

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

EFFECTIVE DATE: August 15, 2024

ISSUED TO

Allnex USA, Inc.

State Registration Number (SRN): B1677

LOCATED AT

2715 Miller Road, Kalamazoo, Kalamazoo County, Michigan 49001

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B1677-2024

Expiration Date: August 15, 2029

Administratively Complete ROP Renewal Application Due Between
February 15, 2028 and February 15, 2029

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-B1677-2024

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

Monica Brothers, Kalamazoo District Supervisor

TABLE OF CONTENTS

AUTHORITY AND ENFORCEABILITY	3
A. GENERAL CONDITIONS.....	4
Permit Enforceability	4
General Provisions.....	4
Equipment & Design	5
Emission Limits.....	5
Testing/Sampling	5
Monitoring/Recordkeeping	6
Certification & Reporting	6
Permit Shield	7
Revisions	8
Reopenings.....	8
Stratospheric Ozone Protection	9
Risk Management Plan.....	9
Emission Trading	9
Permit to Install (PTI)	10
B. SOURCE-WIDE CONDITIONS	11
C. EMISSION UNIT SPECIAL CONDITIONS	12
EMISSION UNIT SUMMARY TABLE	12
EUMACT_EEEE	14
D. FLEXIBLE GROUP SPECIAL CONDITIONS.....	17
FLEXIBLE GROUP SUMMARY TABLE	17
FGBOILERS	18
FGCYREZ.....	20
FGMRPT	23
FGMACT DDDDD.....	31
FGMACT OOO	36
FGMACT ZZZZ.....	41
FGCOLDCLEANERS.....	45
FGRULE290	48
E. NON-APPLICABLE REQUIREMENTS	51
APPENDICES	52
Appendix 1. Acronyms and Abbreviations.....	52
Appendix 2. Schedule of Compliance.....	53
Appendix 3. Monitoring Requirements	53
Appendix 4. Recordkeeping	53
Appendix 5. Testing Procedures	53
Appendix 6. Permits to Install.....	53
Appendix 7. Emission Calculations	54
Appendix 8. Reporting	54

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 are identified for each ROP term or condition. All terms and conditions that are included in a PTI are streamlined, subsumed and/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.

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))**
 - a. The date, location, time, and method of sampling or measurements.
 - b. The dates the analyses of the samples were performed.
 - c. The company or entity that performed the analyses of the samples.
 - d. The analytical techniques or methods used.
 - e. The results of the analyses.
 - f. 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 state 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 annual compliance certification (pursuant to Rule 213(4)(c)) shall be submitted to the USEPA through the USEPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through CDX (<https://cdx.epa.gov/>), unless it contains confidential business information then use the following address: 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))**
 - a. 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).
 - b. 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.
 - c. 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))**
 - a. 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.
 - b. 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))**
 - a. The applicable requirements are included and are specifically identified in the ROP.
 - b. 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:
 - a. 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))**
 - b. 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))**
 - c. 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))**

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
EUBOILER#1	Boiler No. 1 (29 MMBTU/hr heat input)	01-15-1971	FGBOILERS FGMACT DDDDD
EUBOILER#3	Boiler No. 3 (72 MMBTU/hr heat input)	02-01-1986	FGBOILERS FGMACT DDDDD
EUMFORMCELTK	41,400-gallon methyl formcel storage tank.	08-01-1975	FGMRPT FGMACT_OOO
EUMRECFORMTK	41,400-gallon recycled formaldehyde storage tank.	08-01-1975	FGMRPT FGMACT OOO
EUNITRICTK	17,400-gallon 67% nitric acid storage tank.	08-01-1975	FGMRPT
EUMELSTOR	Melamine storage and handling, including the melamine unloading blower, the north and south melamine silos, the melamine transfer blower, and the melamine air filters.	08-01-1975	FGMRPT
EUFRMEOHTK	50,000-gallon fresh methanol storage tank.	08-01-1975	FGMRPT FGMACT OOO
EURECMEOHTK	30,000-gallon recycled methanol storage tank.	08-01-1975	FGMRPT FGMACT_OOO
EURXN	Equipment used in the chemical reaction to form the methylated resin product, including reactors, condensers, tanks, distillation systems, and solids separation equipment, and product recovery equipment. Emissions are controlled by a vapor balance system, methanol scrubber, cryogenic condenser, and a water scrubber.	08-01-1975	FGMRPT FGMACT OOO
EUCYMETKA	50,000-gallon Cymel 303 storage tank A	08-01-1975	FGMRPT
EUCYMETKB	50,000-gallon Cymel 303 storage tank B	08-01-1975	FGMRPT
EUCYREZSTTK	5,000 gallon Cyrez intermediate storage tank. Emissions are controlled by a packed bed water scrubber.	11-12-1986	FGCYREZ
EUCYREZHDTK	350 gallon Cyrez head tank. Emissions are controlled by a packed bed water scrubber.	11-12-1986	FGCYREZ

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUCYREZBLND	Ribbon blender for Cyrez product. Emissions controlled by a baghouse that vents to a packed bed water scrubber.	11-12-1986	FGCYREZ
EUCYREZPKG	Surge bins for packaging Cyrez product. Emissions controlled by a baghouse that vents to a packed bed water scrubber.	11-12-1986	FGCYREZ
EUMACT_EEEE	Transfer racks subject to 40 CFR Part 63, Subpart EEEE. Storage tanks are not subject to this subpart, as they are covered under Subpart OOO.	08-01-1975	NA
EUCUMMINS_ENG	335 HP emergency generator	01-01-1977 and 01-01-2002	FGMACT ZZZZ
EUDET_DIESEL_ENG	288 HP emergency generator	01-01-1997	FGMACT ZZZZ
EUCOLDCLEANERS	All cold cleaners at the Facility.	03-24-2014	FGCOLDCLEANERS
EUMODAFLOW_ST_TANK	5,640 Gallon Modaflow Resin Storage Tank. Emissions are controlled by a packed bed water scrubber	11-01-2023	FGRULE290
EUMODAFLOW_HD_TANK	2,000 l Modaflow Resin Head Tank Emissions are controlled by a packed bed water scrubber.	11-01-2023	FGRULE290
EUMODAFLOWBLEND	Modaflow resin powder production Blender	05-01-2019	FGRULE290
EUMODAFLOWPACK	Modaflow resin powder production - Packaging	05-01-2019	FGRULE290
Changes to the equipment described in this Table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.			

EUMACT_EEEE EMISSION UNIT CONDITIONS

DESCRIPTION

Transfer racks subject to 40 CFR Part 63, Subpart EEEE. Storage tanks are not subject to this subpart, as they are covered under Subpart OOO.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall limit the total actual annual facility-level organic liquid loading volume through transfer racks, excluding maintenance activities, where the total 40 CFR Part 63, Subpart EEEE Table 1 organic HAP content of the organic liquid being loaded through one or more of the transfer rack's arms is at least 98 percent by weight and the material is being loaded into a transport vehicle, to 800,000 gallons.² **(40 CFR 63.2346(b), 40 CFR Part 63, Subpart EEEE, Table 2).**
2. The permittee shall limit the total actual annual facility-level organic liquid containing at least 5 percent organic HAP loading volume through transfer racks, excluding maintenance activities, to less than 10,000,000 gallons.² **(40 CFR 63.2346(b), 40 CFR Part 63, Subpart EEEE, Table 2).**

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. For each emission source identified in 40 CFR 63.2338 that does not require control under this subpart, the permittee shall keep all records identified in 40 CFR 63.2343.² **(40 CFR 63.2390(a))**
2. For each transfer rack that meets the conditions identified in 40 CFR 63.2343(c), the permittee shall keep documentation, including the records specified in 40 CFR 63.2390(d), that verifies the transfer rack is not required to be controlled under this subpart. The documentation must be kept up-to-date and must be in a form suitable and readily available for expeditious inspection and review according to 40 CFR 63.10(b)(1), including records stored in electronic form in a separate location.² **(40 CFR 63.2343(c)(3))**

3. The permittee shall keep records of the total actual annual facility-level organic liquid loading volume as defined in 40 CFR 63.2406 through transfer racks to document the applicability, or lack thereof, of the emission limitations in 40 CFR Part 63, Subpart EEEE table 2, items 7 through 10.² **(40 CFR 63.2390(d))**
4. The permittee shall keep all records in a form suitable and readily available for expeditious inspection and review according to 40 CFR 63.10(b)(1), including records stored in electronic form at a separate location.² **(40 CFR 63.2394(a))**
5. As specified in 40 CFR 63.10(b)(1), the permittee shall keep all files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.² **(40 CFR 63.2394(b))**
6. The permittee shall keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee may keep the records off site for the remaining 3 years.² **(40 CFR 63.2394(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. 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. For each transfer rack subject to this subpart that loads organic liquids but is not subject to control based on the criteria specified in 40 CFR Part 63, Subpart EEEE Table 2, items 7 through 10, the permittee shall submit the information in 40 CFR 63.2386(c)(1), (2), (3), and (10)(i) in either the Notification of Compliance Status, according to the schedule specified in 40 CFR Part 63, Subpart EEEE, Table 12, or a first Compliance report, according to the schedule specified in 40 CFR 63.2386(b), whichever occurs first. **(40 CFR 63.2343(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. 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 EEEE, as they apply to transfer racks at the facility. In addition to the provisions specified in EUMACT_EEEE, these provisions include: **(40 CFR Part 63, Subparts A and EEEE)**
 - a. Records as required by 40 CFR 63.2390
 - b. A startup, shutdown, and malfunction plan (SSMP) is required by 40 CFR 63.6(e)(3); however, as specified in 40 CFR Part 63, Subpart EEEE, Table 12, the 2-day reporting requirement in 40 CFR 63.6(e)(3)(iv) does not apply and 40 CFR 63.6(e)(3) does not apply to emissions sources not requiring control, such as EUMACT_EEEE.

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
FGBOILERS	Natural gas fired boilers.	EUBOILER#1 EUBOILER#3
FGCYREZ	Batch process: Cyrez production.	EUCYREZSTTK EUCYREZHDTK EUCYREZBLND EUCYREZPKG
FGMRPT	Batch process: Cymel production methylated resins.	EURECFORMTK EUMFORMCELTK EUNITRICTK EUMELSTOR EUFRMEOHTK EURECMEOHTK EURXN EUCYMELTKA EUCYMELTKB
FGMACT DDDDD	Requirements for existing Gas 1 (natural gas only). Boilers at major sources of HAPs per 40 CFR Part 63, Subpart DDDDD.	EUBOILER#1 EUBOILER#3
FGMACT OOO	Equipment subject to 40 CFR Part 63, Subpart OOO.	EURECFORMTK EUMFORMCELTK EUFRMEOHTK EURECMEOHTK EURXN
FGMACT ZZZZ	Existing emergency generators exempt from Permit to Install requirements pursuant to Rule 285(2)(g) and subject to 40 CFR 63, Subpart ZZZZ.	EUCUMMINS_ENG EUDET_DIESEL_ENG
FGCOLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 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.	EUCOLDCLEANERS
FGRULE290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.	EUMODAFLOW_ST_TANK EUMODAFLOW_HD_TANK EUMODAFLOWBLEND EUMODAFLOWPACK

FGBOILERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Natural gas fired boilers.

Emission Units: EUBOILER#1, EUBOILER#3

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO _x ^A	0.18 pound per MMBTU heat input ²	Hourly	Each boiler in FGBOILERS	SC V.1, V.2	R336.1205(3), 40 CFR 52.21(c) and (d)

^A "Nitrogen oxides" means all oxides of nitrogen, determined as nitrogen dioxide.

II. MATERIAL LIMIT(S)

1. The permittee shall burn only pipeline quality natural gas in FGBOILERS.² **(R 336.1205, R 336.2802, 40 CFR 52.21)**

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))**

1. Upon request from the AQD District Supervisor, the permittee may be required to verify the NO_x emission rate from either boiler in FGBOILERS testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 60 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.² **(R 336.1205, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) and (d))**
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))**

VI. MONITORING/RECORDKEEPING

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

NA

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))**

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVB001	24 ²	50 ²	40 CFR 52.21(c) and (d)
2. SVB003	48 ²	50 ²	40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

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).

FGCYREZ FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Batch process: Cyrez production.

Emission Units: EUCYREZSTTK, EUCYREZHDTK, EUCYREZBLND, EUCYREZPKG

POLLUTION CONTROL EQUIPMENT

Baghouse (631-003) controls emissions from EUCYREZBLND and EUCYREZPKG; water scrubber (631-006) controls emissions from EUCYREZSTTK, EUCYREZHDTK, and the baghouse (631-003).

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate Matter (PM)	0.05 pound per 1,000 pounds of exhaust gases on a dry gas basis ²	Hourly	FGCYREZ	SC V.1, V.2	R 336.1331
2. PM	1 pph ²	Hourly	FGCYREZ	SC V.1, V.2	R 336.1331
3. Organic HAP	98% removal ²	Hourly	FGCYREZ	SC VI.2, VI.3	40 CFR 63.2460, Table 2 of 40 CFR Part 63, Subpart FFFF
4. VOC	18.0 tpy ²	12-month rolling time period as determined at the end of each calendar month	FGCYREZ	SC VI.4	R 336.1702(a)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee shall not operate EUCYREZBLND or EUCYREZPKG unless the baghouse (ID 631-003) is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining the baghouse pressure drop in the range specified by the manufacturer.² (R 336.1301, R 336.1331, R 336.1910)
- The permittee shall equip and maintain baghouse 631-003 with a pressure drop indicator.² (R 336.1301, R 336.1331, R 336.1910)
- The permittee shall not operate any equipment in FGCYREZ unless the water scrubber is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the water scrubber includes maintaining the water flow rate at or above the rate established during performance testing.² (R 336.1702(a), R 336.1910)

4. The permittee shall equip and maintain the water scrubber with a water flow rate indicator.² **(R 336.1702(a), R 336.1910)**

V. TESTING/SAMPLING

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

1. Upon request from the AQD District Supervisor, the permittee may be required to verify the PM emission rates from FG CYREZ testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A or 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 60 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.² **(R 336.1331, 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))**

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, in a satisfactory manner, the baghouse 631-003 pressure drop on a daily basis.² **(R 336.1301, R 336.1331, R 336.1910)**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the water flow rate of the water scrubber (631-006) on a continuous basis. Water flow rate data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. The water flow rate monitoring device shall be calibrated once per calendar year.² **(R 336.1702(a), R 336.1910)**
3. The permittee shall keep, in a satisfactory manner, records of the water scrubber (631-006) monitored water flow rate, records of the daily average flow rate, and records of all periods when these flow rates are lower than the rate established during performance testing. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1702(a), R 336.1910)**
4. The permittee shall calculate the VOC emission rate from FG CYREZ monthly, for the calendar month and for the 12-month rolling time period ending that calendar month, using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1702(a))**

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))**

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCYR631003	22 ²	50 ²	R336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

1. 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 FFFF as they apply to the facility. In addition to the provisions specified in FG CYREZ, these provisions include:² **(40 CFR Part 63, Subparts A and FFFF)**
 - a. A Leak Detection Monitoring and Repair (LDAR) Program is not required because all equipment contains HAP at <5 percent content.
 - b. Heat exchange systems monitoring is not required because all equipment contains HAP at <5 percent content.
 - c. By June 26, 2019, the permittee shall submit a proposed startup, shutdown, and malfunction plan to the AQD District Supervisor.
 - d. Notifications, reports and records as required by 40 CFR 63.2515, 40 CFR 63.2520 and 40 CFR 63.2525.

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).

FGMRPT FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Batch process: Cymel production methylated resins.

Emission Units: EURECFORMTK, EUMFORMCELTK, EUNITRICTK, EUMELSTOR, EUFRMEOHTK, EURECMEOHTK, EURXN, EUCYMELTKA, EUCYMELTKB

POLLUTION CONTROL EQUIPMENT

Vapor balance system, methanol scrubber (ID 631-509), and cryogenic condenser (ID 631-516, SVMR631509), water scrubber (ID 631-501, SVMR631501), Bin vent filter (ID 110-021.3A), Bin vent filter (ID 110-021.3B), Baghouse (ID 120-006A.IN), and Baghouse (ID 120-006B.IN)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	49 tpy ²	12-month rolling time period as determined at the end of each calendar month	FGMRPT equipment exhausted through cryogenic condenser 631-516	SC V.1, V.2, V.3, VI.2, VI.4, VI.5, VI.8, VI.9, VI.10, VI.11	R 336.1702(a)
2. VOC	6.4 tpy ²	12-month rolling time period as determined at the end of each calendar month	FGMRPT equipment exhausted through water scrubber 631- 501	SC V.1, V.4, VI.3, VI.5, VI.7	R 336.1702(a)
3. VOC	24.7 pph ²	Hourly	FGMRPT equipment exhausted through cryogenic condenser 631-516 and using recycled methanol in methanol scrubber 631-509 while the outlet vapor temperature is more than -50°C	SC V.1, V.3	R 336.1702(a)
4. VOC	6.1 pph ²	Hourly	FGMRPT equipment exhausted through cryogenic condenser 631-516 and using recycled methanol in methanol scrubber 631-509 while the outlet vapor temperature is -50°C or less	SC V.1, V.2	R 336.1702(a)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
5. VOC	6.1 pph ²	Hourly	FGMRPT equipment exhausted through cryogenic condenser 631-516 and using fresh methanol in methanol scrubber 631-509	SC V.1, V.2	R 336.1702(a)
6. Particulate Matter	0.076 pound per 1,000 pounds of exhaust gases on a dry gas basis ²	Hourly	FGMRPT	SC V.1, V.6	R 336.1224 R 336.1225 R 336.1331
7. Formaldehyde (HCHO)	1.3 pph ¹	Hourly	FGMRPT operations exhausted through the cryogenic condenser	SC V.1, V.5, VI.2	R 336.1225
8. HCHO	0.09 pph ¹	Hourly	FGMRPT operations exhausted through the water scrubber	SC V.1, V.5, VI.7	R 336.1225
9. Methanol (MeOH)	6.1 pph ¹	Hourly	FGMRPT operations exhausted through the cryogenic condenser	SC V.1, V.5 VI.2, VI.8, VI.9, VI.10, VI.11	R 336.1225
10. MeOH	8.0 pph ¹	Hourly	FGMRPT operations exhausted through the water scrubber	SC V.1, V.5, VI.7, VI.8, VI.9, VI.10, VI.11	R 336.1225
11. Melamine	0.54 pph ¹	Hourly	Melamine storage silos loading	SC V.1, V.6	R 336.1224 R 336.1225
12. Melamine	0.09 pph ¹	Hourly	Charge hoppers loading	SC V.1, V.6	R 336.1224 R 336.1225

II. MATERIAL LIMIT(S)

1. The permittee shall not process more than 76.6 million pounds of methylated resin product per year, based on a 12-month rolling time period.² (**R 336.1205, R 336.1224, R 336.1225, R 336.1702(a)**)

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the process steps that use nitrogen blankets unless the on-demand nitrogen blanketing system is installed, maintained, and operated in a satisfactory manner.² (**R 336.1225, R 336.1702(a), R 336.1910**)
2. The permittee shall not operate the process steps that use vapor balance unless the vapor balance system is installed, maintained, and operated in a satisfactory manner.² (**R 336.1225, R 336.1702(a), R 336.1910**)
3. The permittee shall not perform reflux operations in the first reactor (ID 120-051) unless the vent receiver tank and vacuum pump are installed, maintained, and operated in a satisfactory manner.² (**R 336.1225, R 336.1702(a), R 336.1910**)

4. The permittee shall not operate the process steps exhausted to the methanol scrubber (ID 631-509) unless the cryogenic condenser (ID 631-516) is installed, maintained, and operated in a satisfactory manner. Operation of the cryogenic condenser in a satisfactory manner includes achieving an outlet vapor temperature after the final condensing step as described below:
 - a. When using fresh methanol in the scrubber, -30°C or lower
 - b. When using recycled methanol in the scrubber, -50°C or lower, except for 2,351 hours per year, based on a 12-month rolling time period as determined at the end of each calendar month, during which the outlet vapor temperature may be greater than -50°C but shall not exceed -30°C.

When fresh methanol is used in the methanol scrubber, the condenser outlet vapor temperature may be determined using a calendar day average. When recycled methanol is used in the methanol scrubber, the condenser outlet vapor temperature shall be determined on an hourly basis.² **(R 336.1225, R 336.1702(a), R 336.1910)**

5. The permittee shall equip and maintain a thermocouple to monitor the outlet temperature of the cryogenic condenser. **(40 CFR 64.6(c)(1)(i and ii))**
6. The permittee shall equip and maintain the cryogenic condenser (ID 631-516) with a high outlet vapor temperature alarm.² **(R 336.1225, R 336.1702(a), R 336.1910)**
7. The permittee shall not operate the process steps exhausted to the water scrubber (ID 631-501) unless the scrubber is installed, maintained, and operated in a satisfactory manner.² **(R 336.1225, R 336.1702(a), R 336.1910)**
8. The permittee shall equip and maintain the water scrubber (ID 631-501) with a water flow rate indicator.² **(R 336.1225, R 336.1702(a), R 336.1910)**
9. The permittee shall not transfer melamine to a storage silo or to a charge hopper unless the associated emission control device identified in the table below is installed, maintained, and operated in a satisfactory manner:² **(R 336.1224, R 336.1225, R 336.1331, R 336.1910)**

Process Equipment	Emission Control Device Associated with the Process Equipment
Melamine storage silo (ID 110-021A)	Bin vent filter (ID 110-021.3A)
Melamine storage silo (ID 110-021B)	Bin vent filter (ID 110-021.3B)
Melamine charge hopper (ID 120-006A)	Baghouse (ID 120-006A.IN)
Melamine charge hopper (ID 120-006B)	Baghouse (ID 120-006B.IN)

V. TESTING/SAMPLING

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

1. When testing is required or requested by the AQD District Supervisor, the permittee shall verify VOC, PM, methanol, formaldehyde, and melamine emission rates from FGMRPT by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved USEPA Method listed in:² **(R 336.2001, R 336.2003, R 336.2004)**

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
VOC	40 CFR Part 60, Appendix A or 40 CFR Part 63, Appendix A
HAPs	40 CFR Part 63, Appendix A

2. At least once every five years, the permittee shall verify VOC emission rates from FGMRPT equipment exhausted through cryogenic condenser 631-516 using fresh methanol in the methanol scrubber (ID 631-509) when the outlet vapor temperature is less than -30°C. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 60 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.² **(R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
3. At least once every five years, the permittee shall verify VOC emission rates from FGMRPT equipment exhausted through cryogenic condenser 631-516 using recycled methanol in the methanol scrubber (ID 631-509) when the outlet vapor temperature is more than -50°C but less than or equal to -30°C. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 60 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.² **(R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
4. At least once every five years, the permittee shall verify VOC emission rates from FGMRPT equipment exhausted through water scrubber 631-501. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 60 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.² **(R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
5. At least once every five years, the permittee shall verify the methanol and formaldehyde emission rates from FGMRPT. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 60 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.² **(R 336.1225, R 336.2001, R 336.2003, R 336.2004)**
6. Upon request from the AQD District Supervisor, the permittee may be required to verify the PM and melamine emission rates from FGMRPT. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 60 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.² **(R 336.1224, R 336.1225, R 336.1331, R 336.2001, R 336.2003, R 336.2004)**
7. 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))**

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.² **(R 336.1205, R 336.1225, R 336.1702(a))**

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the outlet vapor temperature from the final condensing step of the cryogenic condenser on a continuous basis. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. The temperature monitoring device shall be calibrated once per calendar year.² **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the water flow rate of the water scrubber (ID 631-501) on a continuous basis. Water flow rate data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. The water flow rate monitoring device shall be calibrated once per calendar year.² **(R 336.1225, R 336.1702(a), R 336.1910)**
4. The permittee shall keep, in a satisfactory manner, a baseline emission calculation for each product made in FGMRPT. Each baseline emission calculation shall show expected VOC emissions per pound of product. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1205, R 336.1225, R 336.1702(a))**
5. The permittee shall calculate and record the total VOC emission rate from the following equipment in FGMRPT on a monthly basis, for each calendar month determining the cumulative emission rate during the first 12 months and the annual emission rate thereafter, in tons per 12-month rolling time period as determined at the end of each calendar month. These emission calculations shall be derived from the records that are required in SC V.1, VI.2, VI.6, and VI.7. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1205, R 336.1225, R 336.1702(a))**
 - a. FGMRPT equipment exhausted through cryogenic condenser 631-516.
 - b. FGMRPT equipment exhausted through water scrubber 631-501.
6. The permittee shall keep records of the amount, in pounds, of methylated resins produced in FGMRPT for each calendar month and 12-month rolling time period, as determined at the end of each calendar month. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a))**
7. The permittee shall keep, in a satisfactory manner, records of the water scrubber (ID 631-501) monitored water flow rate and records of the daily average flow rate. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1225, R 336.1702(a), R 336.1910)**
8. For each calendar day when fresh methanol is used in the methanol scrubber (ID 631-509), the permittee shall keep, in a satisfactory manner, a record of the daily average cryogenic condenser (ID 631-516) outlet vapor temperature. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1225, R 336.1702(a), R 336.1910)**
9. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the following:
 - a. The hours of operation of FGMRPT
 - b. The hours of operation of FGMRPT while the cryogenic condenser (ID 631-516) outlet vapor temperature is more than -50°C but less than or equal to -30°C and recycled methanol is used in the methanol scrubber (ID 531-509).

The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1225, R 336.1702(a), R 336.1910)**

10. During all periods when recycled methanol is used in the methanol scrubber (ID 631-509), the permittee shall keep, in a satisfactory manner, a record of the hourly average cryogenic condenser (ID 631-516) outlet vapor temperature. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1225, R 336.1702(a), R 336.1910)**
11. The permittee shall keep, in a satisfactory manner, records for each day indicating if recycle methanol was used in the methanol scrubber for that day. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1205, R 336.1225, R 336.1702(a))**
12. The permittee shall continuously monitor and record hourly the condenser outlet gas temperature as an indicator of proper operation of the condenser. The indicator range is as specified in SC IV.4. **(40 CFR 64.6(c)(1)(i) and (ii))**
13. The temperature monitor shall continuously monitor the outlet exhaust gas temperature of the condenser. The averaging period is as follows: when fresh methanol is used in the methanol scrubber, the condenser outlet vapor temperature may be determined using a calendar day average and when recycled methanol is used in the methanol scrubber, the condenser outlet vapor temperature shall be determined on an hourly basis. The monitor shall be calibrated annually or according to manufacturer recommendations, whichever is more frequent. **(40 CFR 64.6(c)(1)(iii))**
14. An excursion for the condenser outlet vapor temperature after the final condensing step of the cryogenic condenser (ID 631-516) shall be identified as one of the following:
 - a. When using fresh methanol in the scrubber, higher than -30°C, determined based on a calendar day average.
 - b. When using recycled methanol in the scrubber, higher than -50°C, except for 2,351 hours per year, based on a 12-month rolling time period as determined at the end of each calendar month, during which the outlet vapor temperature higher than -30°C, determined based on an hourly basis. **(40 CFR 64.6(c)(1)(iii))**
15. 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). Excursions trigger an inspection, corrective action and reporting in a semiannual report. Records of specific corrective action shall be kept onsite. **(40 CFR 64.7(d))**
16. 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))**

17. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
18. 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 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. 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))**
6. 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))**

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVMR631509	4 ²	45 ²	R 336.1225, 40 CFR 52.21(c) and (d)
2. SVMR631501	18 ²	45 ²	R 336.1225, 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:

- 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).

FGMACT DDDDD FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Requirements for new and 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.

Emission Units: EUBOILER#1, EUBOILER#3

POLLUTION CONTROL EQUIPMENT

NA

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))**
- 3. At all times, the permittee must operate and maintain each existing gas 1 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))**

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. To demonstrate that a gaseous fuel other than natural gas or refinery gas qualifies as an Other Gas 1 fuel, as defined in 40 CFR 63.7575, the permittee must conduct a fuel specification analysis for mercury according to the procedures stated in SC V.3 through SC V.5 and Table 6 in 40 CFR Part 63, Subpart DDDDD, as applicable, except as listed below. Or, as an alternative where fuel specification analysis is not practical, the permittee must measure mercury concentration in the exhaust gas when firing only the gaseous fuel to be demonstrated as an Other Gas 1 fuel in the boiler or process heater according to the procedures in Table 6 to 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7521(f))**
 - a. The permittee is not required to conduct the fuel specification analysis in SC V.3 through SC V.5 for any of the fuels listed below.
 - i. For natural gas or refinery gas. **(40 CFR 63.7521(f)(1))**
 - ii. For gaseous fuels that are subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65. **(40 CFR 63.7521(f)(2))**
 - iii. On gaseous fuels for units that are complying with the limits for units designed to burn gas 2 (other) fuels. **(40 CFR 63.7521(f)(3))**
 - iv. For gas streams directly derived from natural gas at natural gas production sites or natural gas plants. **(40 CFR 63.7521(f)(4))**
- 2. The permittee must develop a site-specific fuel analysis plan for Other Gas 1 fuels according to the following procedures and requirements as listed below. **(40 CFR 63.7521(g))**
 - a. If the permittee intends to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must submit the fuel analysis plan to the Administrator for review and approval no later than 60 days before the date that the permittee intends to conduct the initial compliance demonstration described in 40 CFR 63.7510. **(40 CFR 63.7521(g)(1))**
 - b. The permittee must include the following information in the fuel analysis plan. **(40 CFR 63.7521(g)(2))**
 - i. The identification of all gaseous fuel types other than those stated in SC V.2 anticipated to be burned in each boiler or process heater. **(40 CFR 63.7521(g)(2)(i))**
 - ii. For each anticipated fuel type, the identification of whether the permittee or a fuel supplier will be conducting the fuel specification analysis. **(40 CFR 63.7521(g)(2)(ii))**

- iii. For each anticipated fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the samples if the procedures are different from the sampling methods contained in Table 6 of 40 CFR Part 63, Subpart DDDDD. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types. If multiple boilers or process heaters are fueled by a common fuel stream, it is permissible to conduct a single gas specification at the common point of gas distribution. **(40 CFR 63.7521(g)(2)(iii))**
 - iv. For each anticipated fuel type, the analytical methods from Table 6 of 40 CFR Part 63, Subpart DDDDD, with the expected minimum detection levels, to be used for the measurement of mercury. **(40 CFR 63.7521(g)(2)(iv))**
 - v. If the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must also include a detailed description of the methods and procedures that the permittee is proposing to use. Methods in Table 6 of 40 CFR Part 63, Subpart DDDDD shall be used until the requested alternative is approved. **(40 CFR 63.7521(g)(2)(v))**
 - vi. If the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD. When using a fuel supplier's fuel analysis, the permittee is not required to submit the information in SC V.3.b.iii. **(40 CFR 63.7521(g)(2)(vi))**
3. The permittee must obtain a single fuel sample for each fuel type for fuel specification of gaseous fuels. **(40 CFR 63.7521(h))**
4. The permittee must determine the concentration in the fuel of mercury, in units of microgram per cubic meter, dry basis, of each sample for each Other Gas 1 fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7521(i))**
5. If the permittee elected to demonstrate that the unit meets the specification for mercury for the unit designed to burn Other Gas 1 fuel, the permittee must follow the sampling frequency as listed below and conduct this sampling according to the procedures in SC V.2 through SC V.5. **(40 CFR 63.7540(c))**
- a. If the initial mercury constituents in the gaseous fuels are measured to be equal to or less than half of the mercury specification as defined in 40 CFR 63.7575, the permittee does not need to conduct further sampling. **(40 CFR 63.7540(c)(1))**
 - b. If the initial mercury constituents are greater than half but equal to or less than 75% of the mercury specification as defined in 40 CFR 63.7575, the permittee will conduct semiannual sampling. If 6 consecutive semiannual fuel analyses demonstrate 50% or less of the mercury specification, the permittee does not need to conduct further sampling. If any semiannual sample exceeds 75% of the mercury specification, the permittee must return to monthly sampling for that fuel, until 12 months of fuel analyses again are less than 75% of the compliance level. **(40 CFR 63.7540(c)(2))**
 - c. If the initial mercury constituents are greater than 75% of the mercury specification as defined in 40 CFR 63.7575, the permittee will conduct monthly sampling. If 12 consecutive monthly fuel analyses demonstrate 75% or less of the mercury specification, the permittee may decrease the fuel analysis frequency to semiannual for that fuel. **(40 CFR 63.7540(c)(3))**

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 annual compliance report that the permittee submitted. **(40 CFR 63.7555(a)(1))**

2. If the permittee uses an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under 40 CFR Part 63, Other Gas 1 fuel, or gaseous fuel subject to another subpart of 40 CFR Part 60, Part 61, or Part 65, the permittee must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies. **(40 CFR 63.7555(h))**
3. 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))**
4. 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))**
5. 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))**
6. 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 2-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 3-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 intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65, or Other Gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information as listed below.
 - a. Company name and address. **(40 CFR 63.7545(f)(1))**
 - b. Identification of the affected unit. **(40 CFR 63.7545(f)(2))**
 - c. Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began. **(40 CFR 63.7545(f)(3))**
 - d. Type of alternative fuel that the permittee intends to use. **(40 CFR 63.7545(f)(4))**
 - e. Dates when the alternative fuel use is expected to begin and end. **(40 CFR 63.7545(f)(5))**

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

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)**

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).

FGMACT OOO FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Equipment subject to 40 CFR Part 63, Subpart OOO.

Emission Units: EURECFORMTK, EUMFORMCELTK, EUFRMEOHTK, EURECMEOHTK, EURXN

POLLUTION CONTROL EQUIPMENT

Cryogenic condenser (ID 631-516), and water scrubber (ID 631-501)

I. EMISSION LIMIT(S)

1. The permittee shall reduce organic HAP emissions from the combined storage vessels and aggregate batch vent streams in FGMACT OOO by 95 weight-percent.² **(40 CFR 63.1404(a)(1), 40 CFR 63.1408(a)(1)(ii))**
2. The permittee shall reduce the organic HAP emissions from the collection of non-reactor batch process vents in FGMACT OOO by 62 weight percent with the water scrubber.² **(40 CFR 63.1407(a)(3)(ii))**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Except during a pressure release event, operate each pressure relief device in organic HAP gas or vapor service with an instrument reading of less than 500 ppm above background as described in Method 21 of 40 CFR Part 60, Appendix A.² **(40 CFR 63.1411(a))**
2. The permittee shall operate each control device such that the daily average of monitored parameters, established as specified in this 40 CFR 63.1413(a)(4) remains above the minimum level or below the maximum level, as appropriate.² **(40 CFR 63.1413(a)(4))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Except as allowed under 40 CFR 63.1403(b), the permittee shall comply with the provisions of 40 CFR 63.1404 through 40 CFR 63.1410, as appropriate. When emissions are vented to a control device or control technology as part of complying with this 40 CFR Part 63, Subpart OOO, emissions shall be vented through a closed vent system meeting the requirements of 40 CFR Part 63, Subpart SS (National Emission Standards for closed vent systems, control devices, recovery devices).² **(40 CFR 63.1403(a))**
2. The water scrubber (ID 631-501) shall reduce organic HAP emissions by 62 weight percent for the collection of non-reactor batch process vents it controls.² **(40 CFR 63.1407(a)(3)(ii))**
3. The cryogenic condenser (ID 631-516) shall reduce organic HAP emissions by 95 percent measured by weight. This condition subsumes the control efficiency requirements for aggregate batch vent streams and storage vessels in 40 CFR 63.1408(a)(2)(ii).² **(40 CFR 63.1404(a)(1), 40 CFR 63.1405(a)(2))**
4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a water flow measurement device equipped with a continuous recorder located at the scrubber (ID 631-501) influent.² **(40 CFR 63.1415(a), 40 CFR 63.1415(b)(1)(ii), 40 CFR 63.1417(k))**

5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the outlet vapor temperature from the final condensing step of the cryogenic condenser on a continuous basis.² **(40 CFR 63.1415(a), 40 CFR 63.1415(b)(3))**
6. The permittee shall equip each pressure relief device in organic HAP service with a device(s) or parameter monitoring system that is capable of:² **(40 CFR 63.1411(c))**
 - a. Identifying the pressure release;
 - b. Recording the time and duration of each pressure release; and
 - c. Notifying operators immediately that a pressure release is occurring. The device or monitoring system may be either specific to the pressure relief device itself or may be associated with the process system or piping sufficient to indicate a pressure release to the atmosphere. Examples of these types of devices and systems include, but are not limited to, a rupture disk indicator, magnetic sensor, motion detector on the pressure relief valve stem, flow monitor, or pressure monitor.

V. TESTING/SAMPLING

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

1. The permittee shall verify HAPs emission rates from FGMACT OOO 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
HAPs	40 CFR Part 63, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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 verify the HAPs emission rates from FGMACT OOO, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be 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)(ii))**

1. *Data retention.* Unless otherwise specified in this 40 CFR Part 63, Subpart OOO, the permittee shall keep copies of all applicable records and reports required by 40 CFR Part 63, Subpart OOO for at least 5 years, as specified in 40 CFR 63.1416(a)(1), with the exception listed in 40 CFR 63.1416(a)(2):² **(40 CFR 63.1416(a))**
 - a. All applicable records shall be maintained in such a manner that they can be readily accessed. The most recent 6 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provides access within 2 hours after a request. The remaining 4 and one half years of records may be retained offsite. Records may be maintained in hard copy or computer readable form including, but not limited to, on paper, microfilm, computer, floppy disk, CD-ROM, optical disc, magnetic tape, or microfiche.
 - b. If the permittee submits copies of reports to the appropriate USEPA Regional Office, the permittee is not required to maintain copies of reports. If the USEPA Regional Office has waived the requirement of 40 CFR 63.10(a)(4)(ii) for submittal of copies of reports, the permittee is not required to maintain copies of those reports.

2. Unless one or more of the conditions specified in 40 CFR 63.1409(a)(1) through (6) are met, the permittee shall monitor each heat exchange system used to cool process equipment in an affected source, according to the provisions in either 40 CFR 63.1409(b) or (c).² **(40 CFR 63.1409)**
3. The permittee shall comply with the requirements of 40 CFR Part 63, Subpart UU for all equipment, as defined under 40 CFR 63.1402, that contains or contacts 5 weight-percent HAP or greater and operates 300 hours per year or more, except 40 CFR 63.1030. The weight-percent HAP is determined for equipment using the organic HAP concentration measurement methods specified in 40 CFR 63.1414(a).² **(40 CFR 63.1410)**
4. The permittee shall keep malfunction records as specified in 40 CFR 63.1416(b)(1) through (3).² **(40 CFR 63.1416)**
5. *Monitoring records.* If the permittee is required to comply with 40 CFR 63.1415 and, therefore, required to keep continuous records, the permittee shall keep records as specified in 40 CFR 63.1416(c)(1) through (6).² **(40 CFR 63.1416(c))**
6. *Aggregate batch vent stream records.* The permittee shall comply with the recordkeeping requirements for continuous process vents specified in 40 CFR Part 63 Subpart SS.² **(40 CFR 63.1416(e))**
7. *Controlled batch process vent continuous compliance records.* The permittee shall keep continuous compliance records for batch process vent as specified in 40 CFR 63.1416(d)(3).² **(40 CFR 63.1416(d))**
8. *Establishment of parameter monitoring level records.* For each parameter monitored according to 40 CFR 63.1415(b) and Table 3 of 40 CFR Part 63, Subpart OOO, the permittee shall maintain documentation showing the establishment of the level that indicates proper operation of the control device or control technology, including the following:² **(40 CFR 63.1416(d)(2))**
 - a. Parameter monitoring data used to establish the level.
 - b. Identification that the parameter monitoring level is associated with a batch cycle daily average.
 - c. A definition of the batch cycle.
9. *Other records or documentation.* For continuous monitoring systems used to comply with 40 CFR Part 63, Subpart OOO, the permittee shall keep records documenting the completion of calibration checks and records documenting the maintenance of continuous monitoring systems that are specified in the manufacturer's instructions or that are specified in other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.² **(40 CFR 63.1416(g))**
10. The permittee shall retain the following records for heat exchange systems:² **(40 CFR 63.1416(g)(4))**
 - a. Monitoring data required by 40 CFR 63.1409 indicating a leak and the date when the leak was detected, and if demonstrated not to be a leak, the basis for that determination.
 - b. Records of any leaks detected by procedures subject to 40 CFR 63.1409(c)(2) and the date the leak was detected.
 - c. The dates of efforts to repair leaks.
 - d. The method or procedure used to confirm repair of a leak and the date repair was confirmed.
11. If any pressure relief device in organic HAP service releases to atmosphere as a result of a pressure release event, the permittee shall calculate the quantity of organic HAP released during each pressure release event and report this quantity as required in 40 CFR 63.1417(f)(13)(iii). Calculations may be based on data from the pressure relief device monitoring alone or in combination with process parameter monitoring data and process knowledge.² **(40 CFR 63.1411(c)(2))**

12. For pressure relief devices in organic HAP service, the permittee shall keep records of the information specified in 40 CFR 63.1416(g)(5)(i) through (v), as applicable:² **(40 CFR 63.1416(g)(5))**
 - a. A list of identification numbers for pressure relief devices that vent to a fuel gas system, process, drain system, or closed-vent system and control device, under the provisions in 40 CFR 63.1411(d).
 - b. A list of identification numbers for pressure relief devices subject to the provisions in 40 CFR 63.1411(a).
 - c. A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions in 40 CFR 63.1411(b)(2).
 - d. The dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in 40 CFR 63.1411(a) and (b). The results shall include:
 - i. The background level measured during each compliance test.
 - ii. The maximum instrument reading measured at each piece of equipment during each compliance test.
 - e. For pressure relief devices in organic HAP service subject to 40 CFR 63.1411(c), keep records of each pressure release to the atmosphere, including the following information:
 - i. The source, nature, and cause of the pressure release.
 - ii. The date, time, and duration of the pressure release.
 - iii. An estimate of the quantity of total HAP emitted during the pressure release and the calculations used for determining this quantity.
 - iv. The actions taken to prevent this pressure release.
 - v. The measures adopted to prevent future such pressure.

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. The permittee shall submit all reports required by 40 CFR 63.1417(a).² **(40 CFR 63.1417(a))**
6. *Submittals.* The permittee shall submit all reports required under 40 CFR Part 63, Subpart OOO to the Administrator at the appropriate address listed in 40 CFR 63.13. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.² **(40 CFR 63.1417(c))**
7. The permittee shall submit the applicable notifications specified in 40 CFR 63.7(b) and (c), 40 CFR 63.8(f)(4) and 40 CFR 63.9(b) through (e) and (h), as described in Table 5 to 40 CFR Part 63, Subpart OOO.² **(40 CFR 63.1417)**
8. The permittee shall submit a Notification of Compliance Status pursuant to 40 CFR 63.1417(e).² **(40 CFR 63.1717(e))**
9. The permittee shall submit all Periodic Reports pursuant to 40 CFR 63.1417(f).² **(40 CFR 63.1717(f))**

10. If the permittee fails to meet an applicable standard, the permittee shall report such events in the Semi-Annual Report and shall report the number of failures to meet an applicable standard. For each instance, the permittee shall report the date, time and duration of each failure. For each failure the report must include a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.² **(40 CFR 63.1417(g))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart OOO National Emission Standards for Hazardous Air Pollutant Emissions: Manufacture of Amino/Phenolic Resins. (40 CFR Part 63, Subparts A and OOO). A startup, shutdown, and malfunction plan (SSMP) typically required by 40 CFR 63.6(e)(3) is not required for 40 CFR Part 63, Subpart OOO.² **(40 CFR Part 63, Subpart OOO)**

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).

FGMACT ZZZZ 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.

Emission Units: EU-CUMMINS_ENG, EU-DET_DIESEL_ENG

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 FGMACT ZZZZ 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 FGMACT ZZZZ 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 FGMACT ZZZZ, 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 FGMACT ZZZZ 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 FGMACT ZZZZ 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 FGMACT ZZZZ 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 FGMACT ZZZZ, 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 FGMACT ZZZZ, 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 develop and follow 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 FGMACT ZZZZ, 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 FGMACT ZZZZ 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 FGMACT ZZZZ 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. **(R 336.1213(3) 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 FGMACT ZZZZ, demonstrating that the fuel meets the requirement of SC II.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))**

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

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).

FGCOLDCLEANERS 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: EUCOLDCLEANERS

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 a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, used in each cold cleaner. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1213(3))**
- 4. 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))**
- 5. 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 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

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

FGRULE290 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 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.

Emission Units installed on or after December 20, 2016: EUMODAFLOW_ST_TANK, EUMODAFLOW_HD_TANK, EUMODAFLOWBLEND, EUMODAFLOWPACK

Emission Units installed prior to December 20, 2016: N/A

POLLUTION CONTROL EQUIPMENT

Fabric Filter serving EUMODAFLOWBLEND, EUMODAFLOWPACK

I. EMISSION LIMIT(S)

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. **(R 336.1290(2)(a)(i))**
2. Any emission unit for which CO₂ equivalent emissions are not more than 6,250 tons per month and for which the total uncontrolled or controlled emissions of all other air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: **(R 336.1290(2)(a)(ii))**
 - a. For toxic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(A))**
 - b. For toxic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(B))**
 - c. The emission unit shall not emit any toxic air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. **(R 336.1290(2)(a)(ii)(C))**
 - d. For total mercury, the uncontrolled or controlled emissions shall not exceed 0.01 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(D))**
 - e. For lead, the uncontrolled or controlled emissions shall not exceed 16.7 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(E))**
3. Any emission unit that emits only particulate air contaminants without initial risk screening levels and other air contaminants that are exempted under Rule 290(2)(a)(i) or Rule 290(2)(a)(ii), if all the following provisions are met: **(R 336.1290(2)(a)(iii))**
 - a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than

or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(2)(a)(iii)(A))**

- b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303. **(R 336.1290(2)(a)(iii)(B))**
- c. The initial threshold screening level for each particulate toxic air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(2)(a)(iii)(C))**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. **(R 336.1290)**
- 2. The following requirements apply to emission units installed on or after December 20, 2016, utilizing control equipment:
 - a. An air cleaning device for volatile organic compounds shall be installed, maintained, and operated in accordance with the manufacturer's specifications. Examples include the following: **(R 336.1290(2)(b)(i), R 336.1910)**
 - i. Oxidizers and condensers equipped with a continuously displayed temperature indication device.
 - ii. Wet scrubbers equipped with a liquid flow rate monitor.
 - iii. Dual stage carbon absorption where the first canister is monitored for breakthrough and replaced if breakthrough is detected.
 - b. An air cleaning device for particulate matter shall be installed, maintained, and operated in accordance with the manufacturer's specifications or the permittee shall develop a plan that provides to the extent practicable for the maintenance and operation of the equipment in the manner consistent with good air pollution control practices for minimizing emissions. It shall also be equipped to monitor appropriate indicators of performance, for example, static pressure drop, water pressure, and water flow rate. **(R 336.1290(2)(b)(ii), R 336.1910)**

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 records of the following information for each emission unit for each calendar month using the methods outlined in the EGLE, AQD Rule 290; Permit to Install Exemption Record form (EQP 3558) or in a format that is acceptable to the AQD District Supervisor. **(R 336.1213(3))**
 - a. Records identifying each air contaminant that is emitted. **(R 336.1213(3))**
 - b. Records identifying if each air contaminant is controlled or uncontrolled. **(R 336.1213(3))**
 - c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. **(R 336.1213(3))**

- d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(2)(a)(ii) and (iii). **(R 336.1213(3))**
 - e. Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in enough detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. Volatile organic compound emissions from units installed on or after December 20, 2016, shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the AQD District Supervisor. **(R 336.1213(3), R 336.1290(2)(d))**
 - f. Records are maintained on file for the most recent 2-year period and are made available to the department upon request. **(R 336.1213(3), R 336.1290(2)(e))**
- 2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. **(R 336.1213(3))**
 - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. **(R 336.1290(2)(c), R 336.1213(3))**
 - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. **(R 336.1213(3))**
 - 3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. **(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 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

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

APPENDICES

Appendix 1. Acronyms and Abbreviations

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO ₂ e	Carbon Dioxide Equivalent
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
Department/ department	Michigan Department of Environment, Great Lakes, and Energy	gr	Grains
EGLE	Michigan Department of Environment, Great Lakes, and Energy	HAP	Hazardous Air Pollutant
EU	Emission Unit	Hg	Mercury
FG	Flexible Group	hr	Hour
GACS	Gallons of Applied Coating Solids	HP	Horsepower
GC	General Condition	H ₂ S	Hydrogen Sulfide
GHGs	Greenhouse Gases	kW	Kilowatt
HVLP	High Volume Low Pressure*	lb	Pound
ID	Identification	m	Meter
IRSL	Initial Risk Screening Level	mg	Milligram
ITSL	Initial Threshold Screening Level	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	NMOC	Non-methane Organic Compounds
MAP	Malfunction Abatement Plan	NO _x	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	ng	Nanogram
NA	Not Applicable	PM	Particulate Matter
NAAQS	National Ambient Air Quality Standards	PM10	Particulate Matter equal to or less than 10 microns in diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	%	Percent
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SDS	Safety Data Sheet	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection Agency	µg	Microgram
VE	Visible Emissions	µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

Appendix 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. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications 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 4. 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. 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. 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-B1677-2018. 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-B1677-2018a is being reissued as Source-Wide PTI No. MI-PTI-B1677-2024.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
418-96I	201900072 / August 6, 2019	<p>Incorporate PTI No. 418-96I which was to add requirements to the PTI based on a USEPA consent agreement and final order (CAFO). The company also Identified four emission units in FGCYREZ (EUCYREZSTTK, EUCYREZHDTK, EUCYREZBLND, and EUCYREZPKG). And added requirements to use the newly-installed water scrubber when operating FGCYREZ. (The CAFO required 90% removal of organic HAP.)</p> <p>Along with the CAFO-related requirements, the company removed the requirements to read visible emissions from FGCYREZ equipment.</p> <p>Additional changes to the facility's permit included:</p> <ul style="list-style-type: none">• FGCYREZ: include Group 1 requirements under the National Emission Standards for	EUCYREZSTTK EUCYREZHDTK EUCYREZBLND EUCYREZPKG FGCYREZ FGMRPT

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
		<p>NESHAP in 40 CFR Part 63, Subpart FFFF [the Miscellaneous Organic NESHAP (MON)]. This would involve replacing the 10,000 pounds per year emission limit for uncontrolled organic HAP with a 98% removal requirement for organic HAP, verified by the results of the stack test required by the CAFO. And change the condition related to the MON, related to the change from Group 2 to Group 1</p> <ul style="list-style-type: none"> FGMRPT: Based on recent stack test data, the PTI removed the restriction on hours of operation using fresh methanol in the methanol scrubber. <p>PTI No. 418-96I application was not required to go through the public participation process.</p>	

Appendix 7. 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. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use 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.