 CFR 60.7), Air Quality Division, within 30 days of the end of the calendar quarter, a written report for each calendar quarter which shall include all of the following information:
- Excess emissions and the nature and cause of the excess emissions, if known, as follows: For opacity measurements, the report shall consist of the magnitude, in actual percent opacity, of all 6-minute averages of opacity more than the applicable opacity standard for each hour of operation (all allowable exceptions are to be deducted prior to determining the excess averages of opacity). Average values shall be obtained by integration over the averaging period or by arithmetically averaging a minimum of 24 equally spaced, instantaneous opacity measurements per 6 minutes;
 - The date and time identifying each period during which the continuous monitoring system was inoperative, except for daily zero and span checks, and the nature of repairs or adjustments made;
 - If the monitoring system has not been inoperative, repaired, or adjusted, and if no excess emissions occurred, a statement attesting to this fact. **(R 336.1213(3))**
11. The permittee shall submit to the District Supervisor and Technical Programs Unit (TPU) Supervisor (Summary Report only, in a format similar to Figure 1 in 40 CFR 60.7), Air Quality Division, within 30 days of the end of the calendar quarter, a written report for each calendar quarter which shall include sulfur dioxide and nitrogen oxide excess emissions and the nature and cause of the excess emissions. This report shall also include the date and time identifying each period during which the continuous monitoring system was inoperative, except for daily zero and span checks, and the nature of repairs or adjustments made. See Appendix 3-2, Section 3.2-2. **(R 336.1213(3))**
12. The permittee shall report sulfur dioxide, nitrogen oxide and carbon dioxide emissions, and volumetric flow data in accordance with 40 CFR Part 75 (Continuous Emission Monitoring).² **(40 CFR Part 75)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVKARN34	414 ²	450 ²	R 336.1201(3)

IX. OTHER REQUIREMENT(S)

- The permittee shall comply with the acid rain permitting provisions of 40 CFR 72.1 to 72.94 as outlined in a complete Phase II Acid Rain Permit issued by the AQD. Phase II Acid Rain Permit No. MI-AR-1702-2022 is hereby incorporated into this ROP as Appendix 9-2. **(R 336.1902(1)(q))**
- The permittee shall not allow the emission of an air pollutant to exceed the amount of any emission allowances that an affected source lawfully holds as of the allowance transfer deadline pursuant to R 336.1902(1)(q) and 40 CFR 72.9(c)(1)(i). **(R 336.1213(10))**
- The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_x Annual Trading Program, as specified in 40 CFR Part 97, Subpart AAAAA, and identified in Appendix 10-2. **(40 CFR Part 97, Subpart AAAAA)**
- The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_x Ozone Season Group 3 Trading Program, as specified in 40 CFR Part 97, Subpart GGGGG, and identified in Appendix 10-2. **(40 CFR Part 97, Subpart GGGGG)**

Consumers Energy Company
Section 2 – Karn 3 and Karn 4

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2027
PTI No: MI-PTI-B2840-2022

5. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule SO₂ Group 1 Trading Program, as specified in 40 CFR Part 97, Subpart CCCCC, and identified in Appendix 10-2. **(40 CFR Part 97, Subpart CCCCC)**
6. The permittee shall hold allowances for compliance deductions in the source's compliance account as of the allowance transfer deadline in an amount not less than the total NO_x emissions for the control period from the source pursuant to 40 CFR 97.354. **(40 CFR 97.354)**
7. If any emission unit(s) cease(s) to operate in a manner that causes the unit(s) to meet the definition of an EGU subject to 40 CFR Part 63, Subpart UUUUU, the permittee must submit the notification in 40 CFR 63.10000(i)(2) no less than 30 days prior to when the EGU will cease complying with 40 CFR Part 63, Subpart UUUUU. **(40 CFR 63.10000(i)(2), 40 CFR 63.10030(f))**
8. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and UUUUU. **(40 CFR Part 63, Subparts A and UUUUU)**

See Appendices 9-2 and 10-2

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FG-AUXBLRSAB-2
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Requirements for existing boilers and process heaters that are designed to burn gas 1 subcategory fuel with a heat input capacity of 10 MMBTU/hr or greater at major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). Units designed to burn gas 1 subcategory fuels include boilers or process heaters that burn only natural gas, refinery gas, and/or Other Gas 1 fuels.

Emission Units: EU-AUXBLRA-2, EU-AUXBLRB-2

POLLUTION CONTROL EQUIPMENT

Low NOx burner technology

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall conduct an annual tune up of each boiler or process heater as specified below. The annual tune-up shall be no more than 13 months after the previous tune-up. **(40 CFR 63.7500(a)(1), 40 CFR 63.7515(d), Table 3 of 40 CFR Part 63, Subpart DDDDD)**
 - a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown. Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**
 - b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.7540(a)(10)(ii))**
 - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.7540(a)(10)(iii))**
 - d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
 - e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.7540(a)(10)(v))**
2. If the unit is not operated on the required date for the tune-up, the tune-up must be conducted within 30 calendar days of startup. **(40 CFR 63.7540(a)(13))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee must keep a copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted. (40 CFR 63.7555(a)(1))
2. The permittee shall maintain on-site and submit, if requested by the AQD, an annual tune-up report containing the information listed below.
 - a. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater; (40 CFR 63.7540(a)(10)(vi)(A))
 - b. A description of any corrective actions taken as a part of the tune-up; (40 CFR 63.7540(a)(10)(vi)(B))
 - c. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. (40 CFR 63.7540(a)(10)(vi)(C))
3. The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). (40 CFR 63.7560(a))
4. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5-years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.7560(b))
5. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee can keep the records off site for the remaining three years. (40 CFR 63.7560(c))

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
4. If the permittee has switched fuels or made a physical change to the boiler or process heater and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30 days of the switch/change. The notification must identify:

- a. The name of the owner or operator of the affected source, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice; **(40 CFR 63.7545(h)(1))**
 - b. The currently applicable subcategory under 40 CFR Part 63, Subpart DDDDD; **(40 CFR 63.7545(h)(2))**
 - c. The date upon which the fuel switch or physical change occurred. **(40 CFR 63.7545(h)(3))**
5. The permittee must submit boiler and process heater tune-up compliance reports to the appropriate AQD District Office. The reports must be postmarked or submitted by March 15th and must cover the period of January 1 through December 31 of the reporting year. For new units, the first report should cover the period of startup to December 31 of the reporting year. Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). **(40 CFR 63.7550(b))**
6. The permittee must submit a compliance report containing the following information:
- a. Company and Facility name and address; **(40 CFR 63.7550(c)(5)(i))**
 - b. Process unit information, emissions limitations, and operating parameter limitations; **(40 CFR 63.7550(c)(5)(ii))**
 - c. Date of report and beginning and ending dates of the reporting period; **(40 CFR 63.7550(c)(5)(iii))**
 - d. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown; **(40 CFR 63.7550(c)(5)(xiv))**
 - e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii))**
7. The permittee must submit all reports required by Table 9 of this subpart electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, submit the report to the EPA Region V at the appropriate address listed in 40 CFR 63.13 and to the appropriate AQD District Office. **(40 CFR 63.7550(h)(3))**

See Appendix 8-2

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters as specified in 40 CFR Part 63, Subparts A and DDDDD. **(40 CFR Part 63, Subparts A and DDDDD)**
2. The permittee shall meet the monitoring, recordkeeping, and reporting requirements of the NOx SIP Call during the ozone season (May 1 through September 30). (40 CFR Part 96, Subpart H 40 CFR 51.122)

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FG-K34HEAT1&2
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Requirements for new boilers and process heaters that are designed to burn gas 1 subcategory fuel with a heat input capacity of 10 MMBTU/hr or greater at major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). Units designed to burn gas 1 subcategory fuels include boilers or process heaters that burn only natural gas, refinery gas, and/or Other Gas 1 fuels. Units that burn liquid fuel for testing or maintenance purposes for less than a total of 48 hours per year, or that burn liquid fuel during periods of curtailment or supply interruptions are included in this definition. These boilers are also subject to NSPS 60 Subpart Dc.

Emission Units: EU-K34HEAT1-2, EU-K34HEAT2-2

POLLUTION CONTROL EQUIPMENT

Low NOx burner technology and Flue Gas Recirculation

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

OPTIONAL – Use the following condition only for NEW SOURCES. Delete if not applicable (i.e. if they have the documentation to show that this has been completed) and renumber conditions appropriately. The DATE is 13 months after startup.

1. The permittee must, for boilers or process heaters installed after June 4, 2010, complete an initial tune-up as specified in SC III.5 by no later than 13 months after start-up date. The start-up date for EU-K34HEAT1-2 was September 15, 2024 and the start-up date for EU-K34HEAT2-2 was September 15, 2024. **(40 CFR 63.7510(g))**
2. The permittee shall conduct an annual tune up of each boiler or process heater as specified below. The annual tune-up shall be no more than 13 months after the previous tune-up. **(40 CFR 63.7500(a)(1), 40 CFR 63.7515(d), Table 3 of 40 CFR Part 63, Subpart DDDDD)**
 - a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown. Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(ii))**
 - b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.7540(a)(10)(iii))**
 - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.7540(a)(10)(iii))**

Commented [MG5]: The September 15, 2024 date is a estimated date the actual start-up date for each unit will be inserted during the ROP comment period if the Units do not go into service on September 15, 2024.

- d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject. (40 CFR 63.7540(a)(10)(iv))
- e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. (40 CFR 63.7540(a)(10)(v))

3. If the unit is not operated on the required date for the tune-up, the tune-up must be conducted within 30 calendar days of startup. (40 CFR 63.7540(a)(13))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee must keep a copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted. (40 CFR 63.7555(a)(1))
2. The permittee shall maintain on-site and submit, if requested by the AQD, an annual tune-up report containing the information listed below.
 - a. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. (40 CFR 63.7540(a)(10)(vi)(A))
 - b. A description of any corrective actions taken as a part of the tune-up: (40 CFR 63.7540(a)(10)(vi)(B))
 - c. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. (40 CFR 63.7540(a)(10)(vi)(C))
3. The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). (40 CFR 63.7560(a))
4. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5-years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.7560(b))
5. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee can keep the records off site for the remaining three years. (40 CFR 63.7560(c))
6. The permittee shall keep, in a satisfactory manner, monthly natural gas use records for FG-K34HEAT1&2-2. All records shall be kept on file for a period of at least five years and made available to the Department upon request.2 (40 CFR 60.48c (g)(2))

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
4. If the permittee has switched fuels or made a physical change to the boiler or process heater and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30 days of the switch/change. The notification must identify:
 - a. The name of the owner or operator of the affected source, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice; (40 CFR 63.7545(h)(1))
 - b. The currently applicable subcategory under 40 CFR Part 63, Subpart DDDDD; (40 CFR 63.7545(h)(2))
 - c. The date upon which the fuel switch or physical change occurred. (40 CFR 63.7545(h)(3))
5. The permittee must submit boiler and process heater tune-up compliance reports to the appropriate AQD District Office. The reports must be postmarked or submitted by March 15th and must cover the period of January 1 through December 31 of the reporting year. For new units, the first report should cover the period of startup to December 31 of the reporting year. Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). (40 CFR 63.7550(b))
6. The permittee must submit a compliance report containing the following information:
 - a. Company and Facility name and address; (40 CFR 63.7550(c)(5)(i))
 - b. Process unit information, emissions limitations, and operating parameter limitations; (40 CFR 63.7550(c)(5)(ii))
 - c. Date of report and beginning and ending dates of the reporting period; (40 CFR 63.7550(c)(5)(iii))
 - d. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown; (40 CFR 63.7550(c)(5)(xiv))
 - e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. (40 CFR 63.7550(c)(5)(xvii))
7. The permittee must submit all reports required by Table 9 of this subpart electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, submit the report to the EPA Region V at the appropriate address listed in 40 CFR 63.13 and to the appropriate AQD District Office. (40 CFR 63.7550(h)(3))

See Appendix 8-2

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters as specified in 40 CFR Part 63, Subparts A and DDDDD. (40 CFR Part 63, Subparts A and DDDDD)
2. The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart Dc. (40 CFR Part 60, Subpart Dc)

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FG-TANKFARMBLRS-2
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Requirements for existing boilers and process heaters with a heat input capacity of <10 MMBTU/hr for major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). These boilers or process heaters are designed to burn solid, liquid, or gaseous fuels. Two (2) existing natural gas-fired boilers, used as needed to heat the fuel oil transmission lines from the tank farm to the oil-fired defined as EU-KARN3 and EU-KARN4. Each of the tank farm boilers is rated at 5.23 MMBU/hr.

Emission Units: EU-TANKFARMBLR1-~~2~~¹, EU-TANKFARMBLR2-~~2~~¹

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

~~4~~² The permittee must, for boilers or process heaters with a heat input capacity of greater than 5 MMBTU/hr and less than 10 MMBTU/hr, conduct a biennial tune-up of the boiler or process heater according to 40 CFR 63.7540(a)(11) no more than 25 months after the previous tune-up. **(40 CFR 63.7500(e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(11), 40 CFR Part 63, Subpart DDDDD, Table 3.2)**

~~2~~³ The permittee must conduct a tune-up of each boiler or process heater as specified in the following:
(40 CFR 63.7540(a)(11) or (12))

- a. As applicable, inspect the burner and clean or replace any components of the burner as necessary. The permittee may perform the burner inspection any time prior to the tune-up or may delay the burner inspection until the next scheduled unit shutdown. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**
- b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.7540(a)(10)(ii))**
- c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The permittee may delay the inspection until the next scheduled unit shutdown. **(40 CFR 63.7540(a)(10)(iii))**

- d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
- e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.7540(a)(10)(v))**

~~7.3.~~ If the unit is not operated on the required date for the tune-up, the tune-up must be conducted within 30 calendar days of startup. **(40 CFR 63.7540(a)(13))**

~~8.4.~~ At all times, the permittee must operate and maintain each existing small boiler or process heater, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**

Commented [MG6]: Numbering issue.

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 3 + Alignment: Left + Aligned at: 0.25" + Indent at: 0.5"

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 3 + Alignment: Left + Aligned at: 0.25" + Indent at: 0.5"

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee must keep a copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or 2 or 5 year compliance report or one-time energy assessment, as applicable, that the permittee submitted. **(40 CFR 63.7555(a)(1))**
2. The permittee must keep the records in a form suitable and readily available for expeditious review. **(40 CFR 63.7560(a))**
3. The permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.7560(b))**
4. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee can keep the records off site for the remaining three years. **(40 CFR 63.7560(c))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

Consumers Energy Company
Section 2 – Karn 3 and Karn 4

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2027
PTI No: MI-PTI-B2840-2022

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee must submit boiler or process heater tune-up compliance reports to the appropriate AQD District Office and must be postmarked or submitted by March 15th of the year following the applicable 2-year period starting from January 1 of the year following the previous tune-up to December 31 (of the latest tune-up year). Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). If the reporting form is not available in CEDRI at the time the compliance report is due, a hardcopy of the compliance report shall be submitted to EPA Region 5. **(40 CFR 63.7550(b), 40 CFR 63.7550(h)(3))**
5. The permittee must include the following information in the compliance report: **(40 CFR 63.7550(c)(1))**
 - a. Company and Facility name and address; **(40 CFR 63.7550(c)(5)(i))**
 - b. Process unit information, emissions limitations, and operating parameter limitations; **(40 CFR 63.7550(c)(5)(ii))**
 - c. Date of report and beginning and ending dates of the reporting period; **(40 CFR 63.7550(c)(5)(iii))**
 - d. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done biennially or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown; **(40 CFR 63.7550(c)(5)(xiv))**
 - e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii))**

See Appendix 8-2

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and DDDDD for Industrial, Commercial, and Institutional Boilers and Process Heaters. **(40 CFR Part 63, Subparts A and DDDDD)**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FG-PARTSCLEANER34-2
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

Emission Unit: EU-PARTSCLEANER34-2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than five percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. **(R 336.1213(2))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. **(R 336.1611(2)(b), R 336.1707(3)(b))**
2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements:
 - a. The air/vapor interface of the cold cleaner is no more than ten square feet; **(R 336.1281(2)(h))**
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(2)(r)(iv))**
2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**
4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**
5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:
 - a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7; **(R 336.1707(2)(a))**

- b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0; **(R 336.1707(2)(b))**
- c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

- 1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**
- 2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**
 - a. A serial number, model number, or other unique identifier for each cold cleaner;
 - b. The date the unit was installed, manufactured or that it commenced operation;
 - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h);
 - d. The applicable Rule 201 exemption;
 - e. The Reid vapor pressure of each solvent used;
 - f. If applicable, the option chosen to comply with Rule 707(2).
- 3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1611(3), R 336.1707(4))**
- 4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8-2

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Consumers Energy Company
Section 2 – Karn 3 and Karn 4

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2027
PTI No: MI-PTI-B2840-2022

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FG-PAINTROOM34-2
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a, and Rule 287(2)(c). Emission units installed/modified before December 20, 2016, may show compliance with Rule 287 in effect at the time of installation/modification.

Emission Units installed after December 20, 2016: NA

Emission Units installed prior to December 20, 2016: EU-PAINTROOM34-2₁

POLLUTION CONTROL EQUIPMENT

Particulate control system

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Underlying Applicable Requirements
1. Coatings	200 Gallons/month (minus water as applied)	Calendar month	Each emission unit	R 336.1287(2)(c)(i)

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

- Any exhaust system installed on or after December 20, 2016, that serves only coating spray equipment shall be equipped with a dry filter control or water wash control which is installed, maintained, and operated in accordance with the manufacturer's specifications, or the permittee develops a plan which provides to the extent practicable for the maintenance and operation of the equipment in a manner consistent with good air pollution control practices for minimizing emissions. All emission units installed before December 20, 2016, with an exhaust system that serves only coating spray equipment must have a properly installed and operated particulate control system. (R 336.1213(2), R 336.1287(2)(c)(ii), R 336.1910)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the EGLE, AQD Rule 287(2)(c), Permit to Install Exemption Record form (EQP 3562) or in a format acceptable to the AQD District Supervisor. (R 336.1213(3))

Consumers Energy Company
Section 2 – Karn 3 and Karn 4

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2027
PTI No: MI-PTI-B2840-2022

- a. Volume of coating used, as applied, minus water, in gallons; **(R 336.1287(2)(c)(iii))**
- b. Documentation of any filter replacements or maintenance of water wash control for exhaust systems serving coating spray equipment or other documentation included in a plan developed by the owner or operator of the equipment. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that the requirements identified in the table below are not applicable to this stationary source. This determination is incorporated into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

Emission Unit/Flexible Group ID	Non-Applicable Requirement	Justification
EU-KARN34GEN-2	40 CFR Part 63, Subpart ZZZZ – NESHAPs for Stationary Reciprocating Internal Combustion Engines (RICE)	This emission unit is not subject to the provisions of 40 CFR Part 63, Subpart ZZZZ pursuant to (63.6590(b)(3)(iii)), which states "...an existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate, or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii),...does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary."

APPENDICES

Appendix 1-2. Abbreviations and Acronyms

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

AQD	Air Quality Division	MM	Million
acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	MW	Megawatts
BTU	British Thermal Unit	NA	Not Applicable
°C	Degrees Celsius	NAAQS	National Ambient Air Quality Standards
CAA	Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAM	Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environment, Great Lakes, and Energy	PM-10	Particulate Matter less than 10 microns in diameter
dscf	Dry standard cubic foot	Pph	Pound per hour
dscm	Dry standard cubic meter	Ppm	Parts per million
EGLE	Michigan Department of Environment, Great Lakes, and Energy	Ppmv	Parts per million by volume
EPA	United States Environmental Protection Agency	Ppmw	Parts per million by weight
EU	Emission Unit	PS	Performance Specification
°F	Degrees Fahrenheit	PSD	Prevention of Significant Deterioration
FG	Flexible Group	Psia	Pounds per square inch absolute
GACS	Gallon of Applied Coating Solids	Psig	Pounds per square inch gauge
GC	General Condition	PeTE	Permanent Total Enclosure
gr	Grains	PTI	Permit to Install
HAP	Hazardous Air Pollutant	RACT	Reasonable Available Control Technology
Hg	Mercury	ROP	Renewable Operating Permit
hr	Hour	SC	Special Condition
HP	Horsepower	Scf	Standard cubic feet
H ₂ S	Hydrogen Sulfide	Sec	Seconds
HVLP	High Volume Low Pressure *	SCR	Selective Catalytic Reduction
ID	Identification (Number)	SO ₂	Sulfur Dioxide
IRSL	Initial Risk Screening Level	SRN	State Registration Number
ITSL	Initial Threshold Screening Level	TAC	Toxic Air Contaminant
LAER	Lowest Achievable Emission Rate	Temp	Temperature
lb	Pound	THC	Total Hydrocarbons
m	Meter	Tpy	Tons per year
MACT	Maximum Achievable Control Technology	µg	Microgram
MAERS	Michigan Air Emissions Reporting System	VE	Visible Emissions
MAP	Malfunction Abatement Plan	VOC	Volatile Organic Compounds
mg	Milligram	Yr	Year
mm	Millimeter		

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 pounds per square inch gauge (psig).

Appendix 2-2. Schedule of Compliance

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 3-2. Monitoring Requirements

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in TABLES FGKARN34-12 and EU-FOTANKAFG-SUBKTANKS.

Section 3.1-2

The CEMS performance specifications defined in 40 CFR Part 75, Appendix A, are adopted.

Methods of measurement, frequency of measurement and recordkeeping methods for CEMS required under 40 CFR Part 75 are outlined in the most recent version of the Acid Rain Program – Dan E. Karn Plant Monitoring Plan, originally dated August 17, 1994.

Data Reporting: The District Supervisor of the Air Quality Division may approve alternative data reporting or reduction procedures if it can be demonstrated that such procedures are at least as accurate as the procedures identified in R 336.2175.

Section 3.2-2

The Continuous Emissions Monitoring Systems (CEMS) performance specifications defined in 40 CFR Part 75, Appendix A, are adopted. The certified SO₂ and CO₂ monitors will be used to determine sulfur dioxide emissions. The data reduction procedures defined in R 336.2175 will be used to determine SO₂ lbs/mmBTU. Compliance with the SO₂ emission limitation specified in R 336.1401 shall be based upon a monthly calendar average of continuous emission monitoring data.

Section 3.3-2

All monitoring requirements shall be followed in accordance with the applicable provisions of 40 CFR Part 60, Subpart K, Section 60.113(b) and (c).

Section 3.4-2

RUO testing criteria and frequency are specified in the Permittee's *Fully Reclaimed On-Spec Fuel Quality Control Program*.

Appendix 4-2. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 5-2. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 6-2. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B2840-2014. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B2840-2014c is being reissued as Source-Wide PTI No. MI-PTI-B2840-2022.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	NA	NA	NA

The following ROP amendments or modifications were issued after the effective date of ROP No. MI-ROP-B2840-2014.

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	201600024/ June 16, 2016	Reopening to update from CAIR to CSAPR.	EU-KARN3-2 EU-KARN4-2

Appendix 7-2. Emission Calculations

Specific emission calculations to be used with monitoring, testing or recordkeeping data are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible group Special Conditions. Therefore, this appendix is not applicable.

Appendix 8-2. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the EGLE, AQD, Report Certification form (EQP 5736) and EGLE, AQD, Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.

Appendix 9-2. Phase II Acid Rain Permit

**PHASE II ACID RAIN PERMIT
Permit No. MI-AR-1702-2022**

Permittee	Consumers Energy – Dan E Karn Plant
Address	2742 N. Weadock Highway, Essexville, MI
SRN	B2840
Plant Code	1702
Issue Date	July 27, 2022
Effective	Issuance date of this facility's Renewable Operating Permit at the facility in accordance with 40 CFR 72.73.
Expiration	This permit shall expire when the facility's Renewable Operating Permit expires, in accordance with 40 CFR 72.73.
ROP No.	MI-ROP-B2840-2022

The Acid Rain Permit Contents

1. A statement of basis prepared by the Air Quality Division (AQD) containing:

References to statutory and regulatory authorities, and with comments, notes, and justification that apply to the source in general;
2. Terms and conditions including:

A table of sulfur dioxide allowances to be allocated during the term of the permit, if applicable, authorized by this permit during Phase II. Unless they are subject to Sections 405(g)(2) or (3) of the federal Clean Air Act, new units are not allocated allowances in 40 CFR Part 73 and must obtain allowances by other means (Section 403(e) of the federal Clean Air Act);

Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements; and,

Any applicable nitrogen oxides compliance plan. Unless they are coal fired utility units regulated pursuant to Sections 404, 405, or 409 of the federal Clean Air Act, new units are not subject to the acid rain nitrogen oxides requirements (40 CFR 76.1(a)).
3. The permit application that this source submitted, as corrected by the AQD. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

Consumers Energy Company
Section 2 – Karn 3 and Karn 4

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2027
PTI No: MI-PTI-B2840-2022

Statement of Basis

Statutory and Regulatory Authorities.

In accordance with the Natural Resources and Environmental Protection Act, 1994 PA 451 and Titles IV and V of the federal Clean Air Act, the Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division (AQD), issues this permit pursuant to the provisions of R 336.1210 to R 336.1218, and R 336.1902(1)(q).

For further information contact:

Mr. Brian Carley
Environmental Quality Specialist
Michigan Department of Environment, Great Lakes, and Energy
Air Quality Division, Jackson District Office
State Office Building, 4th Floor
301 East Louis B. Glick Highway
Jackson, Michigan 49201-1556
Telephone: 517-416-4631
Facsimile: 517-780-7855

There are no comments, notes and/or justification that apply to the source in general for this section.

Terms and Conditions:

Phase II Sulfur Dioxide Allowance Allocation and Nitrogen Oxides Requirements for each affected unit.

		2022	2023	2024	2025	2026
	SO ₂ allowances	7825	7825	7825	7825	7825
Unit 1	NOx Limit	<p>Pursuant to 40 CFR part 76, the State of Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division approves a NOx standard emissions limitation compliance plan for Unit 1. The NOx compliance plan is effective beginning 2017. Under the NOx compliance plan, this unit's annual average NOx emissions rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.7(a)(2), of 0.40 lb/MMBTU for Phase II tangentially fired boilers.</p> <p>In addition to the described NOx compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions.</p>				

		2022	2023	2024	2025	2026
	SO ₂ allowances	8582	8582	8582	8582	8582
Unit 2	NOx Limit	<p>Pursuant to 40 CFR part 76, the State of Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division approves a NOx standard emissions limitation compliance plan for Unit 2. The NOx compliance plan is effective beginning 2017. Under the NOx compliance plan, this unit's annual average NOx emissions rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.7(a)(2), of 0.46 lb/MMBTU for Phase II dry bottom wall-fired boilers.</p> <p>In addition to the described NOx compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions.</p>				

Consumers Energy Company
Section 2 – Karn 3 and Karn 4

ROP No: MI-ROP-B2840-2022
Expiration Date: July 27, 2027
PTI No: MI-PTI-B2840-2022

Terms and Conditions (cont.):

		2022	2023	2024	2025	2026
Unit 3	SO ₂ allowances	1,023	1,023	1,023	1,023	1,023

		2022	2023	2024	2025	2026
Unit 4	SO ₂ allowances	949	949	949	949	949

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process: None.

Permit Application: (attached)

Acid Rain Permit Application submitted April 16, 2019
NOx Compliance Plan submitted June 29, 2017



United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2018

Acid Rain Permit Application

For more information, see Instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ new ☐ revised ☒ for ARP permit renewal

STEP 1

Identify the facility name,
State, and plant (ORIS) code.

Dan E. Karn Facility (Source) Name	MI State	1702 Plant Code
---------------------------------------	-------------	--------------------

STEP 2

Enter the unit ID# for every
affected unit at the affected
source in column "a."

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
1	Yes
2	Yes
3	Yes
4	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

Dan E. Karn
Facility (Source) Name (from STEP 1)

Acid Rain - Page 2

STEP 3

Permit Requirements

Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Dan E. Karn
Facility (Source) Name (from STEP 1)

Acid Rain - Page 3

STEP 3, Cont'd.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Dan E. Karn
Facility (Source) Name (from STEP 1)

Acid Rain - Page 4

STEP 3, Cont'd.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4
Read the
certification
statement, sign,
and date.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

John P. Broschak, Designated Representative
Name

Signature *John P. Broschak*

04-01-2019
Date



United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2018

Acid Rain NO_x Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

Page 1

This submission is: ☐ New ☒ Revised

Page 1 of 1

STEP 1

Indicate plant name, State, and Plant code from the current Certificate of Representation covering the facility.

Plant Name Dan E. Karn	State MI	Plant Code 1702
-------------------------------	-----------------	------------------------

STEP 2

Identify each affected Group 1 and Group 2 boiler using the unit IDs from the current Certificate of Representation covering the facility. Also indicate the boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom, and select the compliance option for each unit by making an 'X' in the appropriate row and column.

	ID# 1	ID# 2	ID#	ID#	ID#	ID#
	Type T	Type DBW	Type	Type	Type	Type
(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)						
(b) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase I tangentially fired boilers)						
(c) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)		X				
(d) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)	X					
(e) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)						
(f) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)						
(g) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)						
(h) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)						
(i) NO _x Averaging Plan (include NO _x Averaging form)						
(j) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)						
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO _x Averaging (check the NO _x Averaging Plan box and include NO _x Averaging Form)						
(l) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17(a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)						

Dan E. Karn Plant Name (from Step 1)

NO_x Compliance - Page 2
Page 1 of 1

STEP 3
Identify the first calendar year in which this plan will apply.

January 1, 2017

STEP 4
Read the special provisions and certification, enter the name of the designated representative, sign and date.

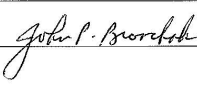
Special Provisions

General

This source is subject to the standard requirements in 40 CFR 72.9. These requirements are listed in this source's Acid Rain Permit.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name John P. Broschak	
Signature 	Date 6/29/17

Appendix 10-2. Cross State Air Pollution Rule (CSAPR) Trading Program Title V Requirements

Description of CSAPR Monitoring Provisions

The CSAPR subject units, and the unit-specific monitoring provisions, at this source are identified in the following tables. These units are subject to the requirements for the CSAPR NO_x Annual Trading Program, CSAPR NO_x Ozone Season Group 3 Trading Program, and CSAPR SO₂ Group 1 Trading Program, which are included below as Sections I, II, and III, respectively.

Each unit will use one of the following as the monitoring methodology for each parameter as provided below and shall comply with the general monitoring, recordkeeping, reporting and other requirements in conditions 1 through 5 below and in paragraph (b) of Sections I, II, and III:

- Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart B (for SO₂ monitoring) or 40 CFR Part 75, Subpart H (for NO_x monitoring)
- Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
- Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR Part 75, Appendix E
- Low Mass Emissions (LME) excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19
- EPA-approved alternative monitoring system requirements pursuant to 40 CFR Part 75, Subpart E

Unit ID: 1 (EU-KARN1)	
Parameter	Monitoring Methodology
SO ₂	CEMS requirements pursuant to 40 CFR Part 75, Subpart B
NO _x	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	CEMS requirements pursuant to 40 CFR Part 75, Subpart B (for SO ₂ monitoring) or 40 CFR Part 75, Subpart H (for NO _x monitoring)

Unit ID: 2 (EU-KARN2)	
Parameter	Monitoring Methodology
SO ₂	CEMS requirements pursuant to 40 CFR Part 75, Subpart B
NO _x	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	CEMS requirements pursuant to 40 CFR Part 75, Subpart B (for SO ₂ monitoring) or 40 CFR Part 75, Subpart H (for NO _x monitoring)

Unit ID: 3 (EU-KARN3)	
Parameter	Monitoring Methodology
SO ₂	CEMS requirements pursuant to 40 CFR Part 75, Subpart B
NO _x	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	CEMS requirements pursuant to 40 CFR Part 75, Subpart B (for SO ₂ monitoring) or 40 CFR Part 75, Subpart H (for NO _x monitoring)

Unit ID: 4 (EU-KARN4)	
Parameter	Monitoring Methodology
SO ₂	CEMS requirements pursuant to 40 CFR Part 75, Subpart B
NO _x	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	CEMS requirements pursuant to 40 CFR Part 75, Subpart B (for SO ₂ monitoring) or 40 CFR Part 75, Subpart H (for NO _x monitoring)

6-1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (CSAPR NO_x Annual Trading Program), 97.1030 through 97.1035 (CSAPR NO_x Ozone Season Group 3 Trading Program), and 97.630 through 97.635 (CSAPR SO₂ Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading programs.

Commented [MEGI7]: I did not make the following special condition numbering changes in CSAPR table intentionally. I may have accidentally caused these special conditions to be renumbered. I am not allowed to reject this change because of EGLE protections on the Karn ROP.

~~7.2.~~ Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <https://www.epa.gov/airmarkets/monitoring-plans-part-75-sources>.

~~8.3.~~ Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR 75.66 and 97.435 (CSAPR NO_x Annual Trading Program), 97.1035 (CSAPR NO_x Ozone Season Group 3 Trading Program), and/or 97.635 (CSAPR SO₂ Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.

~~9.4.~~ Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (CSAPR NO_x Annual Trading Program), 97.1030 through 97.1034 (CSAPR NO_x Ozone Season Group 3 Trading Program), and/or 97.630 through 97.634 (CSAPR SO₂ Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (CSAPR NO_x Annual Trading Program), 97.1035 (CSAPR NO_x Ozone Season Group 3 Trading Program), and/or 97.635 (CSAPR SO₂ Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.

~~10.5.~~ The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (CSAPR NO_x Annual Trading Program), 97.1030 through 97.1034 (CSAPR NO_x Ozone Season Group 3 Trading Program), and 97.630 through 97.634 (CSAPR SO₂ Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add or change this unit's monitoring system description.

SECTION I: CSAPR NO_x Annual Trading Program requirements (40 CFR 97.406)

(f)(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

(f)(b) Emissions monitoring, reporting, and recordkeeping requirements.

~~(3)~~(1) The owners and operators, and the designated representative, of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

~~(4)~~(2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of CSAPR NO_x Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the CSAPR NO_x Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(f)(c) NO_x emissions requirements.

~~(8)~~(1) CSAPR NO_x Annual emissions limitation.

- (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall hold, in the source's compliance account, CSAPR NO_x Annual allowances available for deduction for such control

period under 40 CFR 97.424(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Annual units at the source.

- (ii). If total NO_x emissions during a control period in a given year from the CSAPR NO_x Annual units at a CSAPR NO_x Annual source are in excess of the CSAPR NO_x Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall hold the CSAPR NO_x Annual allowances required for deduction under 40 CFR 97.424(d); and
 - (B). The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.

~~(9)~~(2) CSAPR NO_x Annual assurance provisions.

- (i). If total NO_x emissions during a control period in a given year from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state and Indian country within the borders of such State exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state and Indian country within the borders of such state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the CSAPR NO_x Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the State and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).
- (iv). It shall not be a violation of 40 CFR Part 97, Subpart AAAAA or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the State and Indian country within the borders of such State during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state and Indian country within the borders of such state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold CSAPR NO_x Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each CSAPR NO_x Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.

~~(10)~~(3) Compliance periods.

- (i). A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- (ii). A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.

~~(14)~~(4) Vintage of allowances held for compliance.

- (i). A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated for such control period or a control period in a prior year.
- (ii). A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

~~(12)~~(5) Allowance Management System requirements. Each CSAPR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart AAAAA.

~~(13)~~(6) Limited authorization. A CSAPR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:

- (i). Such authorization shall only be used in accordance with the CSAPR NO_x Annual Trading Program; and
- (ii). Notwithstanding any other provision of 40 CFR Part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

~~(14)~~(7) Property right. A CSAPR NO_x Annual allowance does not constitute a property right.

~~(f)~~(d) **Title V permit revision requirements.**

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with 40 CFR Part 97, Subpart AAAAA.
- (2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

~~(m)~~(e) **Additional recordkeeping and reporting requirements.**

~~(3)~~(1) Unless otherwise provided, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

- (i). The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each CSAPR NO_x Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
- (ii). All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart AAAAA.
- (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Annual Trading Program.

~~(4)~~(2) The designated representative of a CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall make all submissions required under the CSAPR NO_x Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise

affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.

~~(f)~~**(f) Liability.**

- (1) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual source or the designated representative of a CSAPR NO_x Annual source shall also apply to the owners and operators of such source and of the CSAPR NO_x Annual units at the source.
- (2) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual unit or the designated representative of a CSAPR NO_x Annual unit shall also apply to the owners and operators of such unit.

~~(g)~~**(g) Effect on other authorities.**

No provision of the CSAPR NO_x Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Annual source or CSAPR NO_x Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

~~(h)~~**(h) Effect on units in Indian country.**

Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.

SECTION II: CSAPR NO_x Ozone Season Group 3 Trading Program Requirements (40 CFR 97.1006)

~~(a)~~**(a) Designated representative requirements.**

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.1013 through 97.1018.

~~(b)~~**(b) Emissions monitoring, reporting, and recordkeeping requirements.**

~~(3)~~**(1)** The owners and operators, and the designated representative, of each CSAPR NO_x Ozone Season Group 3 source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.1030 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.1031 (initial monitoring system certification and recertification procedures), 97.1032 (monitoring system out-of-control periods), 97.1033 (notifications concerning monitoring), 97.1034 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.1035 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

~~(4)~~**(2)** The emissions data determined in accordance with 40 CFR 97.1030 through 97.1035 shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 3 allowances under 40 CFR 97.1011(a)(2) and (b) and 97.1012 and to determine compliance with the CSAPR NO_x Ozone Season Group 3 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.1030 through 97.1035 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

~~(c)~~**(c) NO_x emissions requirements.**

~~(8)~~**(1)** CSAPR NO_x Ozone Season Group 3 emissions limitation.

- (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Ozone Season Group 3 source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall hold, in the source's compliance account, CSAPR NO_x Ozone Season Group 3 allowances available for deduction for such control period under 40 CFR 97.1024(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Ozone Season Group 3 units at the source.

- (ii). If total NO_x emissions during a control period in a given year from the CSAPR NO_x Ozone Season Group 3 units at a CSAPR NO_x Ozone Season Group 3 source are in excess of the CSAPR NO_x Ozone Season Group 3 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall hold the CSAPR NO_x Ozone Season Group 3 allowances required for deduction under 40 CFR 97.1024(d); and
 - (B). The owners and operators of the source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart GGGGG and the Clean Air Act.

~~(9)~~(2) CSAPR NO_x Ozone Season Group 3 assurance provisions.

- (i). If total NO_x emissions during a control period in a given year from all CSAPR NO_x Ozone Season Group 3 units at CSAPR NO_x Ozone Season Group 3 sources in the state and Indian country within the borders of such state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Ozone Season Group 3 allowances available for deduction for such control period under 40 CFR 97.1025(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.1025(b), of multiplying—
 - (A). The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and
 - (B). The amount by which total NO_x emissions from all CSAPR NO_x Ozone Season Group 3 units at CSAPR NO_x Ozone Season Group 3 sources in the state and Indian country within the borders of such state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the CSAPR NO_x Ozone Season Group 3 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total NO_x emissions from all CSAPR NO_x Ozone Season Group 3 units at CSAPR NO_x Ozone Season Group 3 sources in the state and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the State NO_x Ozone Season Group 3 trading budget under 40 CFR 97.1010(a) and the state's variability limit under 40 CFR 97.1010(b).
- (iv). It shall not be a violation of 40 CFR Part 97, Subpart GGGGG or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Ozone Season Group 3 units at CSAPR NO_x Ozone Season Group 3 sources in the state and Indian country within the borders of such state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Ozone Season Group 3 units at CSAPR NO_x Ozone Season Group 3 sources in the state and Indian country within the borders of such state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold CSAPR NO_x Ozone Season Group 3 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each CSAPR NO_x Ozone Season Group 3 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart GGGGG and the Clean Air Act.

~~(10)~~(3) Compliance periods.

- (i). A CSAPR NO_x Ozone Season Group 3 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.1030(b) and for each control period thereafter.
- (ii). A CSAPR NO_x Ozone Season Group 3 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.1030(b) and for each control period thereafter.

~~(11)~~(4) Vintage of allowances held for compliance.

- (i). A CSAPR NO_x Ozone Season Group 3 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 3 allowance that was allocated for such control period or a control period in a prior year.
- (ii). A CSAPR NO_x Ozone Season Group 3 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 3 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

~~(12)~~(5) Allowance Management System requirements. Each CSAPR NO_x Ozone Season Group 3 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart GGGGG.

~~(13)~~(6) Limited authorization. A CSAPR NO_x Ozone Season Group 3 allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:

- (i). Such authorization shall only be used in accordance with the CSAPR NO_x Ozone Season Group 3 Trading Program; and
- (ii). Notwithstanding any other provision of 40 CFR Part 97, Subpart GGGGG, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

~~(14)~~(7) Property right. A CSAPR NO_x Ozone Season Group 3 allowance does not constitute a property right.

~~(4)~~(d) Title V permit revision requirements.

~~(3)~~(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Ozone Season Group 3 allowances in accordance with 40 CFR Part 97, Subpart GGGGG.

~~(4)~~(2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.1030 through 97.1035, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.1006(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

~~(4)~~(e) Additional recordkeeping and reporting requirements.

~~(3)~~(1) Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 3 source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

- (i). The certificate of representation under 40 CFR 97.1016 for the designated representative for the source and each CSAPR NO_x Ozone Season Group 3 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.1016 changing the designated representative.
- (ii). All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart GGGGG.

- (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Ozone Season Group 3 Trading Program.

~~(4)~~(2) The designated representative of a CSAPR NO_x Ozone Season Group 3 source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall make all submissions required under the CSAPR NO_x Ozone Season Group 3 Trading Program, except as provided in 40 CFR 97.1018. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.

~~(n)~~~~(f)~~ **Liability.**

~~(3)~~(1) Any provision of the CSAPR NO_x Ozone Season Group 3 Trading Program that applies to a CSAPR NO_x Ozone Season Group 3 source or the designated representative of a CSAPR NO_x Ozone Season Group 3 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 3 units at the source.

~~(4)~~(2) Any provision of the CSAPR NO_x Ozone Season Group 3 Trading Program that applies to a CSAPR NO_x Ozone Season Group 3 unit or the designated representative of a CSAPR NO_x Ozone Season Group 3 unit shall also apply to the owners and operators of such unit.

~~(e)~~~~(g)~~ **Effect on other authorities.**

No provision of the CSAPR NO_x Ozone Season Group 3 Trading Program or exemption under 40 CFR 97.1005 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Ozone Season Group 3 source or CSAPR NO_x Ozone Season Group 3 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

~~(p)~~~~(h)~~ **Effect on units in Indian country.**

Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.

SECTION III: CSAPR SO₂ Group 1 Trading Program requirements (40 CFR 97.606)

~~(h)~~~~(a)~~ **Designated representative requirements.**

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

~~(h)~~~~(b)~~ **Emissions monitoring, reporting, and recordkeeping requirements.**

~~(3)~~(1) The owners and operators, and the designated representative, of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

~~(4)~~(2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of CSAPR SO₂ Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the CSAPR SO₂ Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

~~(h)~~~~(c)~~ **SO₂ emissions requirements.**

~~(8)~~(1) CSAPR SO₂ Group 1 emissions limitation.

- (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall hold, in the source's compliance account, CSAPR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO₂ emissions for such control period from all CSAPR SO₂ Group 1 units at the source.
- (ii). If total SO₂ emissions during a control period in a given year from the CSAPR SO₂ Group 1 units at a CSAPR SO₂ Group 1 source are in excess of the CSAPR SO₂ Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source shall hold the CSAPR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and
 - (B). The owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.

~~(9)~~(2) CSAPR SO₂ Group 1 assurance provisions.

- (i). If total SO₂ emissions during a control period in a given year from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO₂ emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—
 - (A). The quotient of the amount by which the common designated representative's share of such SO₂ emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such state for such control period, by which each common designated representative's share of such SO₂ emissions exceeds the respective common designated representative's assurance level; and
 - (B). The amount by which total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the CSAPR SO₂ Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total SO₂ emissions exceed the sum, for such control period, of the state SO₂ Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
- (iv). It shall not be a violation of 40 CFR Part 97, Subpart CCCCC or of the Clean Air Act if total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period exceed the state assurance level or if a common designated representative's share of total SO₂ emissions from the CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold CSAPR SO₂ Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each CSAPR SO₂ Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control

period shall constitute a separate violation of 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.

~~(10)~~(3) Compliance periods.

- (i). A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
- (ii). A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.

~~(11)~~(4) Vintage of allowances held for compliance.

- (i). A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year.
- (ii). A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR SO₂ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

~~(12)~~(5) Allowance Management System requirements. Each CSAPR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart CCCCC.

~~(13)~~(6) Limited authorization. A CSAPR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:

- (i). Such authorization shall only be used in accordance with the CSAPR SO₂ Group 1 Trading Program; and
- (ii). Notwithstanding any other provision of 40 CFR Part 97, Subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

~~(14)~~(7) Property right. A CSAPR SO₂ Group 1 allowance does not constitute a property right.

~~(k)~~(d) Title V permit revision requirements.

~~(3)~~(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO₂ Group 1 allowances in accordance with 40 CFR Part 97, Subpart CCCCC.

~~(4)~~(2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

~~(4)~~(e) Additional recordkeeping and reporting requirements.

~~(3)~~(1) Unless otherwise provided, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

- (i). The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each CSAPR SO₂ Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.
- (ii). All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart CCCCC.
- (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR SO₂ Group 1 Trading Program.

- ~~(4)~~(2) The designated representative of a CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall make all submissions required under the CSAPR SO₂ Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.

Liability.

- ~~(3)~~(1) Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 source or the designated representative of a CSAPR SO₂ Group 1 source shall also apply to the owners and operators of such source and of the CSAPR SO₂ Group 1 units at the source.
- ~~(4)~~(2) Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 unit or the designated representative of a CSAPR SO₂ Group 1 unit shall also apply to the owners and operators of such unit.

~~(m)~~(f) **Effect on other authorities.**

No provision of the CSAPR SO₂ Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR SO₂ Group 1 source or CSAPR SO₂ Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(h) Effect on units in Indian country.

Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.

Appendix 11-2. Fully Reclaimed On-Spec and Specification Used Oil - Fuel Regulatory Specifications

<u>Constituent/Property</u>	<u>Specification Used Oil Regulatory Limits</u>
Flash Point	> 100 degrees F (Closed Cup)
Total Halogens	< 4,000 ppm ⁽¹⁾
Total Lead	< 100 ppm
Total Cadmium	< 2 ppm
Total Chromium	< 10 ppm
Total Arsenic	< 5 ppm
Sulfur	< 1.0% (WT) @ 18,000 BTU/lb
PCB	< 1 ppm
BTU/lb	>17,000 BTU/lb

⁽¹⁾ If greater than 1,000 ppm, a gas chromatograph analysis for the RCRA listed spent solvent chemicals listed in Exhibit 1 shall be performed to confirm that none of the listed chemicals exceeds 100 ppm. (Analysis shall be for totals and not extracted.)

Exhibit 1

RCRA Spent Halogenated Solvent (F001-F002 Solvent) Chemical List

<u>Regulatory Name</u>	<u>CAS#</u>	<u>Synonyms</u>
Carbon Tetrachloride (F001)	56-23-5	Tetrachloroethane
Chlorobenzene (F002)	108-90-7	-
1,2 Dichlorobenzene (F002)	95-50-1	0-Dichlorobenzene
Dichlorodifluoromethane (F001)	75-71-8	-
Methylene Chloride (F001, F002)	74-87-3	Methane, Chloro-
Tetrachloroethylene (F001, F002)	127-18-4	Perchloroethylene, Tetrachloroethene
1,1,1 Trichloroethane (F001, F002)	71-55-6	Methyl Chloroform
1,1,2 Trichloroethane (F002)	79-00-5	-
1,1,2-Trichloro-1,2,2-Trifluoromethane (F002)	76-13-1	-
Trichloroethylene (F001, F002)	79-01-6	TCE, Trichloroethane
Trichlorofluoromethane (F003)	75-69-4	Trichloromonofluoromethane