

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

EFFECTIVE DATE: December 8, 2020
REVISION DATES: April 16, 2021; January 3, 2023

ISSUED TO

DDP Specialty Electronic Materials US, LLC (hereinafter “DDP”)

and

Nutrition & Biosciences USA 1, LLC (hereinafter “N&B”)

State Registration Number (SRN): P1027

LOCATED AT

DDP Specialty Electronic Materials US, LLC, 3400 South Saginaw Road Unit 96, Midland, Midland
County, Michigan 48640

and

Nutrition & Biosciences USA 1, LLC, 3400 South Saginaw Road Unit 57, Midland, Midland County,
Michigan 48640

The stationary source consists of DDP Specialty Electronic Materials US, LLC and Nutrition & Biosciences USA 1, LLC (SRN P1027), The Dow Chemical Company (SRN: A4033), Dow Silicones Corporation (SRN: A4043), SK Saran Americas LLC (SRN: P1026), Corteva Agriscience LLC (SRN: P1028), and Trinseo LLC (SRN: P1025).

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-P1027-2020b

Expiration Date: December 8, 2025

Administratively Complete ROP Renewal Application Due Between
June 8, 2024 and June 8, 2025

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-P1027-2020b

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

Michigan Department of Environment, Great Lakes, and Energy

Chris Hare, Bay City District Supervisor

TABLE OF CONTENTS

AUTHORITY AND ENFORCEABILITY	6
SECTION 1.....	7
A. GENERAL CONDITIONS.....	8
Permit Enforceability	8
General Provisions.....	8
Equipment & Design	9
Emission Limits.....	9
Testing/Sampling	9
Monitoring/Recordkeeping	10
Certification & Reporting	10
Permit Shield	11
Revisions	12
Reopenings.....	12
Renewals.....	13
Stratospheric Ozone Protection	13
Risk Management Plan.....	13
Emission Trading	13
Permit to Install (PTI)	14
B. SOURCE-WIDE CONDITIONS	15
C. EMISSION UNIT SPECIAL CONDITIONS	19
EMISSION UNIT SUMMARY TABLE.....	19
EU04.....	24
EU06-LOWPURITY	30
EU88.....	33
EU89.....	36
EUANION_XCHG	41
EURESIN_DRYER	45
EU94.....	47
EU95.....	50
D. FLEXIBLE GROUP SPECIAL CONDITIONS.....	55
FLEXIBLE GROUP SUMMARY TABLE.....	55
FG963THROX	58
FGHCLSCRUBBER.....	63
FGRULE290	66
FGCOLDCLEANERS-S1	69
FGHONFUGITIVES-S1.....	71
FGRULE703	76
FGOLDMACT-S1	78
FGMONMACT-S1.....	86
FGCOATINGSMACT	96
FGBENZENEWASTE-S1.....	104
E. NON-APPLICABLE REQUIREMENTS	106
APPENDICES	107
Appendix 1-1. Acronyms and Abbreviations.....	107

Appendix 2-1. Schedule of Compliance	108
Appendix 3-1. Monitoring Requirements	108
Appendix 4-1. Recordkeeping	108
Appendix 5-1. Testing Procedures	108
Appendix 6-1. Permits to Install/ROP Revision Applications	109
Appendix 7-1. Emission Calculations	110
Appendix 8-1. Reporting	111
SECTION 2.....	112
A. GENERAL CONDITIONS.....	113
Permit Enforceability	113
General Provisions.....	113
Equipment & Design	114
Emission Limits.....	114
Testing/Sampling	114
Monitoring/Recordkeeping	115
Certification & Reporting	115
Permit Shield	116
Revisions	117
Reopenings.....	117
Renewals.....	118
Stratospheric Ozone Protection	118
Risk Management Plan.....	118
Emission Trading	118
Permit to Install (PTI).....	119
B. SOURCE-WIDE CONDITIONS	120
C. EMISSION UNIT SPECIAL CONDITIONS	124
EMISSION UNIT SUMMARY TABLE.....	124
EU06-HIGHPURITY.....	127
EU08.....	130
EUB2	133
EUB5	140
D. FLEXIBLE GROUP SPECIAL CONDITIONS.....	150
FLEXIBLE GROUP SUMMARY TABLE.....	150
FGHONFUGITIVES-S2.....	151
FGCELLULOSICS	156
FGOLDMACT-S2.....	159
FGMONMACT-S2.....	167
FGBENZENEWASTE-S2.....	177
FGCOLDCLEANERS-S2	179
E. NON-APPLICABLE REQUIREMENTS	181
APPENDICES	182
Appendix 1-2. Acronyms and Abbreviations.....	182
Appendix 2-2. Schedule of Compliance	183
Appendix 3-2. Monitoring Requirements	183
Appendix 4-2. Recordkeeping	183
Appendix 5-2. Testing Procedures	183

Appendix 6-2. Permits to Install/ROP Revision Applications 183
Appendix 7-2. Emission Calculations 184
Appendix 8-2. Reporting 184

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.

Section 1 - DDP

ROP No: MI-ROP-P1027-2020b
Expiration Date: December 8, 2025
PTI No: MI-PTI-P1027-2020b

SECTION 1
DDP SPECIALTY ELECTRONIC MATERIALS US, LLC

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 USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
 - 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 stationary source consists of DDP Specialty Electronic Materials US, LLC and Nutrition & Biosciences USA 1, LLC (SRN P1027), The Dow Chemical Company (SRN: A4033), Dow Silicones Corporation (SRN: A4043), SK Saran Americas LLC (SRN: P1026), Corteva Agriscience LLC (DAS/Corteva) (SRN: P1028), and Trinseo LLC (SRN: P1025). 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.

SOURCE WIDE CONDITIONS

DESCRIPTION

All process equipment source-wide including equipment covered by other permits, grand-fathered equipment, and exempt equipment.

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. For any condition specified in the ROP which requires the permittee to monitor and record an operational parameter (e.g., flow rate, pH, pressure drop, etc.) on a "continuous basis" pursuant to AQD R 336.1213(3), monitoring and recording of data "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar day. In the event the permittee collects more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points collected during the 15-minute period. Any response to an excursion of the corresponding operational parameter set point or range specified in the ROP pursuant to R 336.1213(3), shall be based upon these 15-minute values. Unless otherwise noted in the ROP, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies. **(R 336.1213(3))**
2. The permittee shall maintain waste shipment records for all asbestos-containing waste material transported off-site as per 40 CFR Part 61, Subpart M, Section 61.150(d). **(40 CFR Part 61, Subpart M)**

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 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 follow the applicable notification requirements in 40 CFR Part 61, Subpart M, Section 61.145(b) prior to any applicable demolition or renovation activity. **(40 CFR Part 61, Subpart M)**
5. The permittee shall file a report any time a copy of the waste shipment record, signed by the off-site waste disposal site, is not received in a timely manner, in accordance with 40 CFR Part 61, Subpart M, Section 61.150(d)(4). **(40 CFR Part 61, Subpart M)**
6. An Initial Report shall be filed, according to the requirements of 40 CFR Part 61, Subpart M, Section 61.153, within 90 days of startup for any new source subject to section 61.154. **(40 CFR Part 61, Subpart M)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. For any emission unit in the ROP subject to the applicable sections of 40 CFR Part 63, Subpart A (General Provisions) that require a startup, shutdown and malfunction plan, the owner or operator shall adopt a startup, shutdown, and malfunction plan which conforms to the provisions of Part 63. The owner or operator shall operate and maintain the source in accordance with the procedures specified in the current startup, shutdown, and malfunction plan. Any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by Part 63 shall not be deemed to constitute permit revisions under Part 70 or Part 71 of Chapter I. **(40 CFR Part 63, Subpart A, Section 63.6(e)(3)(ix))**
2. The permittee shall comply with the applicable provisions of 1994 PA 451, Section 324.5524 (Fugitive dust sources or emissions) and with the provisions of the most-recently approved operating program received by the AQD, Saginaw Bay District Office. The operating program shall be amended by the permittee so that the operating program is current and reflects any significant change in the fugitive dust source or fugitive dust emissions. An amendment to an operating program shall be consistent with the requirements of Section 324.5524 and shall be submitted to the department for its review and approval. **(1994 PA 451, Section 324.5524)**
3. The permittee shall comply with the applicable requirements of 40 CFR Part 61, Subparts A and M (National Emission Standards for Asbestos). The applicable sections of Subpart M may include: **(40 CFR Part 61, Subparts A and M)**
 - a. 61.140 Applicability
 - b. 61.141 Definitions
 - c. 61.145 Standard for demolition and renovation
 - d. 61.148 Standard for insulating materials
 - e. 61.150 Standard for waste disposal for manufacturing, fabricating, demolition, renovation and spraying operations
 - f. 61.152 Air cleaning
 - g. 61.153 Reporting
 - h. 61.154 Standard for active waste disposal sites
 - i. 61.156 Cross-reference to other asbestos regulations
 - j. Appendix A (Interpretive Rule Governing Roof Removal Operations)

4. The permittee shall follow the applicable procedures for asbestos emission control in 40 CFR Part 61, Subpart M, Section 61.145(c) during any demolition or renovation activity. **(40 CFR Part 61, Subpart M)**
5. The permittee shall not install or reinstall on a facility component any insulating materials that contain commercial asbestos (other than spray-applied insulating materials) if the materials are either molded and friable or wet-applied and friable after drying, as per 40 CFR Part 61, Subpart M, Section 61.148. **(40 CFR Part 61, Subpart M)**
6. The permittee shall follow the applicable waste disposal requirements in 40 CFR Part 61, Subpart M, Section 61.150 for any asbestos removed during demolition or renovation activities. **(40 CFR Part 61, Subpart M)**
7. The permittee shall follow the applicable requirements of 40 CFR Part 61, Subpart M, Section 61.152 if air cleaning is used as part of the method of compliance with sections 61.145 or 61.150. **(40 CFR Part 61, Subpart M)**
8. The permittee shall comply with the applicable requirements of 40 CFR Part 61, Subpart M, Section 61.154 for any active waste disposal site that receives asbestos-containing waste material. **(40 CFR Part 61, Subpart M)**
9. The permittee shall comply with any other applicable asbestos regulation listed in 40 CFR Part 61, Subpart M, Section 61.156. **(40 CFR Part 61, Subpart M)**
10. The permittee shall comply with the applicable requirements of 40 CFR Part 61, Subpart M, Appendix A for any regulated roof removal operation. **(40 CFR Part 61, Subpart M)**
11. For any performance test required pursuant to AQD Part 10 rules, the permittee may submit as a part of their stack test plan, a request to use existing performance test data where such data exists. The AQD will evaluate as a part of the stack test plan review, whether or not such existing data can be used in lieu of conducting a new performance test. For any performance test required by a federal standard, existing performance test data can only be used in lieu of a required stack test if allowed by the standard. **(R 336.2001, R 336.2003, R 336.2004)**
12. The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A, 40 CFR 82.13 (Protection of Stratospheric Ozone, Production and Consumption Controls). **(40 CFR 82.13)**
13. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart GGGGG (National Emission Standards for Hazardous Air Pollutants (NESHAP): Site Remediation). **(40 CFR Part 63, Subpart GGGGG)**

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).

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	Installation Date/ Modification Date	Flexible Group ID
EU04	<p>The primers process in Automotive’s Glass Bonding production facility at 100 Building.</p> <p>This emission unit is subject to the NESHAP for Miscellaneous Coating Manufacturing in 40 CFR Part 63, Subpart HHHHH, NESHAP for Organic Liquids Distribution in 40 CFR Part 63, Subpart EEEE, and NESHAP for Miscellaneous Organic Chemical Manufacturing in 40 CFR Part 63, Subpart FFFF. In addition, processes subject to HHHHH and FFFF are also subject to the equipment leak provisions of 40 CFR Part 63, Subpart UU (NESHAP for Equipment Leaks - Control level 2 Standards).</p> <p>This emission unit was permitted in PTI 191-18.</p>	06-23-2015 01-11-2019	FGCOATINGSMACT FGMONMACT-S1 FGOLDMACT-S1 FGBENZENEWASTE-S1
EU06-LOWPURITY	<p>Low purity anhydrous hydrogen chloride (HCl) storage and distribution process located in the 954 block.</p> <p>The Low Purity Anhydrous HCl system consists of a railcar unloading system, a vaporizer system, and a storage/distribution system. The anhydrous HCl arrives as a refrigerated liquefied gas and is offloaded from railcars in the 954 block into two storage tanks, V-2901 and V-2902. A vaporizer using a heat transfer fluid vaporizes liquid received from the storage tanks and distributes the gaseous HCl to users via pipeline.</p>	04-22-04 03-23-20	FG954THROX (SRN P1028) FGHCLSCRUBBER

Emission Unit ID	Emission Unit Description	Installation Date/ Modification Date	Flexible Group ID
	<p>The storage tanks are pressure-controlled by venting HCl to the E-101 Absorber and T-101 Scrubber in FGHCLSCRUBBER or to the 954 THROX Absorber and 954 THROX Scrubber. Emissions from offloading railcars are vented either to the T-101 Scrubber in FGHCLSCRUBBER or to the 954 Throx Absorber and 954 Throx Scrubber.</p> <p>This emission unit was permitted in PTI No. 159-19 as EU06.</p>		
EU88	<p>The Cation process in the ion exchange resins manufacturing complex with reactors, separators, storage tanks/silos and related equipment. Most process vents are sent to the 963THROX.</p> <p>This emission unit is subject to the requirements of 40 CFR Part 63, Subpart FFFF (MON) and 40 CFR Part 63, Subpart EEEE (OLD). EU88 is also subject to the equipment leak provisions of the HON (40 CFR Part 63, Subpart H).</p> <p>This emission unit was permitted in PTI No. 183-19.</p>	<p>01-01-1954 06-24-1994 07-01-2005 12-10-2008 03-24-2020</p>	<p>FG963THROX FGHONFUGITIVES-S1 FGMONMACT-S1 FGOLDMACT-S1</p>
EU89	<p>The copolymer process with reactors, distillation/fractionation columns, separators, storage tanks/silos and related equipment located within the 719/774 block. The recuperative TOX (thermal oxidation) unit associated with this emission unit is a dedicated TOX and does not receive process vents from any other emission unit. EU89 is subject to the MON (40 CFR Part 63, Subpart FFFF) and OLD (40 CFR Part 63, Subpart EEEE). By virtue of being subject to Subpart FFFF, this emission unit is also subject to the equipment leak provisions of 40 CFR Part 63, Subpart H.</p> <p>EU89 is a CAM-subject emission unit subject to the requirements of 40 CFR Part 64. The CAM-subject pollutant for this emission unit is VOC.</p>	<p>03-15-1995 08-01-2013</p>	<p>FGMONMACT-S1 FGOLDMACT-S1 FGHONFUGITIVES-S1 FGBENZENEWASTE-S1</p>

Emission Unit ID	Emission Unit Description	Installation Date/ Modification Date	Flexible Group ID
	This emission unit was permitted in PTI 190-12A.		
EUANION_XCHG	<p>Existing ion exchange resin manufacturing facility with direct-flame afterburner and scrubber control.</p> <p>EUANION_XCHG is subject to the MON (40 CFR Part 63, Subpart FFFF) and OLD (40 CFR Part 63, Subpart EEEE). By virtue of being subject to Subpart FFFF, this emission unit is also subject to the equipment leak provisions of 40 CFR Part 63, Subpart H.</p> <p>EUANION_XCHG is a CAM subject emission unit subject to the requirements of 40 CFR Part 64. The CAM subject pollutant for this emission unit is VOC.</p> <p>This emission unit was permitted in PTI 233-74I.</p>	1974 2003	FG963THROX FGHONFUGITIVES-S1 FGMONMACT-S1 FGOLDMACT-S1
EURESIN_DRYER	<p>Crude resin dryer used in conjunction with the resin manufacturing process. Resin is manually added to the dryer, screened and sent to a reactor in the resin manufacturing process. Equipment located in 458 Building.</p> <p>This emission unit was permitted in PTI 570-93A.</p>	1993	FGMONMACT-S1 FGHONFUGITIVES-S1
EU94	<p>The divinylbenzene (DVB) process in the specialty monomers manufacturing block with process cracker furnaces G and H, reactors, distillation/fractionation columns, separators, storage tanks/silos and related equipment. Cracker furnaces G and H burn both natural gas and process vent gas and have a heat input capacity of 6.76 MMBTU/hr each. The DVB process is subject to the MON (40 CFR Part 63, Subpart FFFF) and OLD (40 CFR Part 63, Subpart EEEE). By virtue of being subject to Subpart FFFF, this emission unit is also subject to the equipment leak provisions of 40 CFR Part 63, Subpart H. The DVB process also has a storage tank (V-401) subject to the requirements of 40 CFR Part 60, Subpart Kb.</p>	05-22-1995 09-17-2004	FGMONMACT-S1 FGOLDMACT-S1 FGHONFUGITIVES-S1 FGBENZENEWASTE-S1

Emission Unit ID	Emission Unit Description	Installation Date/ Modification Date	Flexible Group ID
	This emission unit was permitted in PTI 1311-90C.		
EU95	<p>The tar incinerator in the specialty monomers block with storage tanks/silos and related equipment. The tar incinerator is comprised of a boiler sized at 48 MMBTU/hr heat input while the burner is rated for 15 MMBTU/hr. The boiler is fired by natural gas and by-product fuel. By-product fuel is a blend of distillation residues from the specialty monomers facility (process tars) and flux oil for viscosity control. The tar incinerator, classified as an Energy Recovery Unit, is subject to 40 CFR Part 60, Subpart DDDD (Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units) and Michigan Air Pollution Control Rule R 336.1974 (Emissions Standards for Existing Commercial and Industrial Solid Waste Incinerators).</p> <p>This emission unit was permitted in PTI 694-88A.</p>	05-01-1988 01-17-1989	NA
EURULE290	Any existing or future emission unit that emits air contaminants which are exempt from the requirements of R 336.1201 pursuant to R 336.1290.	NA	FG963THROX FGRULE290 FGHONFUGITIVES-S1 FGOLDMACT-S1 FGMONMACT-S1 FGCOATINGSMACT FGBENZENEWASTE-S1
EUCOLDCLEANER-S1	Any existing cold cleaner (placed into operation prior to July 1, 1979) or new cold cleaner (placed into operation after July 1, 1979) that is exempt from NSR permitting by R 336.1281(h) or R 336.1285 (r)(iv).	NA	FGCOLDCLEANER-S1
EURULE703	<p>Any new or future storage vessel subject to the requirements of R 336.1703 (Rule 703). Storage vessels subject to AQD Rule 703 are those which:</p> <p>(1) Receive gasoline from a delivery vessel into any new stationary vessel of more than 2000 gallon capacity located at any gasoline dispensing facility; AND</p>	NA	FGRULE703

Emission Unit ID	Emission Unit Description	Installation Date/ Modification Date	Flexible Group ID
	(2) Were placed into operation on or after July 1, 1979, or for which an application for a permit to install, pursuant to the provisions of Part 2 of Act 451 is made to EGLE on or after July 1, 1979, or both, except for any process or process equipment which is defined as an "existing source" under R 336.1601.		

EU04 EMISSION UNIT CONDITIONS

DESCRIPTION

The primers process in Automotive's Glass Bonding production facility at 100 Building.

This emission unit is subject to the National Emission Standards for Organic Hazardous Air Pollutants (NESHAP) for Miscellaneous Coating Manufacturing in 40 CFR Part 63, Subpart HHHHH, The NESHAP for Miscellaneous Organic Chemical Manufacturing in 40 CFR Part 63, Subpart FFFF, and to the NESHAP for Organic Liquids Distribution in 40 CFR Part 63, Subpart EEEE. In addition, processes subject to HHHHH and FFFF are also subject to the equipment leak provisions of 40 CFR Part 63, Subpart UU (NESHAP for Equipment Leaks - Control level 2 Standards).

This emission unit was permitted in PTI 191-18.

Flexible Group ID: FGCOATINGSMACT, FGMONMACT-S1, FGOLDMACT-S1, FGBENZENEWASTE-S1

POLLUTION CONTROL EQUIPMENT

- Two carbon beds followed by a shared carbon bed (SVEU04-001)
- Pulse jet cartridge dust collector (SVEU04-003)
- Reverse pulse cartridge dust collector (SVEU04-004)
- Pulse jet cartridge dust collector (SVEU04-005)
- In-line cartridge dust collector (SVEU04-007)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC ⁺	8.3 tpy ² ⁺⁺	12-month rolling time period as determined at the end of each calendar month	EU04	SC VI.2	R 336.1702(a)
2. Other volatile organics (OVO): organic compounds that are "volatile" but are not "VOC" ⁺⁺	8.3 tpy ¹ ⁺⁺	12-month rolling time period as determined at the end of each calendar month	EU04	SC VI.3	R 336.1224
3. PM	0.10 lb per 1,000 lbs of exhaust gases on a dry gas basis ²	Hourly	Any vent in EU04	SC VI.4, VI.5, VI.6	R 336.1331

⁺ "Volatile organic compound" (VOC) is a regulatory term defined in Rule 122 (R 336.1122). Acetone is an example of an organic compound that is both organic and volatile in the general chemical senses of these terms, but that Rule 122 identifies as not a VOC. Each of these emission limits (SC I.1 and I.2) applies to the total of all compounds fitting the description.

⁺⁺ This emission limit does not include fugitive emissions (emissions from leaking valves, flanges, etc.) from the emission unit.

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
Emission limits for TACs with a screening level based on a one-hour averaging time					
4. Each Category 1 TAC	0.00001 lb/hr ^{1,*}	Hourly	EU04	SC VI.4, VI.5, VI.6	R 336.1225
5. Each Category 2 TAC	0.0001 lb/hr ^{1,*}	Hourly	EU04	SC VI.4, VI.5, VI.6	R 336.1225
6. Each Category 3 TAC	0.001 lb/hr ^{1,*}	Hourly	EU04	SC VI.4, VI.5, VI.6	R 336.1225
7. Each Category 4 TAC	0.01 lb/hr ^{1,*}	Hourly	EU04	SC VI.4, VI.5, VI.6	R 336.1225
8. Each Category 5 TAC	0.1 lb/hr ^{1,*}	Hourly	EU04	SC VI.4, VI.5, VI.6	R 336.1225
9. Each Category 6 TAC	0.3 lb/hr ^{1,*}	Hourly	EU04	SC VI.4, VI.5, VI.6	R 336.1225
10. Each Category 7 TAC	1.0 lb/hr ^{1,*}	Hourly	EU04	SC VI.4, VI.5, VI.6	R 336.1225
Emission limits for TACs with a screening level based on an eight-hour averaging time					
11. Each Category 1 TAC	0.00003 lb/hr ^{a,1,*}	Eight-hour average, subject to note a	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
12. Each Category 2 TAC	0.0003 lb/hr ^{a,1,*}	Eight-hour average, subject to note a	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
13. Each Category 3 TAC	0.003 lb/hr ^{a,1,*}	Eight-hour average, subject to note a	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
14. Each Category 4 TAC	0.03 lb/hr ^{a,1,*}	Eight-hour average, subject to note a	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
15. Each Category 5 TAC	0.3 lb/hr ^{a,1,*}	Eight-hour average, subject to note a	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
16. Each Category 6 TAC	0.9 lb/hr ^{a,1,*}	Eight-hour average, subject to note a	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
17. Each Category 7 TAC	3.0 lb/hr ^{a,1,*}	Eight-hour average, subject to note a	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
Emission limits for TACs with a screening level based on a 24-hour averaging time					
18. Each Category 1 TAC	0.00006 lb/hr ^{b,1,*}	24-hour average, subject to note b	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
19. Each Category 2 TAC	0.0006 lb/hr ^{b,1,*}	24-hour average, subject to note b	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
20. Each Category 3 TAC	0.006 lb/hr ^{b,1,*}	24-hour average, subject to note b	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
21. Each Category 4 TAC	0.06 lb/hr ^{b,1,*}	24-hour average, subject to note b	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
22. Each Category 5 TAC	0.6 lb/hr ^{b,1,*}	24-hour average, subject to note b	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
23. Each Category 6 TAC	1.8 lb/hr ^{b,1,*}	24-hour average, subject to note b	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
24. Each Category 7 TAC	6.0 lb/hr ^{b,1,*}	24-hour average, subject to note b	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
Emission limits for TACs with a screening level based on an annual averaging time					
25. Each Category 1 TAC	5 lb/yr ^{b,1,*}	12-month rolling time period as determined at the end of each calendar month	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
26. Each Category 2 TAC	50 lb/yr ^{b, 1, *}	12-month rolling time period as determined at the end of each calendar month	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
27. Each Category 3 TAC	460 lb/yr ^{b, 1, *}	12-month rolling time period as determined at the end of each calendar month	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
28. Each Category 4 TAC	4,000 lb/yr ^{b, 1, *}	12-month rolling time period as determined at the end of each calendar month	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
29. Each Category 5 TAC	4,000 lb/yr ^{b, 1, *}	12-month rolling time period as determined at the end of each calendar month	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
30. Each Category 6 TAC	4,000 lb/yr ^{b, 1, *}	12-month rolling time period as determined at the end of each calendar month	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)
31. Each Category 7 TAC	4,000 lb/yr ^{b, 1, *}	12-month rolling time period as determined at the end of each calendar month	EU04	SC VI.4, VI.5, VI.6	R 336.1225 R 336.1227(2)

All references to “a screening level” refer to any applicable AQD-established initial threshold screening level or any applicable AQD-established initial risk screening level. Secondary risk screening levels shall not be considered in these categories. This permit does not authorize emissions of any TAC with a screening level less than 0.001 microgram per cubic meter for any averaging time.

- Category 1 TACs are all TACs with a screening level of 0.001 to < 0.01
- Category 2 TACs are all TACs with a screening level of 0.01 to < 0.1
- Category 3 TACs are all TACs with a screening level of 0.1 to < 1
- Category 4 TACs are all TACs with a screening level of 1 to < 10
- Category 5 TACs are all TACs with a screening level of 10 to < 30
- Category 6 TACs are all TACs with a screening level of 30 to < 100
- Category 7 TACs are all TACs with a screening level ≥ 100

Screening levels and category criteria are in units of micrograms per cubic meter.

^a The average emission rate shall not be less than one-eighth of the maximum one-hour emission rate.

^b The average emission rate shall not be less than one-tenth of the maximum one-hour emission rate.

^{*} This emission limit does not include fugitive emissions (emissions from leaking valves, flanges, etc.) from the emission unit.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The cleaning of equipment in EU04 shall be done by methods and materials that minimize the emission of VOCs and OVO. These methods and materials shall include those listed in Rule 630(3).² **(R 336.1224, R 336.1702(a))**
2. The permittee shall store all organic wash solvent containing VOC in closed containers.² **(R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the portions of EU04 vented to an activated carbon bed or carbon bed system unless the activated carbon bed or carbon bed system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each activated carbon bed or carbon bed system includes complying with the provisions of FGCOATINGSMACT related to these emission control devices.² **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, 40 CFR 63.8000)**
2. The permittee shall not operate the portions of EU04 vented to an emission control device listed below unless the listed emission control device is installed, maintained, and operated in a satisfactory manner.
 - a. FL-5410 filter receiver² **(R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
 - b. FL-5420 dryer filter² **(R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
 - c. FL-2490 process dust collector² **(R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
 - d. FL-5446 in-line filter² **(R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

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 336.1224, R 336.1225, R 336.1702(a))**
2. The permittee shall calculate the VOC emission rate from EU04 monthly, for the preceding 12-month rolling time period, 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))**
3. The permittee shall calculate the OVO emission rate from EU04 monthly, for the preceding 12-month rolling time period, 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.¹ **(R 336.1224)**
4. The permittee shall keep a current description, in a manner acceptable to the AQD District Supervisor, of each activity carried out in EU04 that emits air contaminants. The description for each activity shall include all information needed to demonstrate that emissions from the activity comply with the emission limits in EU04 SC I.1 through I.31. At a minimum the description shall include raw materials used and emission calculations for all air contaminants emitted, and shall reference the source of production information used in emission calculations. The permittee shall keep all descriptions at the facility and make them available to the Department upon request.² **(R 336.1224, R 336.1225, R 336.1702(a))**
5. The permittee shall keep monthly records, in a manner acceptable to the AQD District Supervisor, of all activities carried out in EU04 that emit air contaminants. The permittee shall cross-reference these records with the activity-specific description required by EU04 SC VI.4 in a manner that demonstrates compliance with the emission limits in SC I.1 through I.31. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1224, R 336.1225, R 336.1702(a))**

6. The requirements of SC VI.7 below apply when the permittee emits a TAC from EU04 for which the AQD has neither established a screening level nor identified which emission limits in SC I.1 through I.31 apply to the TAC, as follows:¹ **(R 336.1224, R 336.1225)**
 - a. If no exemption from the Permit to Install requirement applies to the changes resulting in the emission of the TAC, all the provisions of SC VI.7 apply.
 - b. If an exemption from the Permit to Install requirement applies to the changes resulting in the emission of the TAC, and the exemption involves determining a screening level for the TAC (e.g., R 336.1285(b) when assessing “meaningful change” involves the use of a screening level), all the provisions of SC VI.7 apply.
 - c. If an exemption from the Permit to Install requirement applies to the changes resulting in the emission of the TAC, and the exemption does not involve determining a screening level for the TAC, SC VI.7 does not apply.
7. Except as allowed by SC VI.6, the permittee shall follow the procedure below for any TAC emitted from EU04 for which the AQD has neither established a screening level nor identified which emission limits in SC I.1 through I.31 apply to the TAC.¹ **(R 336.1224, R 336.1225)**
 - a. Before emitting the TAC from EU04, the permittee shall calculate the maximum emission rates and shall determine provisional screening levels according to Rules 229, 231, and 232 (R 336.1229, R 336.1231, and R 336.1232). The permittee shall record this information along with the TAC’s Chemical Abstract Service Registry Number or other identifier specific to the air contaminant, the applicable emission unit ID, the active permit number, and the date when the permittee began to emit the TAC from EU04.
 - b. Calculated emission rates shall include the maximum annual emissions and the maximum emissions for any one-hour period, any eight-hour period, or any 24-hour period. The maximum emissions shall be based on the maximum emissions-generating operating scenarios and on the nature of the activities that cause the emissions.
8. The permittee shall conduct a monthly visible emissions check of the emission control devices listed below during routine operating conditions. For the purposes of this condition, such checks do not have to be in accordance with Method 9. If a check reveals any visible emissions, the permittee shall inspect the particulate filter and perform any maintenance required to eliminate visible emissions.² **(R 336.1910)**
 - a. FL-5410 filter receiver
 - b. FL-5420 dryer filter
 - c. FL-2490 process dust collector
 - d. FL-5446 in-line filter

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. By August 1 of each calendar year, for each TAC emitted from EU04 for the first time during the period from July 1 of the previous calendar year through June 30 of the current calendar year, the permittee shall submit all records required by SC VI.7 to the AQD Toxics Unit Supervisor and to the AQD District Supervisor in an acceptable format.¹ **(R 336.1224, R 336.1225)**

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVEU04-001 ^a (Two Carbon Beds followed by a shared carbon bed)	3 ²	9.33 ²	R 336.1225 40 CFR 52.21(c) & (d)
2. SVEU04-003 ^b (FL-5410-Pulse Jet Cartridge Filter)	6 ²	77.33 ²	R 336.1225 40 CFR 52.21(c) & (d)
3. SVEU04-004 ^b (FL-5420 Dryer Vent Reverse Pulse Jet Cartridge Filter)	6 ²	52 ²	R 336.1225 40 CFR 52.21(c) & (d)
4. SVEU04-005 ^b (FL-2490 Process Pulse Jet Cartridge Filter)	6 x 12 ²	17.2 ²	R 336.1225 40 CFR 52.21(c) & (d)
5. SVEU04-006 (Packaging Vent)	8 ²	42.25 ²	R 336.1225 40 CFR 52.21(c) & (d)
6. SVEU04-007 (FL-5446 Dissolved Solids Primer Resin Airvey System in line Cartridge Filter)	3.5 ²	49 ²	R 336.1225 40 CFR 52.21(c) & (d)

^a This stack is allowed to discharge downward.

^b This stack is allowed to discharge horizontally.

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).

**EU06-LOWPURITY
EMISSION UNIT CONDITIONS**

DESCRIPTION

Low purity anhydrous hydrogen chloride (HCl) storage and distribution process located in the 954 block.

The Low Purity Anhydrous HCl system consists of a railcar unloading system, a vaporizer system, and a storage/distribution system. The anhydrous HCl arrives as a refrigerated liquefied gas and is offloaded from railcars in the 954 block into two storage tanks, V-2901 and V-2902. A vaporizer using a heat transfer fluid vaporizes liquid received from the storage tanks and distributes the gaseous HCl to users via pipeline.

The storage tanks are pressure-controlled by venting HCl to the E-101 Absorber and T-101 Scrubber in FGHCLSCRUBBER or to the 954 THROX Absorber and 954 THROX Scrubber. Emissions from offloading railcars are vented either to the T-101 Scrubber in FGHCLSCRUBBER or to the 954 Throx Absorber and 954 Throx Scrubber.

This emission unit was permitted in PTI No. 159-19 as EU06.

Flexible Group ID: FG954THROX (SRN P1028) or FGHCLSCRUBBER

POLLUTION CONTROL EQUIPMENT

FGHCLSCRUBBER

- T-101 Scrubber: This scrubber receives the exhaust from E-101 Absorber, along with process exhaust from the anhydrous HCl distribution system in EU06-LOWPURITY, EU06-HIGHPURITY (all storage tanks and rail cars and the tank truck loading and unloading facilities) and from the aqueous HCl storage and distribution system in EU05 (SRN P1028). The design vapor flow rate of the scrubber is 470 SCFM and the absorbing media used is recirculated water (approximately 6% HCl). The T-101 Scrubber vents to Vent No. SVHCLSCRUBBER01.

FG954THROX (SRN P1028)

- 954 THROX Absorber (T-3601): The absorber is located after the 954 THROX (thermal heat recovery oxidizer) and prior to the 954 THROX Scrubber. The design vapor flow rate of the absorber is 4470 SCFM and the absorbing media used is water. The absorber receives the exhaust from the 954 THROX and can also receive exhaust directly from the anhydrous HCl distribution system in EU06.
- 954 THROX Scrubber (T-3602): Packed bed scrubber receiving the exhaust from the 954 THROX Absorber. The design vapor flow rate of the scrubber is 6050 scfm and the absorbing media used is water, caustic, and sodium thiosulfate. The scrubber receives the exhaust from the 954 Absorber.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not depressurize the anhydrous HCl distribution system (which includes but is not limited to rail car depressurization, anhydrous HCl storage tank depressurization, and distribution line depressurization) unless one of the following conditions is met.² **(R 336.1225, R 336.1910)**

- a. The T-101 Scrubber is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the T-101 Scrubber includes the conditions outlined in FGHCLSCRUBBER and attaining at least 99.6 percent removal of HCl.
- b. The 954 THROX Absorber and 954 THROX Scrubber are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the 954 THROX Absorber and Scrubber includes the conditions outlined in FG954THROX and attaining at least 99.6 percent removal of HCl.

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. Within 60 days after issuance of PTI No. 159-19, the permittee shall submit a plan to the AQD District Supervisor identifying the operating parameters for FG954THROX that shall be obtained from the operator or owner of FG954THROX. All operating parameter data in the plan for FG954THROX shall be obtained within 30 days of the end of the month to which it pertains. If the plan fails to provide adequate information to demonstrate 99.6 percent removal of HCl, the permittee shall amend the plan. The permittee shall also amend the plan within 45 days after receiving notification from the AQD District Supervisor that the plan does not provide adequate information to demonstrate 99.6 percent removal of HCl. The permittee shall keep the plan and recorded parameter data on file at the facility and make them available to the Department upon request.² **(R 336.1910)**

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)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVHCLSCRUBBER01 (T-101 scrubber) ^a	6 ²	60 ²	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV954THROX (T-3602 Scrubber at FG654THROX) ^b	24 ²	60 ²	R 336.1225, 40 CFR 52.21(c) & (d)

^a This stack's requirements also appear in the conditions for FGHCLSCRUBBER (SRN P1027).

^b This stack's requirements also appear in the conditions for FG954THROX (SRN P1028).

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).

**EU88
 EMISSION UNIT CONDITIONS**

DESCRIPTION

The Cation process in the ion exchange resins manufacturing complex with reactors, separators, storage tanks/silos and related equipment. Most process vents are sent to the 963THROX.

This emission unit is subject to the requirements of 40 CFR Part 63, Subpart FFFF (MON) and 40 CFR Part 63, Subpart EEEE (OLD). EU88 is also subject to the equipment leak provisions of the HON (40 CFR Part 63, Subpart H).

This emission unit was permitted in PTI No. 183-19.

Flexible Group ID: FG963THROX, FGHONFUGITIVES-S1, FGMONMACT-S1, FGOLDMACT-S1

POLLUTION CONTROL EQUIPMENT

T-301 Cation Water scrubber, methylene chloride tank vapor balance system, and afterburner (THROX – thermal heat recovery oxidation unit followed by a quench and scrubber (963THROX)).

I. EMISSION LIMIT(S)

Pollutant	Limit*	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	0.9 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU88	SC VI.3	R 336.1702(a)

* Limits do not include fugitive emissions (i.e., emissions from leaking valves, flanges, etc.) from the process.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not vent the portions of EU881 ducted to the 963 THROX unless one of the following conditions is met.² (**R 336.1224, R 336.1225, R 336.1702(a), R 336.1910**)
 - a. The 963 THROX is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the 963 THROX includes the conditions outlined in FG963THROX and attaining the following efficiencies:
 - i. At least 99.9% destruction of organic compounds
 - ii. At least 99.1% total chloride removal in the THROX Scrubber
 - iii. At least 80% SO₂ removal efficiency
 - b. In the event of a malfunction of the 963 THROX, the portions of EU88 ducted to the 963 THROX shall be vented to the T-301 Cation water scrubber until the process can be safely shut down.
2. The permittee shall not transfer any oleum into the storage tank unless the T-130 Cation water scrubber is installed, maintained, and operated in a satisfactory manner.² (**R 336.1224, R 336.1225, R 336.1910**)
3. The permittee shall not transfer any methylene chloride into the storage tank unless the vapor balance system is installed, maintained, and operated in a satisfactory manner.² (**R 336.1225, R 336.1910**)

4. The hourly average liquid flow rate of the T-301 Cation water scrubber shall not be less than 5 gallons per minute.² **(R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain the T-301 Cation water scrubber with a liquid flow indicator.² **(R 336.1910)**

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall monitor, on a continuous basis, the liquid flow rate of the T-301 Cation water scrubber. For the purpose of this condition, monitoring and recording of data “on a continuous basis” is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar day. In the event the permittee collects more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points recorded during the 15-minute period. Any response to an excursion of the corresponding operational parameter set point or range specified in this permit shall be based upon these 15-minute values. Unless otherwise noted in this permit, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies.² **(R 336.1910)**
2. The permittee shall keep, in a satisfactory manner, continuous liquid flow rate records for the T-301 Cation water scrubber, as required by SC VI.1. All records shall be kept on file and made available to the Department upon request.² **(R 336.1910)**
3. Within 30 days following the end of each calendar month, the applicant shall calculate and record VOC emissions from the process for the previous calendar month and for the 12-month rolling time period ending that month to demonstrate compliance with the emission limit in SC I.1. The permittee shall keep all records on file 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 deviations pursuant to General Condition 23 of Part A. Report shall be postmarked or received by 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. Report shall be postmarked or received by 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)

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. SV88004 ^a (T-301 Cation water scrubber)	4 ²	58 ²	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV963THROX ^b (963 THROX)	24 ²	80 ²	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV88010 ^a (V-401 Neutralizer vessel)	6 ²	39 ²	R 336.1225 40 CFR 52.21(c) & (d)
4. SV88011 (V-1201 Neutralizer vessel)	6 ²	48 ²	R 336.1225, 40 CFR 52.21(c) & (d)
5. SV88014 (458 building roof vent for wastewater basin/sump)	14 x 14 ²	44 ²	R 336.1225, 40 CFR 52.21(c) & (d)
6. SV88019 ^a (V-194 separator pot)	8 ²	46 ²	R 336.1225, 40 CFR 52.21(c)&(d)
7. SV88020 ^a (ME-101 raw material handling system cyclone)	5 ²	63 ²	R 336.1225, 40 CFR 52.21(c)&(d)

^a Exhaust gases are not discharged upwards.

^b This stack's requirements also appear in the conditions for FG963THROX (SRN P1027)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

EU89 EMISSION UNIT CONDITIONS

DESCRIPTION

The copolymer process with reactors, distillation/fractionation columns, separators, storage tanks/silos and related equipment located within the 719/774 block. The recuperative TOX (thermal oxidation) unit associated with this emission unit is a dedicated TOX and does not receive process vents from any other emission unit. EU89 is subject to the MON (40 CFR Part 63, Subpart FFFF) and OLD (40 CFR Part 63, Subpart EEEE). By virtue of being subject to Subpart FFFF, this emission unit is also subject to the equipment leak provisions of 40 CFR Part 63, Subpart H.

EU89 is a CAM-subject emission unit subject to the requirements of 40 CFR Part 64. The CAM-subject pollutant for this emission unit is VOC.

This emission unit was permitted in PTI 190-12A.

Flexible Group ID: FGMONMACT-S1, FGOLDMACT-S1, FGHONFUGITIVES-S1, FGBENZENEWASTE-S1

POLLUTION CONTROL EQUIPMENT

- Cyclones 1 through 10 identified as the following:
 - Feed hopper cyclone (SV89012)
 - C fluid bed dryer cyclone (SV89014)
 - B fluid bed dryer cyclone (SV89015)
 - A fluid bed dryer cyclone (SV89016)
 - H-801 cyclone (SV89017)
 - 624 feed hopper cyclone (SV89018)
 - 604 feed hopper cyclone (SV89019)
 - 614 feed hopper cyclone (SV89020)
 - C-600 dryer cyclone (SV89044)
 - C-550 addback cyclone (SV89046)
- TOX (recuperative thermal oxidation unit - 4.0 MMBTU/hr capacity) (SV89001). This is a CAM-subject control device.
- Wet Venturi Packaging Hopper Dust Scrubber System (VS-555)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC+	3.4 pph ²	Hourly	Emissions exhausted from the TOX (SV89001)	SC VI.1	R 336.1702(a)
2. VOC	10.8 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU89	SC VI.1, VI.2	R 336.1702(a)
3. Styrene+	3.5 tpy ¹	12-month rolling time period as determined at the end of each calendar month	EU89	SC VI.2	R 336.1225
4. PM	2.1 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU89	SC VI.2	R 336.1331, R 336.2802

- * This limit does not include fugitive emissions (emissions from leaking valves, flanges, etc.) from the emission unit.
- 5. There shall be no visible emissions from SV89032, SV89034, SV89041, or SV89042.² (R 336.1331)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Annual production of low conversion gel products. (LCP)	50 percent of the maximum total annual gel production capacity in EU89 ²	12-month rolling time period as determined at the end of each calendar month	EU89	SC VI.4, VI.5	R 336.1225, R 336.1702(a)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the portion of the process connected to the TOX unless the TOX is preheated to the minimum temperature of 717°C and with a minimum retention time of 0.5 seconds. Compliance with the temperature limit shall be based upon 15-minute average data. An excursion of the temperature limit is the exceedance of the operational parameter limit or acceptable range defined in this condition, or demonstrated during testing. In the event these conditions cannot be met or an excursion is detected, a shutdown of the process venting to the TOX will occur after the process has been brought to a safe state.² (R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(d))
2. The permittee shall maintain the TOX with a temperature monitoring device. This includes, but is not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, and maintaining the device according to manufacturer’s specifications (e.g., equipment calibration, etc.).² (R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(b))

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 monitor and record, on a continuous basis, the preheated temperature of the TOX. For the purpose of this condition, monitoring and recording of data “on a continuous basis” is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar day. In the event the permittee records more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points recorded during the 15-minute period. Unless otherwise noted in this table, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies. Data recorded during monitoring malfunctions, associated repairs, and required Quality Assurance / Quality Control (QA/QC) activities shall not be used for 40 CFR Part 64 compliance.² (R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(c))
2. Within 30 days following the end of each calendar month, the permittee shall calculate and record emissions from the process for the previous calendar month to demonstrate compliance with the 12-month rolling time period

emission limits specified in EU89 SC I.2, I.3, and I.4. These records shall be made available to the AQD upon request.² **(R 336.1331, R 336.1702(a))**

3. The permittee shall conduct a quarterly visible emissions check of each vent listed below during routine operating conditions. For the purpose of this condition, such checks do not have to be in accordance with Method 9. If a check reveals any visible emissions from a vent(s) (other than uncombined water vapor), the permittee shall take the actions listed below for the vent(s) to eliminate visible emissions. The permittee shall keep records of the results of the quarterly visible emissions check and of any maintenance performed or any corrective actions taken after visible emissions are observed. The permittee shall keep these records on file and make them available to the AQD upon request.² **(R 336.1331)**
 - a. For vents 1) through 10), vents equipped with cyclones, if a check reveals any visible emissions from a vent(s) (other than uncombined water vapor), the permittee shall inspect the cyclone associated with the vent(s) and perform any maintenance required to eliminate visible emissions.
 - 1) SV89012
 - 2) SV89014
 - 3) SV89015
 - 4) SV89016
 - 5) SV89017
 - 6) SV89018
 - 7) SV89019
 - 8) SV89020
 - 9) SV89044
 - 10) SV89046
 - b. For vents 11) through 14), vents without cyclones, if a check reveals any visible emissions from a vent(s) (other than uncombined water vapor), the permittee shall implement any corrective actions required to eliminate visible emissions.
 - 11) SV89032
 - 12) SV89034
 - 13) SV89041
 - 14) SV89042
4. The permittee shall monitor and record, in a satisfactory manner, the LCP gel production in EU89 on a monthly basis.² **(R 336.1225, R 336.1702(a))**
5. Each calendar month, the permittee shall calculate the fraction of total gel production capacity in EU89 that consists of LCP, for the preceding 12-month rolling time period. 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))**
6. 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 practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**
7. Except for, as applicable, monitoring malfunctions, associated repairs, and required QA/QC (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 QA/QC shall not be used for 40 CFR Part 64 compliance, 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, in frequent, 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))**

8. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan if required by the Administrator pursuant to 40 CFR 64.8, 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))**
9. The permittee shall properly maintain the monitoring system including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(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 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. Each semiannual report of deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. **(40 CFR 64.9(a)(2)(i))**
5. Each semiannual report of deviations shall include summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than monitor downtime associated with zero and span or other daily calibration checks, if applicable). **(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 Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV89001 (TOX vent stack)	36 ²	30 ²	R 336.1225, R 336.2803, R 336.2804
2. SV89014 (C fluid bed dryer cyclone)	16 ²	45.75 ²	R 336.1225, R 336.2803, R 336.2804
3. SV89015 (B fluid bed dryer cyclone)	16 ²	45.75 ²	R 336.1225, R 336.2803, R 336.2804
4. SV89016 (A fluid bed dryer cyclone)	16 ²	45.75 ²	R 336.1225, R 336.2803, R 336.2804
5. SV89044 (C 600 dryer cyclone)	36 ²	139 ²	R 336.1225, R 336.2803, R 336.2804
6. SV89055 (Slurry tank vent)	6 ²	40.9 ²	R 336.1225, R 336.2803, R 336.2804
7. SV89056 (Slurry tank vent)	6.5 ²	34.5 ²	R 336.1225, R 336.2803, R 336.2804
8. SV89057 (Slurry tank vent)	6 ²	40.9 ²	R 336.1225, R 336.2803, R 336.2804
9. SV89060 (Dewatering equipment)	14 ²	100 ²	R 336.1225, R 336.2803, R 336.2804

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
10. SV89066 (Reactor nitrogen purge)	2 ²	45 ²	R 336.1225, R 336.2803, R 336.2804
11. SV89077 (Monomer tank)	2 ²	60 ²	R 336.1225, R 336.2803, R 336.2804
<i>The following stacks and vents are not required to discharge unobstructed vertically upwards.</i>			
12. SV89058 (Slurry tank)	15.3 ²	Not restricted ²	R 336.1225, R 336.2803, R 336.2804
13. SV89061 (Dewatering equipment)	8 ²	0.75 ²	R 336.1225, R 336.2803, R 336.2804
14. SV89074 (Monomer tank)	3 ²	50 ²	R 336.1225, R 336.2803, R 336.2804
15. SV89075 (Monomer tank)	2 ²	17 ²	R 336.1225, R 336.2803, R 336.2804
16. SV89076 (Monomer tank)	2 ²	6 ²	R 336.1225, R 336.2803, R 336.2804
17. SV89089 (TOX header bypass)	4 ²	25 ²	R 336.1225, R 336.2803, R 336.2804
18. SV89090 (Dempster station)	2 ²	4 ²	R 336.1225, R 336.2803, R 336.2804

IX. OTHER REQUIREMENT(S)

1. 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 CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. **(40 CFR 64.7(e))**

Footnotes:

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

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

**EUANION_XCHG
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Existing ion exchange resin manufacturing facility with direct-flame afterburner and scrubber control.

EUANION_XCHG is subject to the MON (40 CFR Part 63, Subpart FFFF) and OLD (40 CFR Part 63, Subpart EEEE). By virtue of being subject to Subpart FFFF, this emission unit is also subject to the equipment leak provisions of 40 CFR Part 63, Subpart H.

EUANION_XCHG is a CAM subject emission unit subject to the requirements of 40 CFR Part 64. The CAM subject pollutant for this emission unit is VOC.

This emission unit was permitted in PTI 233-74I.

Flexible Group ID: FG963THROX, FGHONFUGITIVES-S1, FGMONMACT-S1, FGOLDMACT-S1

POLLUTION CONTROL EQUIPMENT

- Scrubber 1 - Packed tower water scrubber mainly for the removal of acidic vapors. The liquid influent to this scrubber comes from Scrubber 2 and the liquid effluent from this scrubber discharges to Scrubber 3. The scrubber vapors discharge to Scrubber 2.
- Scrubber 2 - Packed tower water scrubber. The liquid effluent is discharged to Scrubber 1. The scrubber vapors discharge to stack ID SV963THROX.
- Scrubber 3 - Venturi scrubber mainly for the removal of amines. The liquid effluent is discharged to the Dow wastewater treatment plant (WWTP). The scrubber vapors discharge to Scrubber 1.
- Scrubber 4 - Packed tower water scrubber. The liquid effluent is discharged to the Dow wastewater treatment plant (WWTP). The scrubber vapors discharge to stack ID SVEG9202. This is a CAM subject control device. Monitoring and recordkeeping the liquid flow rate of the scrubber under the MON is considered “presumptively acceptable” under CAM.
- Scrubber 5A & 5B - A water scrubber with an induced draft fan. The liquid effluent is discharged to the Dow WWTP. The scrubber vapors discharge to stack ID nos. SVEG9204A and SVEG9204B.
- 963THROX & Scrubber 6 – 963THROX is a natural gas fired afterburner with heat recovery, a.k.a. “thermal oxidizer with heat recovery”. Scrubber 6 is a packed tower caustic scrubber, having two sections, that is immediately downstream of the 963THROX. The first section uses water as the scrubbing media. The liquid effluent from this section is discharged to the Dow WWTP. The second section uses aqueous caustic and sodium thiosulfate and water as the scrubbing media. Scrubber liquid effluent is discharged to the Dow WWTP. Both the 963THROX and scrubber 6 vapors discharge to the air through stack no. SV963THROX. This is a CAM subject control device.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	4.3 pph ²	Hourly	EUANION_XCHG	SC VI.1	R 336.1702(a)
2. VOC	2.6 tpy ²	12-month rolling time period as determined at the end of each calendar month	EUANION_XCHG	SC VI.1, VI.6	R 336.1702(a)
3. HCl	2.2 pph ¹	Hourly	EUANION_XCHG	SC VI.3	R 336.1224, R 336.1225
4. Chlorine	1.0 pph ¹	Hourly	EUANION_XCHG	SC VI.3	R 336.1224, R 336.1225

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the process steps of EUANION_XCHG exhausted to Scrubber 4 unless the scrubber is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of Scrubber 4 includes, but is not limited to, maintaining a minimum liquid flow rate of 45 gallons per minute (gpm), or any other liquid flow rate limit demonstrated during testing. Compliance with this limit shall be based on hourly average monitoring data. An excursion of the limit specified in this condition is an exceedance of the operational parameter limit or acceptable range defined in this condition, or demonstrated during testing. Upon detecting an excursion of the limit specified in this condition, the permittee shall restore operation of the scrubber 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).² (R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(d), 40 CFR Part 63, Subpart FFFF)
2. The permittee shall not operate the process steps of EUANION_XCHG exhausted to the following scrubbers unless Scrubber 1, Scrubber 2, Scrubber 3, Scrubber 5A, and Scrubber 5B are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of Scrubber 1 includes, but is not limited to, maintaining a minimum liquid flow rate of 90 gpm. Satisfactory operation of Scrubber 2 includes, but is not limited to, maintaining a minimum liquid flow rate of 45 gpm. Satisfactory operation of Scrubber 3 includes, but is not limited to, maintaining a minimum liquid flow rate of 25 gpm. Satisfactory operation of Scrubber 5A and Scrubber 5B includes, but is not limited to, maintaining a minimum level of 5 inches of water in each scrubber reservoir when Scrubber 5A and 5B are in use.² (R 336.1225, R 336.1702(a), 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 monitor and record the scrubber liquid flow rate for Scrubber 4 on an hourly basis. For the purpose of this condition, “on an hourly basis” means a minimum of one reading per hour. In the event the permittee collects more than one data point during the one hour period, the data point recorded may be the average (rolling or block) during the one hour period. Unless otherwise noted in this table, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (QA/QC) (including, as applicable, calibrations 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 QA/QC activities shall not be used for 40 CFR Part 64 compliance, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all of the data collected during all other periods in assessing the operation of the control 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.² (R 336.1225, R 336.1702(a), R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(c), 40 CFR Part 63, Subpart FFFF)

2. The permittee shall monitor the scrubber liquid flowrates for Scrubber 1, Scrubber 2, and Scrubber 3 on an hourly basis. For the purpose of this condition, "on an hourly basis" means a minimum of one reading per hour. In the event the permittee collects more than one data point during the one hour period, the data point recorded may be the average (rolling or block) during the one hour period.² (R 336.1225, R 336.1702(a), R 336.1910)
3. The permittee shall keep hourly records of scrubber liquid flowrates for Scrubber 1, Scrubber 2, and Scrubber 3. All records shall be made available to the Department upon request.² (R 336.1910)
4. The permittee shall keep per shift records of each liquid level of the scrubber reservoirs associated with Scrubber 5A and Scrubber 5B. All records shall be made available to the Department upon request.² (R 336.1910)
5. The permittee shall keep maintenance and/or inspection records for the pneumatic conveying system used for the transfer of paraformaldehyde. All records shall be made available to the Department upon request.² (R 336.1310, R 336.1901)
6. The permittee shall keep records of monthly emission calculations and results to demonstrate compliance with the emission limits listed in SC I.1 – I.4. Worst case emission totals may be calculated using the method described in Appendix 7, Section 7.1 of this permit. If the permit limit is met using the method described in Appendix 7, Section 7.1 of this permit, then no further calculations are needed. If the worst case emissions as calculated in Appendix 7, Section 7.1 of this permit are above permitted limits, further calculations that reflect actual operations will be used to determine compliance with the permitted limit. Within 30 days, following the end of each calendar month, the permittee shall calculate and record emissions from the process for the previous calendar month to demonstrate compliance with the 12-month rolling time period emission totals of this permit.² (R 336.1224, R 336.1702(a))
7. For Scrubber 4, the permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. (40 CFR 64.7(b))
8. For Scrubber 4, the permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan if required by the Administrator pursuant to 40 CFR 64.8 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))

See Appendix 7

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 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. Each semiannual report of deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. (40 CFR 64.9(a)(2)(i))
5. Each semiannual report of deviations shall include summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than monitor downtime associated with zero and span or other daily calibration checks, if applicable). (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. SVEG9202 (Scrubber 4)	12 ¹	77 ¹	R 336.1225
2. SVEG9204A (Scrubber 5A)	6 ¹	66 ¹	R 336.1225
3. SVEG9204B (Scrubber 5B)	10 ¹	95 ¹	R 336.1225
4. SVEG9205A (Solids hopper 1)	2 ¹	74 ¹	R 336.1225
5. SVEG9205B (Solids hopper 2)	2 ¹	74 ¹	R 336.1225
6. SVEG9205C (Solids hopper 3)	2 ¹	88 ¹	R 336.1225
7. SV963THROX	18 ²	80 ²	R 336.1225 40 CFR 52.21(c) & (d)

SVEG9204A, SVEG9204B, SVEG9205A, SVEG9205B & SVEG9205C have a horizontal vent orientation.

IX. OTHER REQUIREMENT(S)

1. The permittee shall not operate EUANION_XCHG process steps exhausted to the 963THROX unless the off-gas vent emissions are ducted to the 963THROX and Scrubber 6.² (R 336.1702(a))
2. The permittee shall not operate the pneumatic conveying system for paraformaldehyde unless the closed loop nitrogen recycle system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation means that it shall be operated and maintained in accordance with the manufacturer’s specifications.² (R 336.1301, R 336.1331, R 336.1901, R 336.1910)
3. The permittee shall equip and maintain Scrubber 4 with a liquid flow indicator. This includes, but is not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, and maintaining the device according to manufacturer’s specifications (e.g., equipment calibration, etc.).² (R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(b))
4. The permittee shall equip and maintain Scrubbers 1 - 3 with a liquid flow indicator.² (R 336.1910)
5. The permittee shall equip and maintain each of the associated scrubber reservoirs of Scrubber 5A and Scrubber 5B with liquid level indicators.² (R 336.1910)
6. For Scrubber 4, 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 CAM Plan to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (40 CFR 64.7(e))

Footnotes:

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

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

**EURESIN_DRYER
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Crude resin dryer used in conjunction with the resin manufacturing process. Resin is manually added to the dryer, screened and sent to a reactor in the resin manufacturing process. Equipment located in 458 Building. EURESIN_DRYER is subject to the MON (40 CFR Part 63, Subpart FFFF). By virtue of being subject to Subpart FFFF, this emission unit is also subject to the equipment leak provisions of 40 CFR Part 63, Subpart H.

This emission unit was permitted in PTI 570-93A.

Flexible Group ID: FGMONMACT-S1, FGHONFUGITIVES-S1

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Styrene	1.0 pph ¹	Hourly	EURESIN_DRYER	SC VI.1	R 336.1224 R 336.1225
2. Styrene	0.60 tpy ¹	12-month rolling time period as determined at the end of each calendar month	EURESIN_DRYER	SC VI.1	R 336.1224 R 336.1225

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

- The permittee shall keep records of monthly emission calculations and results to demonstrate compliance with the emission limits listed in this table. Within 30 days following the end of each calendar month, the permittee shall calculate and record emissions from the process for the previous calendar month to demonstrate compliance with the 12-month rolling time period emission limits specified in this table. These records shall be made available to the AQD upon request.¹ **(R 336.1225)**

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 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)

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. SV92013 (Dryer vent) ^a	14 x 16 ¹	8 ¹	R 336.1225

^aThe exhaust gases may be discharged unobstructed horizontally to the ambient air.

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU94
 EMISSION UNIT CONDITIONS**

DESCRIPTION

The divinylbenzene (DVB) process in the specialty monomers manufacturing block with process cracker furnaces G and H, reactors, distillation/fractionation columns, separators, storage tanks/silos and related equipment. Cracker furnaces G and H burn both natural gas and process vent gas and have a heat input capacity of 6.76 MMBTU/hr each. The DVB process is subject to the MON (40 CFR Part 63, Subpart FFFF) and OLD (40 CFR Part 63, Subpart EEEE). By virtue of being subject to Subpart FFFF, this emission unit is also subject to the equipment leak provisions of 40 CFR Part 63, Subpart H. The DVB process also has a storage tank (V-401) subject to the requirements of 40 CFR Part 60, Subpart Kb.

This emission unit was permitted in PTI 1311-90C.

Flexible Group ID: FGMONMACT-S1, FGOLDMACT-S1, FGHONFUGITIVES-S1, FGBENZENEWASTE-S1

POLLUTION CONTROL EQUIPMENT

- Sorbathene adsorber or pressure swing adsorption (PSA). Activated carbon adsorber comprised of two units which alternate in operation. These units are referred to as V-281A and V-281B. The PSA unit normally discharges emissions to cracker H. When cracker H is down, the PSA unit will discharge to the atmosphere through SV94001.
- Raw material storage tank V-401 vapor balance system

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	1.9 tpy ¹	12-month rolling time period as determined at the end of each calendar month	EU94	SC VI.2, VI.3	R 336.1225
2. Benzene	579 ppy ¹	12-month rolling time period as determined at the end of each calendar month	EU94	SC VI.2, VI.3	R 336.1225
3. Ethylvinylbenzene	429 ppy ¹	12-month rolling time period as determined at the end of each calendar month	EU94	SC VI.2, VI.3	R 336.1225

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall comply with the requirements of 40 CFR Part 60, Subpart Kb for raw material storage tank V 401. **(40 CFR Part 60, Subpart Kb)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the portions of EU94 that vent to the Sorbathene adsorber unless the Sorbathene adsorber is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes, but is not limited to, maintaining a carbon bed operating temperature (top section) of less than 50°C in either carbon bed adsorber V-281A or V-281B (whichever is receiving process exhaust).² **(R 336.1225, R 336.1910)**

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the temperature of the top section of either carbon bed adsorber V-281A or V-281B (whichever is receiving process exhaust) on a continuous basis. On a “continuous basis” is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar day. In the event the permittee records more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points recorded during the 15-minute period. Any response to an excursion of the corresponding operational parameter set point or range specified in this table shall be based upon these 15-minute values. Unless otherwise noted in this table, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies.² **(R 336.1225, R 336.1910)**
2. The permittee shall keep, in a satisfactory manner, records of the continuous carbon bed temperatures for EU94, as required by SC VI.1. All records shall be kept on file for a period of five years and made available to the Department upon request.² **(R 336.1225, R 336.1910)**
3. Within 30 days, following the end of each calendar month, the applicant shall calculate and record emissions from the process for the previous calendar month to demonstrate compliance with the 12-month rolling time period emission totals of this table. All records shall be kept on file for a period of five years and made available to the Department upon request.¹ **(R 336.1225)**

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 deviations pursuant to General Condition 23 of Part A. Report shall be postmarked or received by 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. Report shall be postmarked or received by 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)

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. SV94001 (PSA)	6 ¹	50 ¹	R 336.1225
2. SV94002 (G Cracker)	37 ¹	60 ¹	R 336.1225
3. SV94003 (H Cracker)	30 ¹	103 ¹	R 336.1225
4. SV94004 ^a (North Tankfarm)	6 ¹	28 ¹	R 336.1225
5. SV94005 ^a (West tank farm)	4 ¹	1 ¹	R 336.1225
6. SV94006 ^b (V-422 tank)	2 ¹	20 ¹	R 336.1225
7. SV94007 ^a (Process day tanks)	4 ¹	1 ¹	R 336.1225
8. SV94008 (582 drum loading)	18 ¹	18 ¹	R 336.1225
9. SV94009 (1099 Tank Truck Loading)	24 ¹	9.8 ¹	R 336.1225
10. SV94010 ^b (Product storage tanks)	3 ¹	21 ¹	R 336.1225
11. SV94011 ^b (755storage tanks)	2 ¹	0.03 ¹	R 336.1225

^a Storage tank vents exhausting downward

^b Goose neck down vent orientation

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU95
 EMISSION UNIT CONDITIONS**

DESCRIPTION

The tar incinerator in the specialty monomers block with storage tanks/silos and related equipment. The tar incinerator is comprised of a boiler sized at 48 MMBTU/hr heat input while the burner is rated for 15 MMBTU/hr. The boiler is fired by natural gas and by-product fuel. By-product fuel is a blend of distillation residues from the specialty monomers facility (process tars) and flux oil for viscosity control. The tar incinerator, classified as an Energy Recovery Unit, is subject to 40 CFR Part 60, Subpart DDDD (Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units) and Michigan Air Pollution Control Rule R 336.1974 (Emissions Standards for Existing Commercial and Industrial Solid Waste Incinerators).

This emission unit was permitted in PTI 694-88A.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

- Low NOx burner technology
- Low excess air firing

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate Matter (PM)	0.8 pph ²	Hourly	EU95	SC V.1	R 336.1331
2. PM	3.36 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU95	SC VI.2	R 336.1331
3. Sulfur Dioxide (SO ₂)	0.61 pph ²	Hourly	EU95	SC IX.1	R 336.1402
4. SO ₂	2.67 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU95	SC VI.2	R 336.1402
5. Nitrogen Dioxide (NO ₂) [*]	1.3 lbs/MMBTU heat input ²	Hourly ^A	EU95	SC V.1	40 CFR 52.21
6. NO ₂ [*]	23 pph ²	Hourly	EU95	SC V.1	40 CFR 52.21
7. NO ₂ [*]	87 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU95	SC VI.2	40 CFR 52.21
8. Volatile Organic Compound (VOC) ^{**}	0.0023 lb/MMBTU heat input ²	Hourly ^A	EU95	SC V.1	R 336.1702
9. VOC ^{**}	0.16 pph ²	Hourly	EU95	SC V.1	R 336.1702

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
10. VOC**	0.058 tons/month ²	12-month rolling time period as determined at the end of each calendar month	EU95	SC VI.2	R 336.1702
11. Cadmium***	0.023 milligrams per dry standard cubic meter	Hourly ^A	EU95	SC V.3	40 CFR Part 60, Subpart DDDD Table 7, R 336.1974(9)(d)
12. Carbon monoxide***	35 parts per million dry volume	Hourly ^A	EU95	SC V.3	40 CFR Part 60, Subpart DDDD Table 7, R 336.1974(9)(d)
13. Dioxins/furans (total mass basis) ***	2.9 nanograms per dry standard cubic meter	Hourly ^A	EU95	SC V.3	40 CFR Part 60, Subpart DDDD Table 7, R 336.1974(9)(d)
14. Dioxins/furans (toxic equivalency basis) ***	0.32 nanograms per dry standard cubic meter	Hourly ^A	EU95	SC V.3	40 CFR Part 60, Subpart DDDD Table 7, R 336.1974(9)(d)
15. Hydrogen chloride***	14 parts per million dry volume	Hourly ^A	EU95	SC V.3	40 CFR Part 60, Subpart DDDD Table 7, R 336.1974(9)(d)
16. Lead***	0.096 milligrams per dry standard cubic meter	Hourly ^A	EU95	SC V.3	40 CFR Part 60, Subpart DDDD Table 7, R 336.1974(9)(d)
17. Mercury***	0.0024 milligrams per dry standard cubic meter	Hourly ^A	EU95	SC V.3	40 CFR Part 60, Subpart DDDD Table 7, R 336.1974(9)(d)
18. Oxides of nitrogen (NOx)***	76 parts per million dry volume	Hourly ^A	EU95	SC V.3	40 CFR Part 60, Subpart DDDD Table 7, R 336.1974(9)(d)
19. PM filterable***	110 milligrams per dry standard cubic meter	Hourly ^A	EU95	SC V.3	40 CFR Part 60, Subpart DDDD Table 7, R 336.1974(9)(d)
20. SO ₂ ***	720 parts per million dry volume	Hourly ^A	EU95	SC V.3	40 CFR Part 60, Subpart DDDD Table 7, R 336.1974(9)(d)
21. Opacity	10% Opacity	1-hour block average	EU95	SC V.4	40 CFR Part 60, Subpart DDDD 60.2675(h), R 336.1974(9)(d)

* NO₂ emissions when firing natural gas and/or by-product fuel(s)

** VOC (as non-methane hydrocarbons) when firing natural gas and/or by-product fuel(s)

- *** All emission limitations (except for opacity) are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the total mass basis limit or the toxic equivalency basis limit.
- A If a stack test is used to demonstrate compliance with this emission limit, the hourly emission rate during testing shall be determined by the average of the qualified test runs performed in accordance with the method requirements.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. If the oxygen content in the exhaust gas stack from the incinerator is less than 1.5% or greater than 16%, the permittee shall implement corrective action and maintain a record of action taken to prevent reoccurrence. **(R 336.1213(3))²**
2. The permittee shall not operate the incinerator above 9.9 MMBtu/hr on an annual average heat input rate.²

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. Verification of VOC, PM, SO₂, and/or NO_x emission rates from the tar incinerator by testing, at owner's expense, in accordance with Department requirements, may be required. The testing shall be conducted within 60 days following the receipt of the written notification of the requirement. Verification of emission rates includes the submittal of a complete report of the test results. If testing is required, a complete test plan must be submitted to the Air Quality Division. The final plan must be approved by the Division prior to testing and a complete report of test results must be submitted to the Division within 60 days following the last date of testing.² **(R 336.2001, R 336.2003, R 336.2004)**
2. The permittee shall comply with the performance testing requirements specified in 40 CFR 60.2690 to 40 CFR 60.2695. **(R 336.1974(9)(e))**
3. The permittee shall conduct initial and subsequent performance tests in accordance with the requirements of 40 CFR Part 60, Subpart DDDD. The initial performance test must be conducted no more than 180 days after the final date of compliance. The permittee shall submit a test plan for review and approval to the AQD at least 60 days prior to testing. Results of the performance test shall be submitted to the AQD within 60 days of the last date of the test. **(40 CFR 60.2705, R 336.1974(9)(e), R 336.2001)**
4. The permittee shall conduct an annual performance test for the pollutants listed in Table 2 or Tables 6 through 9 of 40 CFR Part 60, Subpart DDDD. The annual performance test shall be conducted between 11 and 13 months of the previous performance test. Opacity must be measured using EPA Reference Method 9 at 40 CFR Part 60. **(40 CFR 60.2710(b), 40 CFR 60.2715, R 336.1974(9)(g))**
 - a. The permittee may conduct performance tests less often in accordance with the requirements of 40 CFR 60.2720(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, on a continuous basis, the oxygen content in the exhaust gas stack from the incinerator. For the purpose of this condition, "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes. **(R 336.1213(3))**

2. Within 30 days following the end of each calendar month, the permittee shall calculate and record emissions from the process for the previous calendar month to demonstrate compliance with the monthly and 12-month rolling time period emission limits specified in this table. These records shall be made available to the AQD upon request. **(R 336.1213(3))**
3. The permittee shall calculate the annual average heat input rate for the tar incinerator monthly, for the preceding 12-month rolling time period, 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. **(40 CFR 52.21, R 336.1702)**
4. The permittee shall conduct a weekly visible emissions check of the tar incinerator vent during routine operating conditions. For the purpose of this condition, such checks do not have to be in accordance with Method 9 and can be performed using a color camera and monitor system or field observation. If a check reveals any visible emissions from the vent (excluding uncombined water vapor), the permittee shall perform any maintenance required to eliminate visible emissions. The permittee shall keep records of the results of the weekly visible emissions check and of any maintenance performed after visible emissions are observed. These records shall be kept on file and made available to the AQD upon request. **(40 CFR Part 60, Subpart DDDD 60.2675(h), R 336.1974(9)(d))**
5. The permittee shall comply with all applicable recordkeeping requirements of 40 CFR 60.2740. **(R 336.1974(9)(i))**
6. All records required under 40 CFR Part 60, Subpart DDDD must be available onsite in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the administrator in accordance with 40 CFR 60.2745. **(R 336.1974(9)(i))**

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 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 the initial commercial and industrial solid waste incinerators (CISWI) performance test report in accordance with 40 CFR 60.2760, no later than 60 days following the initial performance test. **(R 336.1974(8))**
5. The permittee shall submit an annual CISWI report in accordance with 40 CFR 60.2765 and 40 CFR 60.2770. **(R 336.1974(8))**
6. The permittee shall submit CISWI emission and operating limit deviation reports in accordance with 40 CFR 60.2775 and 60.2780. **(R 336.1974(8))**
7. The permittee shall submit CISWI qualified operator deviation reports in accordance with 40 CFR 60.2785. **(R 336.1974(8))**
8. The permittee shall submit notification of continued operation of a CISWI unit with a waste-to-fuel switch, 30 days prior to the effective date of the change in accordance with 40 CFR 60.2790. **(R 336.1974(8))**

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. SV95008 (Incinerator)	35 ²	40 ²	40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. A copy of the sulfur content of natural gas for each specific contract shall be made available to the AQD upon request. The permittee shall install an operable natural gas sample port prior to the burner. The sulfur dioxide emission limits are based on the use of natural gas with a maximum sulfur content of 5.5 grains per 100 standard cubic feet.² **(R 336.1402)**
2. The permittee shall comply with all applicable provisions of the New Source Performance Standards in 40 CFR Part 60, Subpart DDDD for Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units as adopted by reference in R 336.1902 **(40 CFR Part 60, Subpart DDDD, R 336.1974)**
 - a. Closing or reopening of unit in 40 CFR 60.2610 and 60.2615
 - b. Waste management plan in 40 CFR 60.2620 to 60.2630
 - c. Operator training and qualifications in 40 CFR 60.2635 to 60.2665
 - d. Emission and operating limits in 40 CFR 60.2670 to 40 CFR 60.2680 and Tables 2 to 3 and 6 to 9
 - e. Performance testing in 40 CFR 60.2690 to 40 CFR 60.2695
 - f. Inspection of control equipment in 40 CFR 60.2706 and 40 CFR 60.2710(k)
 - g. Initial and continuous compliance in 40 CFR 60.2700 to 40 CFR 60.2725 and 40 CFR 60.7
 - h. Monitoring in 40 CFR 60.2730 to 40 CFR 60.2735
 - i. Recordkeeping in 40 CFR 60.2740 to 40 CFR 60.2745
 - j. Title V Operating Permit requirements in 40 CFR 60.2805
 - k. Toxic Equivalency Factors in Table 4
 - l. Definitions in 40 CFR 60.2875
 - m. Reporting formats and date changes in 40 CFR 60.2795 and 40 CFR 60.2800

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).

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
FG963THROX	<p>28.2 million BTU/hr natural gas fired afterburner with heat recovery, a.k.a. "thermal oxidizer with heat recovery" (THROX), located at 963 Building. This afterburner receives process vents from various emission units at DDP, N&B, DAS/Corteva, Dow, and Trinseo LLC.</p> <p>This THROX is subject to 40 CFR Part 63, Subparts U, FFFF and UUUU. In addition, by virtue of being subject to these regulations, FG963THROX is also subject to the equipment leak provisions of the HON (40 CFR Part 63, Subpart H).</p> <p>FG963THROX is a CAM subject emission unit subject to the requirements of 40 CFR Part 64. The CAM subject pollutants for this emission unit are VOC and HAPs.</p>	<p>DDP emission units: EU88, EUANION_XCHG, EURULE290</p> <p>N&B Emission Unit: EUB2 in Section 2</p> <p>DAS/Corteva (SRN P1028) emission units: EU03, EU11, EU12b</p> <p>Dow (SRN A4033) emission units: EU82</p> <p>Trinseo LLC (SRN P1025) emission units: EUB1</p>
FGHCLSCRUBBER	<p>E-101 is a falling film absorber that receives process exhaust from pressure controlling the anhydrous HCl storage tanks. The absorber uses dilute aqueous HCl (<6%) as the recirculating fluid. The vent from E-101 absorber goes through T-101 Scrubber before exhausting to atmosphere.</p> <p>T-101 is a recirculated water scrubber (<6% HCl) that receives process exhaust from both the EU06-LOWPURITY, EU06-HIGHPURITY in Section 2, anhydrous and EU05 (SRN P1028) aqueous HCl storage and distribution systems, all storage tanks, rail cars, and tank truck loading and unloading facilities. T-101 is subject to 40 CFR Part 63, Subpart NNNNN.</p> <p>The Backup Venturi Scrubber is used as a backup to T-101 Scrubber for the aqueous HCl storage tanks V-2126 and V-2127, which are part of EU05. The scrubbing medium for the Backup Venturi Scrubber is water.</p>	<p>DDP emission units: EU06-LOWPURITY</p> <p>N&B Emission Unit: EU06-HIGHPURITY in Section 2</p> <p>DAS/Corteva (SRN P1028) emission units: EU05</p>

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
	This flexible group was permitted in PTI No. 159-19..	
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.	EURULE290
FGCOLDCLEANERS-S1	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.	EUCOLDCLEANER-S1
FGHONFUGITIVES-S1	Emission units subject to the requirements of 40 CFR Part 63, Subparts A (General Provisions) and H (HON for Equipment Leaks).	EU88, EU89, EU94, EUANION_XCHG, EURESIN_DRYER, EURULE290
FGRULE703	Any new or future storage vessel subject to the requirements of R 336.1703 (Rule 703). Storage vessels subject to AQD Rule 703 are those which meet the following criteria: 1. Receive gasoline from a delivery vessel into any new stationary vessel of more than 2000 gallon capacity located at any gasoline dispensing facility; AND 2. Were placed into operation on or after July 1, 1979, or for which an application for a permit to install, pursuant to the provisions of Part 2 of Act 451 is made to EGLE on or after July 1, 1979, or both, except for any process or process equipment which is defined as an "existing source" under R 336.1601.	EURULE703
FGOLDMACT-S1	Each new, reconstructed, or existing Organic Liquid Distribution (OLD) (non-gasoline) operation that is part of an emission unit subject to the requirements of 40 CFR Part 63, Subpart EEEEE. The 40 CFR Part 63, Subpart EEEEE affected source is comprised of storage tanks, transfer racks, equipment leak components associated with storage tanks, transfer racks and pipelines, transport vehicles, and all containers while loading or unloading at transfer racks subject to Subpart EEEEE. Equipment listed in 40 CFR 63.2338(c) that is part of an affected source under another National Emission Standards for Hazardous Air Pollutants (NESHAP) is excluded from the affected source.	EU04, EU88, EU89, EU94, EUANION_XCHG, EURULE290
FGMONMACT-S1	These conditions apply to miscellaneous organic chemical manufacturing process units (MCPU) that are located at, or are part of, a major source as defined in section 112(a) of the Clean Air Act and that meet all the criteria specified in 40 CFR Part 63, Subpart FFFF (40 CFR 63.2435). Specified processes are further defined in 40 CFR 63.2440.	EURULE290, EU04, EU88, EU89, EU94, EUANION_XCHG, EURESIN_DRYER

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGCOATINGSMACT	Each new and existing miscellaneous coating manufacturing operation as defined in 40 CFR Part 63, Subpart HHHHH, 63.7985(b) that meet the conditions specified in 40 CFR 63.7985(a)(1) through (4). This includes the facility-wide collection of equipment described in 40 CFR 63.7985(b)(1) through (4) used to manufacture coatings as defined in 40 CFR 63.8105 and also includes cleaning operations.	EURULE290, EU04
FGBENZENEWASTE-S1	Benzene waste operations standards that apply to equipment and processes at certain chemical manufacturing plants.	EU04, EU89, EU94, EURULE290

FG963THROX FLEXIBLE GROUP CONDITIONS

DESCRIPTION

28.2 million BTU/hr natural gas fired afterburner with heat recovery, a.k.a. “thermal oxidizer with heat recovery” (THROX), located at 963 Building. This afterburner receives process vents from various emission units at DDP, N&B in Section 2, DAS/Corteva (SRN: P1028), Dow (SRN: A4033), and Trinseo LLC (SRN: P1025).

This THROX is subject to 40 CFR Part 63, Subparts U, FFFF, and UUUU. In addition, by virtue of being subject to these regulations, FG963THROX is also subject to the equipment leak provisions of the HON (40 CFR Part 63, Subpart H).

FG963THROX is a CAM subject emission unit subject to the requirements of 40 CFR Part 64. The CAM subject pollutants for this emission unit are VOC and HAPs.

Emission Units:

- DDP emission units: EU88, EUB2, EUANION_XCHG, EURULE290
- N&B in Section 2 emission unit: EUB2
- DAS/Corteva (SRN: P1028) emission units: EU03, EU11, EU12b
- Dow (SRN: A4033) emission units: EU82
- Trinseo LLC (SRN: P1025) emission units: EUB1

POLLUTION CONTROL EQUIPMENT

- Scrubber 6 – Packed tower caustic scrubber, having two sections, that is immediately downstream of the THROX. The first section uses water as the scrubbing media. The effluent from this section is discharged to the Dow (SRN: A4033) WWTP. The second section uses aqueous caustic and sodium thiosulfate and water as the scrubbing media. Scrubber effluent is discharged to the Dow WWTP. This is a CAM subject control device.
- Quench – A water quench precedes scrubber 6 and is used to cool process gas prior to entering the scrubber.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall maintain the pH of the scrubbing effluent of Scrubber 6 at 7.5 or higher, or any other limit demonstrated during stack testing. Compliance with this limit shall be determined per the applicable federal standard. An excursion of the pH limit is the exceedance of the operational parameter limit or acceptable range defined in this condition, or demonstrated during testing. Upon detecting an excursion of the pH limit, the permittee shall restore operation of Scrubber 6 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).² (R 336.1225, R 336.1702(a), R 336.1910, 40 CFR Part 63, Subparts U, FFFF and UUUU, 40 CFR 64.6(c), 40 CFR 64.7(d))
2. The minimum exit gas temperature of the 963THROX shall not be less than 701.4°C, or any other limit demonstrated during stack testing. Compliance with this limit shall be determined per the applicable federal

standard. An excursion of the exit gas temperature limit is the exceedance of the operational parameter limit or acceptable range defined in this condition, or demonstrated during testing. Upon detecting an excursion of the exit gas temperature limit, the permittee shall restore operation of the 963THROX 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).² **(R 336.1225, R 336.1702(a), R 336.1910, 40 CFR Part 63, Subparts U, FFFF, and UUUU, 40 CFR 64.6(c) & 40 CFR 64.7(d))**

3. The permittee shall maintain Scrubber 6 with liquid flow and pH indicators. This includes, but is not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, and maintaining the devices according to manufacturer’s specifications (e.g., equipment calibration, etc.).² **(R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(b))**
4. The permittee shall maintain the 963THROX with a temperature monitoring device. This includes, but is not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, and maintaining the device according to manufacturer’s specifications (e.g., equipment calibration, etc.). **(40 CFR 64.6(c), 40 CFR 64.7(b))**
5. If the exit gas temperature of the quench is greater than 80°C, the permittee shall implement corrective action and maintain a record of action taken to prevent reoccurrence. **(R 336.1213(3))**
6. The liquid flow rate of Scrubber 6 (2nd section) shall not be less than 79.7 gallons per minute (gpm), or any other limit demonstrated during stack testing. Compliance with this limit shall be determined per the applicable federal standard. An excursion of the liquid flow rate limit is the exceedance of the operational parameter limit or acceptable range defined in this condition, or demonstrated during testing. Upon detecting an excursion of the liquid flow rate limit, the permittee shall restore operation of Scrubber 6 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).² **(R 336.1225, R 336.1702(a), R 336.1910, 40 CFR Part 63, Subparts U, FFFF, and UUUU, 40 CFR 64.6(c), 40 CFR 64.7(d))**

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. The permittee shall verify the destruction or removal efficiency rate for VOCs from the 963THROX and Scrubber 6 by testing at the owner’s expense, in accordance with the Department requirements. 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 VOC destruction or removal efficiency rate from FG963THROX 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
VOC	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 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)**

3. The permittee shall verify the VOC destruction or removal efficiency rate from FG963THROX within 24 months after issuance of ROP-MI-P1027-2020, and at a minimum, every five years from the date of the last test thereafter. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days prior to the test, 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 the firebox exit gas temperature of the THROX on a continuous basis. For the purpose of this condition, monitoring and recording of data "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar day. In the event the permittee records more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points recorded during the 15-minute period. Unless otherwise noted in this table, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (QA/QC) (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 QA/QC shall not be used for 40 CFR Part 64 compliance, 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, in frequent, 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.² **(R 336.1225, R 336.1702(a), R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(c))**
2. The permittee shall monitor and record the scrubber liquid flowrate for Scrubber 6 on an hourly basis. For the purpose of this table, "on an hourly basis" means a minimum of one reading per hour. In the event the permittee collects more than one data point during the one hour period, the data point recorded may be the average (rolling or block) during the one hour period. Unless otherwise noted in this table, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies. Except for, as applicable, monitoring malfunctions, associated repairs, and required QA/QC (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 QA/QC shall not be used for 40 CFR Part 64 compliance, 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, in frequent, 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.² **(R 336.1225, R 336.1702(a), R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(c))**
3. The permittee shall monitor and record the pH of the scrubbing effluent for Scrubber 6 on an hourly basis. Unless otherwise noted in this table, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies. Except for, as applicable, monitoring malfunctions, associated repairs, and required QA/QC (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 QA/QC shall not be used for 40 CFR Part 64 compliance, 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, in frequent, 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.² **(R 336.1225, R 336.1702(a), R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(c))**

4. The permittee shall monitor and record the exit gas temperature of the quench (1st section of Scrubber 6) on a continuous basis. For the purpose of this condition, “on a continuous basis” is defined as an instantaneous data point recorded at least once every 15 minutes. The permittee may record average values consistent with SC VI.1 of the source-wide requirements table of this ROP. **(R 336.1213(3))**
5. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan if required by the Administrator pursuant to 40 CFR 64.8, 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))**
6. For each emission unit venting to FG963THROX that is not part of SRN P1027, within 30 days of the end of each month, the permittee shall provide, to each emission unit that sent emissions to FG963THROX during that calendar month, the FG963THROX operating parameter data required by the emission unit’s permit conditions. The permittee shall keep a record of the data provided for each calendar month and make the record available to the Department upon request. **(R 336.1910)**

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 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. Each semiannual report of deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. **(40 CFR 64.9(a)(2)(i))**
5. Each semiannual report of deviations shall include summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than monitor downtime associated with zero and span or other daily calibration checks, if applicable). **(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. SV963THROX	18 ²	80 ²	40 CFR 52.21(c) & (d) R 336.1225

IX. OTHER REQUIREMENT(S)

1. When treating streams from elastomer production process units, the permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts A (General Provisions) and U (National emission standards for hazardous air pollutants (NESHAP): group I polymers and resins). **(40 CFR Part 63, Subparts A and U)**
2. When treating streams from cellulose manufacturing process units, the permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts A (General Provisions) and UUUU (NESHAP for cellulose products manufacturing). Compliance is determined as per FGCELLULOSICS. **(40 CFR Part 63, Subparts A and UUUU)**
3. When treating streams from miscellaneous organic NESHAP (MON) units, the permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts A (General Provisions) and FFFF (NESHAP for Miscellaneous Organic Chemical Process Units). Compliance is determined as per FGMONMACT. **(40 CFR Part 63, Subparts A and FFFF)**
4. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts A (General Provisions) and H (NESHAP for organic hazardous air pollutants for equipment leaks). Compliance is determined as per FGHONFUGITIVES. **(40 CFR Part 63, Subparts A and H)**
5. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**
6. 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 CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. **(40 CFR 64.7(e))**

Footnotes:

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

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

FGHCLSCRUBBER FLEXIBLE GROUP CONDITIONS

DESCRIPTION

E-101 is a falling film absorber that receives process exhaust from pressure controlling the anhydrous HCl storage tanks. The absorber uses dilute aqueous HCl (<6%) as the recirculating fluid. The vent from E-101 absorber goes through T-101 Scrubber before exhausting to atmosphere.

T-101 is a recirculated water scrubber (<6% HCl) that receives process exhaust from both the EU06-LOWPURITY, EU06-HIGHPURITY in Section 2, anhydrous, and EU05 (P1028) aqueous HCl storage and distribution systems, all storage tanks, rail cars, and tank truck loading and unloading facilities. T-101 is subject to 40 CFR Part 63, Subpart NNNNN.

The Backup Venturi Scrubber is used as a backup to T-101 Scrubber for the aqueous HCl storage tanks V-2126 and V-2127, which are part of EU05. The scrubbing medium for the Backup Venturi Scrubber is water.

This flexible group was permitted in PTI No. 159-19.

Emission Unit:

- DDP emission units: EU06-LOWPURITY
- N&B in Section 2 emission unit: EU06-HIGHPURITY
- DAS/Corteva (SRN P1028) emission units: EU05

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

- T-101 Scrubber: This scrubber receives the exhaust from E-101 Absorber, along with process exhaust from the anhydrous HCl distribution system in EU06-Lowpurity and EU06-Highpurity (all storage tanks and rail cars and the tank truck loading and unloading facilities) and from the aqueous HCl storage and distribution system in EU05 (SRN P1028). The design vapor flow rate of the scrubber is 470 SCFM and the absorbing media used is recirculated water (approximately 6% HCl). This scrubber vents to Vent No. SVHCLSCRUBBER01.
- Backup Venturi Scrubber: This scrubber is used as backup to the T-101 Scrubber for some exhaust streams. The scrubbing media of the Backup Venturi Scrubber is water. This scrubber vents to Vent No. SVHCLSCRUBBER02.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall establish, and as appropriate revise, operating limits for T-101 Scrubber based on the minimum or maximum values, as applicable, measured during the most recent performance test or documented in a design evaluation in accordance with 40 CFR Part 63, Subpart NNNNN. **(R 336.1910, 40 CFR 63.9020(e))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not receive emissions for FGHCLSCRUBBER unless the T-101 Scrubber or the Backup Venturi Scrubber is installed, maintained, and operated in a satisfactory manner. **(R 336.1224, R 336.1225, R 336.1910)**
 - a. Satisfactory operation of the T-101 Scrubber includes, but is not limited to, maintaining a concentration of 6% or less HCl by weight in the liquid phase at the top of the scrubber and attaining an HCl removal efficiency of at least 99.6 percent.
 - b. Satisfactory operation of the Backup Venturi Scrubber includes a visual verification that venturi water flow is on before use and attaining an HCl removal efficiency of at least 80 percent.
2. The permittee shall equip and maintain the T-101 Scrubber recirculation line with a density meter for determining the weight percent of HCl in the top of the scrubber. **(R 336.1225, 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. The permittee shall conduct performance testing or prepare a design evaluation for HCl emissions from the T-101 Scrubber in accordance with 40 CFR Part 63 Subpart NNNNN. **(40 CFR 63.9015)**
2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1225, R 336.1910)**
2. The permittee shall record once per calendar day, in a satisfactory manner, the concentration (in weight percent) of HCl in the liquid phase at the top of the T-101 Scrubber. In the event the permittee records more than one data point during the calendar day, the average concentration of HCl shall be recorded. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1225, R 336.1910)**
3. For each calendar day the backup venturi scrubber is used, the permittee shall visibly verify liquid flow to the scrubber. The permittee shall keep a record of each observation. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1225, R 336.1910)**
4. For each emission unit venting to FGHCLSCRUBBER that is not part of SRN P1027, within 30 days of the end of each month, the permittee shall provide, to each emission unit that sent emissions to FGHCLSCRUBBER during that calendar month, the FGHCLSCRUBBER operating parameter data required by the emission unit's permit conditions. These include, for each device to which the emission unit sends emissions:
 - a. The most recently demonstrated percent removal of HCl by T-101 Scrubber
 - b. The most recently demonstrated percent removal of HCl by the Backup Venturi Scrubber

The permittee shall keep a record of the data provided for each calendar month and make the record available to the Department upon request. **(R 336.1910)**

5. The permittee shall comply with the parametric monitoring requirements of 40 CFR Part 63, Subpart NNNNN, Sections 63.9025 and 63.9035 and Table 5, as they apply to the T-101 Scrubber. **(40 CFR Part 63, Subpart NNNNN)**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVHCLSCRUBBER01 (T-101 scrubber) ^a	6	60	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVHCLSCRUBBER02 (Backup Venturi Scrubber) ^b	6	60	R 336.1225, 40 CFR 52.21(c) & (d)

^a This stack’s requirements also appear in the conditions for EU05 (SRN P1028) and for EU06-HIGHPURITY in Section 2 (SRN P1027).

^b This stack’s requirements also appear in the conditions for EU05 (SRN P1028) and for EU06-HIGHPURITY in Section 2 (SRN P1027).

IX. OTHER REQUIREMENT(S)

1. When the T-101 Scrubber is treating streams from HCl production units, as defined in 40 CFR 63.9075, 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 NNNNN, as they apply to the T-101 Scrubber, except for the following, which are the responsibility of the HCl production unit owner (See the ROP for SRN P1028). **(40 CFR Part 63, Subparts A & NNNNN)**
 - a. Subpart NNNNN NOCS.
 - b. Subpart NNNNN semi-annual report.
 - c. Reporting of startup, shutdown, and malfunction events.
 - d. Leak detection and repair requirements for the HCl production unit (excluding the T-101 Scrubber) and the leak detection and repair plan.

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).

FGRULE290 FLEXIBLE GROUP CONDITIONS
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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: NA

Emission Units installed prior to December 20, 2016: EURULE290 - One or more of these emission units is subject to 40 CFR Part 63, Subparts A, H, UU, EEEE, FFFF, and HHHHH

POLLUTION CONTROL EQUIPMENT

NA

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 sufficient 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))**

See Appendix 4

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. When an emission unit under FGRULE290 is also an affected process unit under an applicable Part 63 standard that requires compliance with the provisions of 40 CFR Part 63, Subpart H, the permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts A (General Provisions) and H (National emission standards for Hazardous Air Pollutants (NESHAP) for organic hazardous air pollutants for equipment leaks). Compliance is determined as per FGHONFUGITIVES unless otherwise specified in the applicable Part 63 standard. **(40 CFR Part 63, Subparts A and H)**
2. When an emission unit under FGRULE290 is also an affected miscellaneous coating manufacturing operation, the permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts A (General Provisions) and HHHHH (NESHAP for Miscellaneous Coating Manufacturing Operations). **(40 CFR Part 63, Subparts A and HHHHH)**
3. When an emission unit under FGRULE290 is also an affected miscellaneous organic chemical manufacturing process unit, the permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts A (General Provisions) and FFFF (NESHAP for Hazardous Air Pollutant Emissions for Miscellaneous Organic Chemical Manufacturing). Compliance is determined as per FGMONMACT. **(40 CFR Part 63, Subparts A and FFFF)**
4. When an air emission unit under FGRULE290 is an affected organic liquid distribution process unit, the permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart EEEE (NESHAP for Organic Liquid Distribution). The requirements of this standard are outlined in table FGOLDMACT of the ROP. **(40 CFR Part 63, Subpart EEEE)**

FGCOLDCLEANERS-S1 FLEXIBLE GROUP CONDITIONS
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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: EUCOLDCLEANER-S1

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

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

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

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

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

VII. REPORTING

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

See Appendix 8-1

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

FGHONFUGITIVES-S1 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Emission units subject to the requirements of 40 CFR Part 63, Subparts A (General Provisions) and H (HON for Equipment Leaks).

Emission Units: EU88, EU89, EUANION_XCHG, EURESIN_DRYER, EU94, EURULE290

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Organic HAP – Phase I	10,000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps in light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
2. Organic HAP – Phase II	5000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps in light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
3. Organic HAP – Phase III (general)	1000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps in light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
4. Organic HAP – Phase III (food/medical service)	2000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps in light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
5. Organic HAP – Phase III (polymerizing monomers)	5000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps in light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
6. Organic HAP	No Detectable Emissions (NDE) = 500 ppm above background	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Compressors	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
7. Organic HAP	NDE	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pressure relief devices in gas/vapor service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
8. Organic HAP - Phase I	10,000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Valves in gas/vapor or light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
9. Organic HAP - Phase II and III	500 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Valves in gas/vapor or light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
10. Organic HAP	NDE	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps, valves, connectors & agitators in heavy liquid service; pressure relief devices in liquid service; and instrumentation systems	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
11. Organic HAP	NDE	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Closed-vent systems	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
12. Organic HAP	10,000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Agitators in gas/vapor or light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
13. Organic HAP	500 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Connectors in gas/vapor or light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall comply with the applicable design criteria for equipment subject to 40 CFR Part 63, Subpart H. Applicable design criteria may include (**40 CFR Part 63, Subpart H**):
 - a. 63.163(e) Design criteria for pumps equipped with dual mechanical seal systems
 - b. 63.163(j) Criteria for designating pumps as unsafe-to-monitor
 - c. 63.164 Design criteria for compressors
 - d. 63.166 Design criteria for sampling systems
 - e. 63.168(h) Criteria for designating unsafe-to-monitor valves
 - f. 63.168(i) Criteria for designating difficult-to-monitor valves
 - g. 63.172(b)-(c) Design criteria for control devices
 - h. 63.173(d) Design criteria for agitators equipped with dual mechanical seal systems
 - i. 63.173(h) Criteria for designating agitators as difficult-to-monitor
 - j. 63.173(j) Criteria for designating agitators as unsafe-to-monitor
 - k. 63.174(f) Criteria for designating connectors as unsafe-to-monitor
 - l. 63.174(g) Criteria for designating connectors as unsafe-to-repair
 - m. 63.174(h) Criteria for designating connectors as inaccessible

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 conduct monitoring for equipment leaks, defined in SC I.1 through SC I.13 of this table, in accordance with 40 CFR Part 63, Subpart H, Sections 63.163 through 63.174, as applicable. **(40 CFR Part 63, Subpart H)**
2. The permittee shall conduct pressure testing, for batch processes using this option, in accordance with 40 CFR Part 63, Subpart H, Section 63.178 (Alternative means of emission limitation: Batch processes). **(40 CFR Part 63, Subpart H)**
3. The permittee shall use Method 21 (except as otherwise specified in 40 CFR Part 63, Subpart H, Section 63.180(b) or (c), or except as allowed under an alternative monitoring method approved by the US EPA in letters dated July 26, 2007 and August 19, 2008) when performing instrument monitoring of equipment, as per 40 CFR Part 63, Subpart H, Section 63.180(b) (Test methods and procedures). **(40 CFR Part 63, Subpart H)**
4. The permittee shall conduct instrument monitoring at the frequencies listed in 40 CFR Part 63, Subpart H, Sections 63.163 through 63.174, as applicable. **(40 CFR Part 63, Subpart H)**
5. Batch process pressure testing, when applicable, shall be conducted each time the process is reconfigured, or at a minimum of once per year, in accordance with 40 CFR Part 63, Subpart H, Section 63.178(b)(1). For processes subject to MON and complying with pressure testing, this provision is allowed for both batch and continuous processes per 40 CFR 63.2480(b)(1). **(40 CFR Part 63, Subpart H and FFFF)**

VI. MONITORING/RECORDKEEPING

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

1. If applicable, control devices used to comply with the provisions of 40 CFR Part 63, Subpart H shall be monitored to ensure proper operation and maintenance, in accordance with 40 CFR Part 63, Subpart H, Section 63.172(e) (Standards: Closed-vent systems and control devices). **(40 CFR Part 63, Subpart H)**
2. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart H, Section 63.181 (Recordkeeping requirements). **(40 CFR Part 63, Subpart H)**.

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 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 applicable, the permittee shall submit an Initial Notification within 120 days of promulgation of a referencing subpart, in accordance with 40 CFR Part 63, Subpart H, Section 63.182(b). **(40 CFR Part 63, Subpart H)**
5. If applicable, the permittee shall submit a Notification of Compliance Status Report within 90 days of any applicable compliance date, in accordance with 40 CFR Part 63, Subpart H, Section 63.182(c). **(40 CFR Part 63, Subpart H)**
6. If applicable, the permittee shall submit semiannual Periodic Reports, beginning six months after the date of the Notification of Compliance Status Report, in accordance with 40 CFR Part 63, Subpart H, Section 63.182(d). **(40 CFR Part 63, Subpart H)**

7. Semiannual periodic reports are due March 15 and September 15 of each year. Reports for rules not included in these date change agreements are due according to the schedule in their applicable flexible group table. Startup, shutdown, and malfunction reports shall be submitted at the same time. **(40 CFR Part 63, Subpart A, Section 63.9(i), 63.10(a)(6), 63.10(d)(5)(i); 40 CFR Part 63, Subpart H, Section 63.182(d)(1))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions). The applicable sections of Subpart A are listed in Table 4 of Subpart H. **(40 CFR Part 63, Subparts A & H)**
2. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart H (National Emission Standards for Organic Hazardous air Pollutants (NESHAP) for Equipment Leaks). The applicable sections of Subpart H may include: **(40 CFR 63 Subpart H)**
 - a. 63.160 Applicability
 - b. 63.161 Definitions
 - c. 63.162 Standards: General
 - d. 63.163 Standards: Pumps in light liquid service
 - e. 63.164 Standards: Compressors
 - f. 63.165 Standards: Pressure relief devices in gas/vapor service
 - g. 63.166 Standards: Sampling connection systems
 - h. 63.167 Standards: Open-ended valves or lines
 - i. 63.168 Standards: Valves in gas/vapor service and in light liquid service
 - j. 63.169 Standards: Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service
 - k. 63.170 Standards: Surge control vessels and bottoms receivers
 - l. 63.171 Standards: Delay of repair
 - m. 63.172 Standards: Closed-vent systems and control devices
 - n. 63.173 Standards: Agitators in gas/vapor service and in light liquid service
 - o. 63.174 Standards: Connectors in gas/vapor service and in light liquid service
 - p. 63.178 Alternative means of emission limitations: Batch processes
 - q. 63.180 Test methods and procedures
 - r. 63.181 Recordkeeping requirements
 - s. 63.182 Reporting requirements

**FGRULE703
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Any new or future storage vessel subject to the requirements of R 336.1703 (Rule 703). Storage vessels subject to AQD Rule 703 are those which meet the following criteria:

1. Receive gasoline from a delivery vessel into any new stationary vessel of more than 2000 gallon capacity located at any gasoline dispensing facility; AND
2. Were placed into operation on or after July 1, 1979, or for which an application for a permit to install, pursuant to the provisions of Part 2 of Act 451 is made to EGLE on or after July 1, 1979, or both, except for any process or process equipment which is defined as an "existing source" under R 336.1601.

Emission Unit: EURULE703

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain an up-to-date record of all storage vessels subject to the requirements of AQD Rule 703. (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 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 not load or allow the loading of gasoline from a delivery vessel into any new stationary vessel of more than 2000 gallon capacity located at any gasoline dispensing facility, unless such stationary vessel is equipped with a permanent submerged fill pipe. **(R 336.1703(1))**
2. A new stationary vessel at a gasoline dispensing facility shall be constructed in a manner that will allow the vessel to be retrofitted according to AQD Rule 703(2) and (3). **(R 336.1703(5))**

FGOLDMACT-S1 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Each new, reconstructed, or existing Organic Liquid Distribution (OLD) (non-gasoline) operation that is part of an emission unit subject to the requirements of 40 CFR Part 63, Subpart EEEE. The 40 CFR Part 63, Subpart EEEE affected source is comprised of storage tanks, transfer racks, equipment leak components associated with storage tanks, transfer racks and pipelines, transport vehicles, and all containers while loading or unloading at transfer racks subject to Subpart EEEE. Equipment listed in 40 CFR 63.2338(c) that is part of an affected source under another National Emission Standards for Hazardous Air Pollutants (NESHAP) is excluded from the affected source.

Emission Units: EU04, EU88, EU89, EU94, EUANION_XCHG, EURULE290

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Total organic HAP	Reduce emissions by 95 wt% OR ≤ 20ppmv* exhaust concentration	Defined in 40 CFR Part 63, Subparts A and EEEE	Storage Tanks See Table 2 of 40 CFR Part 63, Subpart EEEE	SC V.1 – V.8	40 CFR 63.2346(a)
2. Total organic HAP	Reduce emissions by 95 wt% OR ≤ 20ppmv* exhaust concentration	Defined in 40 CFR Part 63, Subparts A and EEEE	Transfer Racks See Table 2 of 40 CFR Part 63, Subpart EEEE	SC V.1 – V.8	40 CFR 63.2346(b)

* Corrected to 3% oxygen for combustion devices using supplemental combustion air

3. The permittee shall comply with the applicable requirements for storage tanks and transfer racks specified in 40 CFR Part 63, Subpart SS for meeting emission limits, substituting the term storage tank at each occurrence of the term storage vessel in Subpart SS. **(40 CFR 63.2346(a)(1))**
4. The permittee must be in compliance with the emission limitations at all times when the equipment identified in 40 CFR 63.2338(b)(1) through (4) is in OLD operation. The emission limitations apply during periods of Startup, Shutdown and Malfunction (SSM) except as provided in 40 CFR 63.2378(b)(2) and (3). **(40 CFR 63.2350(a), 40 CFR 63.2378(b)(1))**

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. For each storage tank identified in Table 2 of 40 CFR Part 63, Subpart EEEE, items 1 through 5, the permittee shall reduce the emissions of organic HAP using one of the following work practice standards:
 - a. Route emissions to a fuel gas system or back into a process as specified in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2346(a)(2))**
 - b. Comply with 40 CFR Part 63, Subpart WW (control level 2); or **(40 CFR 63.2346(a)(3))**
 - c. Use a vapor balancing system that complies with 40 CFR 63.2346(a)(4)(i) through (vii) and with the recordkeeping requirements in 40 CFR 63.2390(e). **(40 CFR 63.2346(a)(4))**
2. For each storage tank identified in Table 2 of 40 CFR Part 63, Subpart EEEE, item 6, the permittee shall reduce the emissions of organic HAP using one of the following work practice standards:
 - a. Route emissions to a fuel gas system or back into a process as specified in 40 CFR Part 63, Subpart SS; or **(40 CFR 63.2346(a)(2))**
 - b. Use a vapor balancing system that complies with 40 CFR 63.2346(a)(4)(i) through (vii) and with the recordkeeping requirements in 40 CFR 63.2390(e). **(40 CFR 63.2346(a)(4))**
3. For each **new** transfer rack that meets the criterion for control in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee shall reduce the emissions of organic HAP during loading of organic liquids into transport vehicles or containers using one of the following work practice standards:
 - a. Route emissions to a fuel gas system or back into a process as specified in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2346(b)(2))**
 - b. Use a vapor balancing system that routes organic HAP vapors displaced from the loading of organic liquids into transport vehicles to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header; and **(40 CFR 63.2346(b)(3)(i))**
 - c. Use a vapor balancing system that routes organic HAP vapors displaced from the loading of organic liquids into containers directly (e.g., no intervening tank or containment area such as a room) to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header. **(40 CFR 63.2346(b)(3)(ii))**
4. For each **existing** transfer rack that meets the criterion for control in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee shall reduce the emissions of organic HAP during loading of organic liquids into transport vehicles using one of the following work practice standards:
 - a. Route emissions to a fuel gas system or back into a process as specified in 40 CFR Part 63, Subpart SS; or **(40 CFR 63.2346(b)(2))**
 - b. Use a vapor balancing system that routes organic HAP vapors displaced from the loading of organic liquids into transport vehicles to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header. **(40 CFR 63.2346(b)(3)(i))**
5. For each pump, valve, and sampling connection that operates in organic liquids service for at least 300 hours per year at an affected source that has at least one storage tank or transfer rack that meets the applicability criteria for control in Table 2 of 40 CFR Part 63, Subpart EEEE, the permittee must comply with 40 CFR Part 63, Subpart TT (control level 1); 40 CFR Part 63, Subpart UU (control level 2); or 40 CFR Part 63, Subpart H. **(40 CFR 63.2346(c))**
6. For each transport vehicle equipped with vapor collection equipment that is loaded at a transfer rack subject to control based on the criteria specified in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee must follow the steps in 40 CFR 60.502(e) to ensure that organic liquids are loaded only into vapor-tight transport vehicles and comply with the provisions in 40 CFR 60.502(f) through (i), substituting the term "transport vehicle" at each occurrence of the term "tank truck" or "gasoline tank truck". **(40 CFR 63.2346(d)(1))**
7. For each transport vehicle without vapor collection equipment that is loaded at a transfer rack subject to control based on the criteria specified in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee must ensure that organic liquids are loaded only into transport vehicles that have current certification in accordance with the U.S. Department of Transportation (DOT) pressure test requirements in 49 CFR Part 180 for cargo tanks or 49 CFR 173.31 for tank cars. **(40 CFR 63.2346(d)(2))**

8. For each existing, new and reconstructed high throughput transfer rack routing emissions to a control device to comply with an emission limit in Table 2 of 40 CFR Part 63, Subpart EEEE, the permittee shall meet the operating limits specified in Table 3 of 40 CFR Part 63, Subpart EEEE as identified below. The permittee must establish the operating limits during the initial performance test or design evaluation. The operating limits shall be met at all times after they are established, when the equipment identified in 40 CFR 63.2338(b)(1) through (4) is in OLD operation. **(40 CFR 63.2346(e), 40 CFR 63.2350(a), 40 CFR 63.2370(b) and Table 3)**

Control Device	Operating Limit
Thermal oxidizer	Maintain the daily average fire box or combustion zone temperature greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Catalytic oxidizer	a. Replace the existing catalyst bed before the age of the bed exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND b. Maintain the daily average temperature at the inlet of the catalyst bed greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND c. Maintain the daily average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Absorber	a. Maintain the daily average concentration level of organic compounds in the absorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR b. Maintain the daily average scrubbing liquid temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND c. Maintain the difference between the specific gravities of the saturated and fresh scrubbing fluids greater than or equal to the difference established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Condenser	a. Maintain the daily average concentration level of organic compounds at the condenser exit less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR b. Maintain the daily average condenser exit temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Adsorption system with adsorbent regeneration	a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR b. Maintain the total regeneration stream mass flow during the adsorption bed regeneration cycle greater than or equal to the reference stream mass flow established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND c. Before the adsorption cycle commences, achieve and maintain the temperature of the adsorption bed after regeneration less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND d. Achieve a pressure reduction during each adsorption bed regeneration cycle greater than or equal to the pressure reduction established during the design evaluation or performance test that demonstrated compliance with the emission limit.

Control Device	Operating Limit
Adsorption system without adsorbent regeneration	a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR b. Replace the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation or performance test before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND c. Maintain the temperature of the adsorption bed less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Flare	a. Comply with the equipment and operating requirements in 40 CFR 63.987(a); AND b. Conduct an initial flare compliance assessment in accordance with 40 CFR 63.987(b); AND c. Install and operate monitoring equipment as specified in 40 CFR 63.987(c).
Another type of control	Submit a monitoring plan as specified in 40 CFR 63.995(c) and 40 CFR 63.2366(b), and monitor the control device in accordance with that plan.

9. For each storage tank and low throughput transfer rack, the permittee shall comply with the respective requirements for monitored parameters as specified in 40 CFR Part 63, Subpart SS. Alternatively, the permittee may comply with the operating limits in Table 3 of 40 CFR Part 63, Subpart EEEE. **(40 CFR 63.2346(e))**
10. For noncombustion devices using total organic compounds (TOC) rather than organic HAP to demonstrate compliance with a percent reduction requirement in Table 2 to 40 CFR Part 63, Subpart EEEE, the permittee must first demonstrate, subject to the approval of the Administrator, that TOC is an appropriate surrogate for organic HAP (for storage tank(s) and/or transfer rack(s), the percent destruction of organic HAP is equal to or higher than the percent destruction of TOC). This demonstration must be conducted prior to or during the initial compliance test. **(40 CFR 63.2346(f))**
11. When electing to comply with 40 CFR Part 63, Subpart EEEE by combining emissions from different emission sources into a single control device, the permittee must comply with the provisions in 40 CFR 63.982(f). **(40 CFR 63.2346(j))**
12. The permittee shall develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3), except for sources not required to be controlled as specified in 40 CFR 63.2343. The permittee must follow the requirements in 40 CFR 63.6(e)(1) and (3) during periods of startup, shutdown, malfunction, or nonoperation of the affected source or any part thereof. In addition, the provisions of 40 CFR 63.2378(b)(1) through (3) apply. **(40 CFR 63.2350(c), 40 CFR 63.2378(b))**
13. The permittee must be in compliance with the operating limits at all times when the equipment identified in 40 CFR 63.2338(b)(1) through (4) is in OLD operation. **(40 CFR 63.2350(a))**
14. The permittee shall operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(E)(l)(i). **(40 CFR 63.2350(b))**

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. The permittee shall demonstrate initial compliance with each applicable emission limitation and work practice standard as specified in Tables 6 and 7 of 40 CFR Part 63, Subpart EEEE. **(40 CFR 63.2370(a))**
2. The permittee shall demonstrate continuous compliance with each applicable emission limitation, operating limit, and work practice standard in Tables 2 through 4 of 40 CFR Part 63, Subpart EEEE according to the methods specified in 40 CFR Part 63, Subpart SS and in Tables 8 through 10 of 40 CFR Part 63, Subpart EEEE, as applicable. **(40 CFR 63.2378(a))**
3. For each performance test, design evaluation, and/or compliance determination conducted, the permittee shall use the following procedures:
 - a. Performance tests according to the procedures in 40 CFR Part 63, Subpart SS and the provisions specified in 40 CFR 63.2354(b); **(40 CFR 63.2354(a)(1))**
 - b. Design evaluations according to the procedures in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2354(a)(2))**
 - c. Performance evaluations of a continuous emission monitoring system (CEMS) according to the requirements in 40 CFR 63.8(e); **(40 CFR 63.2354(a)(3))**
 - d. Compliance determination of the organic HAP or Total Organic Compounds (TOC) emission limit according to either of the following (in addition to EPA Method 25 or 25A):
 - i. Method 18 of 40 CFR Part 60, Appendix A; as specified in 40 CFR 63.2354(b)(3)(i); or **(40 CFR 63.2354(b)(3))**
 - ii. Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry under the conditions specified in 40 CFR 63.2354(b)(3)(ii). **(40 CFR 63.2354(b)(3))**
 - e. Compliance determination of the HAP content of organic liquids according to either EPA Method 311 of 40 CFR Part 63, Appendix A or other method approved by the Administrator. **(40 CFR 63.2354(c))**
4. The permittee shall conduct initial performance tests and design evaluations by the following dates, whichever is earlier: **(40 CFR 63.2358(a))**
 - a. According to the schedule in 40 CFR 63.7(a)(2); or
 - b. The compliance date specified in any applicable State or Federal new source review construction permit.
5. For storage tanks and transfer racks choosing to comply with the emission limits in Table 2 of 40 CFR Part 63, Subpart EEEE, the permittee shall demonstrate initial compliance according to the following schedule:
 - a. For existing transfer racks, by August 4, 2007; **(40 CFR 63.2358(b)(1))**
 - b. For existing storage tanks with a floating roof, the next time the tank is emptied and degassed, but not later than February 3, 2014; **(40 CFR 63.2358(b)(1)(i))**
 - c. For reconstructed and new sources, within 180 days after initial start up. **(40 CFR 63.2358(b)(2))**
6. For storage tanks at existing sources choosing to comply with the work practice standards in Table 4 of 40 CFR Part 63, Subpart EEEE, the permittee shall conduct the initial compliance demonstration the next time the tank is emptied and degassed but not later than February 3, 2014. **(40 CFR 63.2358(c)(1))**
7. For transfer racks and equipment leak components at existing sources that are complying with the work practice standards in Table 4 of 40 CFR Part 63, Subpart EEEE, the permittee shall conduct the initial compliance demonstration by August 4, 2007. **(40 CFR 63.2358(c)(2))**
8. For storage tanks, transfer racks and equipment leak components at reconstructed or new sources that are complying with the work practice standards in Table 4 of 40 CFR Part 63, Subpart EEEE, the permittee shall conduct the initial compliance demonstration within 180 days after the initial start up date for the affected source. **(40 CFR 63.2358(d))**
9. For nonflare control devices, the permittee shall conduct subsequent performance tests required in Table 5 of 40 CFR Part 63, Subpart EEEE, item 1 at any time EPA requests. **(40 CFR 63.2362(a))**

10. For each owned transport vehicle that is equipped with vapor collection equipment that is loaded with organic liquids at transfer racks subject to control based on the criteria in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee shall perform the vapor tightness testing required in Table 5 of 40 CFR Part 63, Subpart EEEE, item 2 at least once per year. **(40 CFR 63.2362(b)(1))**
11. For each owned transport vehicle that does not have vapor collection equipment, the permittee shall maintain current certification in accordance with the U.S. DOT pressure test requirements in 49 CFR Part 180 for cargo tanks or 49 CFR 173.31 for tank cars. **(40 CFR 63.2362(b)(2))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii), 40 CFR 63.2394)**

1. For each storage tank with a capacity less than 5,000 gallons and each transfer rack that only unloads organic liquids, the permittee shall keep documentation that verifies that each storage tank and transfer rack identified in 40 CFR 63.2343(a) is not required to be controlled. 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). **(40 CFR 63.2343(a))**
2. For each storage tank using a vapor balancing system per 40 CFR 63.2346(a)(4), the permittee shall keep the following records:
 - a. Current certification in accordance with the U.S. DOT pressure test requirements of 49 CFR Part 180 – cargo tanks; **(40 CFR 63.2390(e)(1))**
 - b. Current certification in accordance with the U.S. DOT pressure test requirements of 49 CFR 173.31 – tank cars, **(40 CFR 63.2390(e)(1))**
 - c. Pressure relief vent setting specified in 40 CFR 63.2346(a)(4)(v), **(40 CFR 63.2390(e)(2))**
 - d. A record of the equipment to be used and procedures to be followed when reloading cargo tanks or tank cars and displacing vapors back to the storage tank from which the liquid originates. **(40 CFR 63.2390(e)(3)(i))**
 - e. A record of each time the vapor balancing system is used to comply with 40 CFR 63.2346(a)(4)(vi)(B) **(40 CFR 63.2390(e)(3)(ii))**
3. For each transport vehicle into which organic liquids are loaded at a transfer rack that is subject to control based on the criteria in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee shall keep the following records:
 - a. The documentation described in 40 CFR 60.505(b) for transport vehicles equipped with vapor collection; **(40 CFR 63.2390(c)(1))**
 - b. Current certification in accordance with U.S. DOT pressure test requirements in 49 CFR Part 180 for cargo tanks without vapor collection equipment; **(40 CFR 63.2390(c)(2))**
 - c. Current certification in accordance with U.S. DOT pressure test requirements in 49 CFR Part 173 for tank cars without vapor collection equipment; **(40 CFR 63.2390(c)(2))**Alternatively, the permittee may record that the verification of U.S. DOT tank certification or Method 27 in 40 CFR Part 60, Appendix A has been performed. **(40 CFR 63.2390(c)(3))**
4. 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 Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10. **(40 CFR 63.2390(d))**
5. For each control device required to comply with 40 CFR Part 63, Subpart EEEE, the permittee shall install, operate, and maintain a Continuous Monitoring System (CMS). If using a Continuous Parameter Monitoring System (CPMS), the permittee shall comply with the applicable requirements in 40 CFR Part 63, Subpart SS. If using a CEMS, the permittee shall comply with the applicable requirements in 40 CFR 63.8. **(40 CFR 63.2366(a))**
6. For nonflare control devices controlling storage tanks and low throughput transfer racks, the permittee shall submit a monitoring plan according to the requirements in 40 CFR Part 63, Subpart SS. **(40 CFR 63.2366(b))**
7. When using a control device to comply with 40 CFR Part 63, Subpart EEEE, the permittee shall monitor continuously or collect data at all required intervals at all times the emission source and control device are in

OLD operation to demonstrate continuous compliance The permittee is not required to monitor and collect data during the following situations:

- a. Malfunctions of the CMS; **(40 CFR 63.2374(b))**
- b. Repairs of the CMS; **(40 CFR 63.2374(b))**
- c. Required quality assurance or control activities (including calibration checks and required zero span adjustments). **(40 CFR 63.2374(b))**

Furthermore, the permittee shall not use data recorded during the above situations in data averages and calculations used to report emission and operating levels. **(40 CFR 63.2374(c))**

8. The permittee shall keep 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. **(40 CFR 63.2394(a))**
9. The permittee shall keep records of all information for five years following the date of each occurrence, measurement, maintenance, corrective action, report or record as specified in 40 CFR 63.10(b)(1). **(40 CFR 63.2394(b))**
10. The permittee shall keep each record on site for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report or record as specified in 40 CFR 63.10(b)(1). These same records may be kept off site for the remaining three years. **(40 CFR 63.2394(c))**
11. The permittee shall keep all records required by 40 CFR 63.2343 for each emission source that does not require control under 40 CFR Part 63, Subpart EEEE. **(40 CFR 63.2390(a))**
12. The permittee shall keep all of the following records for each emission source that requires control under 40 CFR Part 63, Subpart EEEE:
 - a. All records in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2390(b))**
 - b. All records in Table 12 of 40 CFR Part 63, Subpart EEEE; **(40 CFR 63.2390(b))**
 - c. All records required to show continuous compliance as required in 40 CFR Part 63, Subpart SS and in Tables 8 through 10 of 40 CFR Part 63, Subpart EEEE. **(40 CFR 63.2390(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 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. For each storage tank having a capacity greater than or equal to 5,000 gallons that is not subject to control based on the criteria specified in Table 2 of 40 CFR Part 63, Subpart EEEE, items 1 through 6, the permittee shall comply with the requirements specified in 40 CFR 63.2343(b)(1) through (b)(3). **(40 CFR 63.2343(b))**
5. For each transfer rack that loads organic liquids and is not subject to control based on the criteria in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee shall comply with the requirements specified in 40 CFR 63.2343(c)(1) through (c)(3). **(40 CFR 63.2343(c))**
6. The permittee must submit a subsequent Compliance report as specified in paragraphs 40 CFR 63.2343(b)(3) and (c)(3) if one or more of the following events occur since the filing of the Notification of Compliance Status or the last Compliance report:
 - a. Any storage tank or transfer rack became subject to control under this Subpart EEEE; **(40 CFR 63.2343(d)(1))**

- b. Any storage tank equal to or greater than 18.9 cubic meters (5,000 gallons) became part of the affected source but is not subject to any of the emission limitations, operating limits, or work practice standards of this subpart; **(40 CFR 63.2343(d)(2))**
 - c. Any transfer rack (except those racks at which only unloading of organic liquids occurs) became part of the affected source; **(40 CFR 63.2343(d)(3))**
 - d. Any of the information required in 40 CFR 63.2386(c)(1), (2) or (3) has changed. **(40 CFR 63.2343(d)(4))**
7. The permittee shall submit the following notifications according to the schedule in Table 12 of 40 CFR Part 63, Subpart EEEE:
- a. Each notification in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2382(a))**
 - b. Each notification in Table 12 of 40 CFR Part 63, Subpart EEEE; **(40 CFR 63.2382(a))**
 - c. Initial notification according to the schedule specified in 40 CFR 63.2382(b); **(40 CFR 63.2382(b))**
 - d. Notification of Intent to conduct a performance test as required in 40 CFR 63.7(b)(1); **(40 CFR 63.2382(c))**
 - e. Notification of Compliance Status including the information required in 40 CFR 63.999(b) and 40 CFR 63.2382(d)(2)(i) through (viii). **(40 CFR 63.2382(d))**
- These notifications must be submitted according to the schedule in Table 12 of 40 CFR Part 63, Subpart EEEE and as specified in paragraphs (b) through (d) of 40 CFR 63.2382.
8. The permittee shall submit all applicable reports in 40 CFR 63.2386 according to the schedule in Table 11 of 40 CFR Part 63, Subpart EEEE and by the dates specified in 40 CFR 63.2386(b)(1) through (3). These reports include, but are not limited to, the following:
- a. Each report in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2386(a))**
 - b. Each report in Table 11 of 40 CFR Part 63, Subpart EEEE; **(40 CFR 63.2386(a))**
 - c. Each report in Table 12 of 40 CFR Part 63, Subpart EEEE; **(40 CFR 63.2386(a))**
 - d. First Compliance Report containing the information specified in 40 CFR 63.2386(c)(1) through (10); **(40 CFR 63.2386(c))**
 - e. Subsequent Compliance Reports containing the information specified in 40 CFR 63.2386(c)(1) through (9) and 40 CFR 63.2386(d)(1) through (4) where applicable; **(40 CFR 63.2386(d))**
 - f. Report of all deviations for each affected source that has obtained a Renewable Operating Permit. **(40 CFR 63.2386(e))**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with all applicable provisions of the NESHAP, as specified in 40 CFR Part 63, Subpart A and Subpart EEEE for Organic Liquid Distribution by the initial compliance date. **(40 CFR Part 63, Subparts A and EEEE)**

FGMONMACT-S1 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

These conditions apply to miscellaneous organic chemical manufacturing process units (MCPU) that are located at, or are part of, a major source as defined in section 112(a) of the Clean Air Act and that meet all the criteria specified in 40 CFR Part 63, Subpart FFFF (40 CFR 63.2435). Specified processes are further defined in 40 CFR 63.2440.

Emission Units: EURULE290, EU04, EU88, EU89, EU94, EUANION_XCHG, EURESIN_DRYER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

1. The permittee shall comply with the emission limits in Tables 1 through 5 of Subpart FFFF at all times, except during periods of startup, shutdown, and malfunction, or the alternative emission limits specified in 40 CFR 63.2495, 40 CFR 63.2500, or 40 CFR 63.2505, except as specified in 40 CFR 63.2450 (b) through (s). **(40 CFR 63.2450(a))**
2. The permittee shall comply with each applicable emission limit in Table 1 of Subpart FFFF for continuous process vents. **(40 CFR 63.2455(a))**
3. The permittee shall comply with each applicable emission limit in Table 2 of Subpart FFFF for batch process vents. **(40 CFR 63.2460(a))**
4. The permittee shall comply with each applicable emission limit in Table 3 of Subpart FFFF for process vents that emit hydrogen halide and halogen HAP or HAP metals. **(40 CFR 63.2465(a))**
5. The permittee shall comply with each applicable emission limit in Table 4 of Subpart FFFF for storage tanks. **(40 CFR 63.2470(a))**
6. The emission limits in Table 4 to Subpart FFFF for control devices used to control emissions from storage tanks do not apply during periods of planned routine maintenance. **(40 CFR 63.2470(d))**
7. As an alternative to the emission limits specified in Table 4 to Subpart FFFF, the permittee may elect to implement vapor balancing in accordance with 40 CFR 63.1253(f), except as specified in 40 CFR 63.2470(e)(1) through (3). The permittee may comply with the vapor balancing alternative in 40 CFR 63.1253(f) when the storage tank is filled from a barge. All requirements for tank trucks and railcars specified in 40 CFR 63.1253(f) also apply to barges, except when 40 CFR 63.1253(f)(2) refers to pressure testing certifications, the requirements in 40 CFR 61.304(f) apply for barges. **(40 CFR 63.2470(e))**
8. For each surge control vessel or bottoms receiver that meets the capacity and vapor pressure thresholds for a Group 1 storage tank, the permittee shall comply with the emission limits specified in Table 4 of Subpart FFFF. **(40 CFR 63.2450(r))**
9. The permittee shall comply with each applicable emission limit in Table 5 of Subpart FFFF for transfer racks. **(40 CFR 63.2475(a))**
10. The permittee may elect to comply with the pollution prevention alternative requirements specified below in lieu of the emission limitations and work practice standards contained in Tables 1 through 7 to Subpart FFFF for any MCPU for which initial startup occurred before April 4, 2002. The permittee may comply with the requirements of 40 CFR 63.2495(a)(1) for a series of processes, including situations where multiple processes are merged, if

the permittee demonstrates to the satisfaction of the Administrator that the multiple processes were merged after the baseline period into an existing process or processes. **(40 CFR 63.2495(a))**

- a. The permittee must reduce the production-indexed HAP consumption factor (HAP factor) by at least 65% from a 3-year average baseline beginning no earlier than the 1994 through 1996 calendar years. For any reduction in the HAP factor achieved by reducing HAP that are also volatile organic compounds (VOC), the permittee must demonstrate an equivalent reduction in the production-indexed VOC consumption factor (VOC factor) on a mass basis. For any reduction in the HAP factor achieved by reducing a HAP that is not a VOC, the permittee may not increase the VOC factor. **(40 CFR 63.2495(a)(1))**
 - b. Any MCPU for which the permittee seeks to comply by using the pollution prevention alternative must begin with the same starting material(s) and end with the same product(s). The permittee may not comply by eliminating any steps of a process by transferring the step offsite (to another manufacturing location). The permittee may also not merge a solvent recovery step conducted offsite to onsite and as part of an existing process as a method of reducing consumption. **(40 CFR 63.2495(a)(2))**
 - c. The permittee may comply with the requirements of paragraph (a) above for a series of processes, including situations where multiple processes are merged, if the permittee demonstrates to the satisfaction of the Administrator that the multiple processes were merged after the baseline period into an existing process or processes. **(40 CFR 63.2495(a)(3))**
 - d. The permittee must comply with the emission limitations and work practice standards contained in Tables 1 through 7 of Subpart FFFF for all HAP that are generated in the MCPU and that are not included in consumption, as defined in 40 CFR 63.2550. If any vent stream routed to the combustion control is a halogenated vent stream, as defined in 40 CFR 63.2550, then hydrogen halides that are generated as a result of combustion control must be controlled according to the requirements of 40 CFR 63.994 and the requirements referenced therein. The permittee may not merge nondedicated formulation or nondedicated solvent recovery processes with any other processes. **(40 CFR 63.2495(b))**
 - e. To demonstrate initial compliance with the pollution prevention alternative requirements (40 CFR 63.2495(a)), the permittee must prepare a demonstration summary in accordance with 40 CFR 63.2495(c)(1) and calculate baseline and target annual HAP and VOC factors in accordance with 40 CFR 63.2495(c)(2) and (3). **(40 CFR 63.2495(c))**
11. For an existing source, the permittee may elect to comply with the percent reduction emission limitations in Tables 1, 2, 4, 5, and 7 to Subpart FFFF by complying with the emissions averaging provisions specified in 40 CFR 63.150, except as specified below. **(40 CFR 63.2500(a))**
- a. The batch process vents in an MCPU collectively are considered one individual emission point for the purposes of emissions averaging, except that only individual batch process vents must be excluded to meet the requirements of 40 CFR 63.150(d)(5). **(40 CFR 63.2500(b))**
 - b. References in 40 CFR 63.150 to 40 CFR 63.112 through 40 CFR 63.130 mean the corresponding requirements in 40 CFR 63.2450 through 40 CFR 63.2490, including applicable monitoring, recordkeeping, and reporting. **(40 CFR 63.2500(c))**
 - c. References to "periodic reports" in 40 CFR 63.150 mean "compliance report" for the purposes of Subpart FFFF. **(40 CFR 63.2500(d))**
 - d. For batch process vents, estimate uncontrolled emissions for a standard batch using the procedures in 40 CFR 63.1257(d)(2)(i) and (ii) instead of the procedures in 40 CFR 63.150(g)(2). Multiply the calculated emissions per batch by the number of batches per month when calculating the monthly emissions for use in calculating debits and credits. **(40 CFR 63.2500(e))**
 - e. References to "storage vessels" in 40 CFR 63.150 mean "storage tank" as defined in 40 CFR 63.2550 for the purposes of Subpart FFFF. **(40 CFR 63.2500(f))**
12. As an alternative to complying with the emission limits and work practice standards for process vents and storage tanks in Tables 1 through 4 to Subpart FFFF and the requirements in 40 CFR 63.2455 through 40 CFR 63.2470, the permittee may comply with the emission limits below and demonstrate compliance in accordance with the requirements in 40 CFR 63.2505(b). **(40 CFR 63.2505)**
- a. The permittee must route vent streams through a closed-vent system to a control device that reduces HAP emissions as specified in either paragraph below. **(40 CFR 63.2505(a)(1))**
 - i. If the permittee uses a combustion control device, it must reduce HAP emissions to an outlet TOC concentration of 20 parts per million by volume (ppmv) or less and to an outlet concentration of hydrogen halide and halogen HAP of 20 ppmv or less, or as an alternative, if the permittee controls halogenated vent streams emitted from a combustion device followed by a scrubber, reduce the hydrogen halide and

- halogen HAP generated in the combustion device by greater than or equal to 95% by weight in the scrubber. **(40 CFR 63.2505(a)(1)(i))**
- ii. If the permittee uses a noncombustion control device(s), it must reduce HAP emissions to an outlet total organic HAP concentration of 50 ppmv or less, and an outlet concentration of hydrogen halide and halogen HAP of 50 ppmv or less. **(40 CFR 63.2505(a)(1)(ii))**
 - b. Any Group 1 process vents within a process that are not controlled according to this alternative standard must be controlled according to the emission limits in Tables 1 through 3 to Subpart FFFF. **(40 CFR 63.2505(a)(2))**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall comply with the work practice standards in Tables 1 through 7 of Subpart FFFF at all times, except during periods of startup, shutdown, and malfunction, and comply with the requirements specified in 40 CFR 63.2455 through 40 CFR 63.2490 (or the alternative means of compliance in 40 CFR 63.2495, 40 CFR 63.2500, or 40 CFR 63.2505), except as specified in 40 CFR 63.2450 (b) through (s). **(40 CFR 63.2450(a))**
2. When organic HAP emissions from different emission types (e.g., continuous process vents, batch process vents, storage tanks, transfer operations, and waste management units) are combined, the permittee shall comply with the requirements of either 40 CFR 63.2450(c)(1) or 40 CFR 63.2450(c)(2). **(40 CFR 63.2450(c))**
3. The permittee shall not use a flare to control halogenated vent streams or hydrogen halide and halogen HAP emissions. **(40 CFR 63.2450(o))**
4. Opening a safety device, as defined in 40 CFR 63.2550, is allowed at any time conditions require it to avoid unsafe conditions. **(40 CFR 63.2450(p))**
5. For each surge control vessel or bottoms receiver that meets the capacity and vapor pressure thresholds for a Group 1 storage tank, the permittee shall comply with the work practice standards specified in Table 4 of Subpart FFFF. **(40 CFR 63.2450(r))**
6. For the purposes of determining group status for continuous process vents, batch process vents, and storage tanks in 40 CFR 63.2455, 40 CFR 63.2460, and 40 CFR 63.2470, the permittee shall consider hydrazine to be an organic HAP. **(40 CFR 63.2450(s))**
7. Periods of planned routine maintenance of each control device used to control emissions from storage tanks, during which the control device does not meet the emission limit specified in Table 4 to Subpart FFFF, must not exceed 240 hours per year (hr/yr). The permittee may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr. The application must explain why the extension is needed, it must indicate that no material will be added to the storage tank between the time the 240-hr limit is exceeded and the control device is again operational, and it must be submitted at least 60 days before the 240-hr limit will be exceeded. **(40 CFR 63.2470(d))**
8. The permittee must comply with each work practice standard in Table 5 to Subpart FFFF that applies to transfer racks, and the permittee must meet each applicable requirement in 40 CFR 63.2475(b) and (c). When the term "high throughput transfer rack" is used in 40 CFR Part 63, Subpart SS, the term "Group 1 transfer rack," as defined in 40 CFR 63.2550, applies for the purposes of Subpart FFFF. **(40 CFR 63.2475)**

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. The requirements specified in 40 CFR 63.2450 (g)(1) through (5) apply instead of or in addition to the requirements specified in 40 CFR Part 63, Subpart SS. **(40 CFR 63.2450(g))**
2. To demonstrate compliance with the emission limit in Table 3 to Subpart FFFF for HAP metals at a new source, the permittee must conduct an initial performance test of each control device that is used to comply with the emission limit for HAP metals specified in Table 3 to Subpart FFFF. The permittee must conduct the performance test according to the procedures in 40 CFR 63.997. The permittee must use Method 29 of Appendix A of 40 CFR Part 60 to determine the HAP metals at the inlet and outlet of each control device, or use Method 5 of Appendix A of 40 CFR Part 60 to determine the total particulate matter (PM) at the inlet and outlet of each control device. The permittee has demonstrated initial compliance if the overall reduction of either HAP metals or total PM from the process is greater than or equal to 97% by weight. **(40 CFR 63.2465(d)(2))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall comply with the recordkeeping requirements specified in 40 CFR 63.2515, 40 CFR 63.2520, and 40 CFR 63.2525. **(40 CFR 63.2450(a))**
2. Each continuous emissions monitoring system (CEMS) must be installed, operated, and maintained according to the requirements in 40 CFR 63.8 and 40 CFR 63.2450(j)(1) through (5). **(40 CFR 63.2450(j))**
3. The provisions in 40 CFR 63.2450(k)(1) through (6) of this section apply in addition to the requirements for continuous parameter monitoring system (CPMS) in 40 CFR Part 63, Subpart SS. **(40 CFR 63.2450(k))**
4. 40 CFR 63.152(f)(7)(ii) through (iv) and 40 CFR 63.998(b)(2)(iii) and (b)(6)(i)(A), which apply to the exclusion of monitoring data collected during periods of startup, shutdown, and malfunction from daily averages, do not apply for the purposes of 40 CFR Part 63, Subpart FFFF. **(40 CFR 63.2450(l))**
5. To demonstrate compliance with the emission limit in Table 3 to Subpart FFFF for HAP metals at a new source, the permittee must comply with the monitoring requirements specified in 40 CFR 63.1366(b)(1)(xi) for each fabric filter used to control HAP metals. **(40 CFR 63.2465(d)(3))**
6. The permittee must keep records of HAP and VOC consumption, production, and the rolling annual HAP and VOC factors for each MCPU for which the permittee is complying with 40 CFR 63.2495(a), the pollution prevention standard. **(40 CFR 63.2495(e))**
7. The permittee shall keep each applicable record required by 40 CFR Part 63, Subpart A and in referenced subparts of 40 CFR 63 F, G, SS, UU, WW, and GGG and in referenced Subpart F of 40 CFR Part 63 **(40 CFR 63.2525(a))**
8. The permittee shall keep records of each operating scenario as specified below:
 - a. A description of the process and the type of process equipment used; **(40 CFR 63.2525(b)(1))**
 - b. An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in 40 CFR 63.2505; wastewater point of determination (POD); storage tanks; and transfer racks; **(40 CFR 63.2525(b)(2))**
 - c. The applicable control requirements of Subpart FFFF, including the level of required control, and for vents, the level of control for each vent; **(40 CFR 63.2525(b)(3))**
 - d. The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device; **(40 CFR 63.2525(b)(4))**
 - e. The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s); **(40 CFR 63.2525(b)(5))**
 - f. The applicable monitoring requirements of Subpart FFFF and any parametric level that assures compliance for all emissions routed to the control device or treatment process; **(40 CFR 63.2525(b)(6))**

- g. Calculations and engineering analyses required to demonstrate compliance; **(40 CFR 63.2525(b)(7))**
 - h. For reporting purposes, a change to any of these elements not previously reported, except for 40 CFR 63.2525(b)(5), constitutes a new operating scenario. **(40 CFR 63.2525(b)(8))**
9. The permittee shall keep a schedule or log of operating scenarios for processes with batch vents from batch operations updated each time a different operating scenario is put into effect. **(40 CFR 63.2525(c))**
10. The permittee shall keep records of the information specified below for Group 1 batch process vents in compliance with a percent reduction emission limit in Table 2 to Subpart FFFF if some of the vents are controlled to less the percent reduction requirement. **(40 CFR 63.2525(d))**
- a. Records of whether each batch operated was considered a standard batch; **(40 CFR 63.2525(d)(1))**
 - b. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch. **(40 CFR 63.2525(d)(2))**
11. The permittee shall keep records of the information specified below, as applicable, for each process with Group 2 batch process vents or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr. No records are required if the permittee documented in the notification of compliance status report that the MCPU meets any of the situations described in 40 CFR 63.2525(e)(1)(i), (ii), or (iii). **(40 CFR 63.2525(e))**
- a. If the permittee documented in the notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive organic HAP is the only HAP and usage is less than 10,000 lb/yr, as specified in 40 CFR 63.2460(b)(7), the permittee must keep records of the amount of HAP material used, and calculate the daily rolling annual sum of the amount used no less frequently than monthly. If a record indicates usage exceeds 10,000 lb/yr, the permittee must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and begin recordkeeping as specified in 40 CFR 63.2525(e)(4). After 1 year, the permittee may revert to recording only usage if the usage during the year is less than 10,000 lb. **(40 CFR 63.2525(e)(2))**
 - b. If the permittee documented in the notification of compliance status report that total uncontrolled organic HAP emissions from the batch process vents in an MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, then the permittee must keep records of the number of batches operated and calculate a daily rolling annual sum of batches operated no less frequently than monthly. If the number of batches operated results in organic HAP emissions that exceed 1,000 lb/yr, the permittee must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and begin recordkeeping as specified in 40 CFR 63.2525(e)(4). After one year, the permittee may revert to recording only the number of batches if the number of batches operated during the year results in less than 1,000 lb of organic HAP emissions. **(40 CFR 63.2525(e)(3))**
 - c. If none of the conditions specified in 40 CFR 63.2525(e)(1) through (3) are met, the permittee must keep records of the information specified below. **(40 CFR 63.2525(e)(4))**
 - i. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions. **(40 CFR 63.2525(e)(4)(i))**
 - ii. A record of whether each batch operated was considered a standard batch. **(40 CFR 63.2525(e)(4)(ii))**
 - iii. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch. **(40 CFR 63.2525(e)(4)(iii))**
 - iv. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly. **(40 CFR 63.2525(e)(4)(iv))**
12. The permittee shall keep a record of each time a safety device is opened to avoid unsafe conditions in accordance with 40 CFR 63.2450(s). **(40 CFR 63.2525(f))**
13. The permittee shall keep record of the results of each CPMS calibration check and the maintenance performed, as specified in 40 CFR 63.2450(k)(1). **(40 CFR 63.2525(g))**
14. For each CEMS, The permittee must keep records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period. **(40 CFR 63.2525(h))**

15. For each process unit groups (PUG), the permittee must keep records specified below. **(40 CFR 63.2525(i))**
 - a. Descriptions of the MCPU and other process units in the initial PUG required by 40 CFR 63.2535(l)(1)(v). **(40 CFR 63.2525(i)(1))**
 - b. Rationale for including each MCPU and other process unit in the initial PUG (identify the overlapping equipment between process units) required by 40 CFR 63.2535(l)(1)(v). **(40 CFR 63.2525(i)(2))**
 - c. Calculations used to determine the primary product for the initial PUG required by 40 CFR 63.2535(l)(2)(iv). **(40 CFR 63.2525(i)(3))**
 - d. Descriptions of process units added to the PUG after the creation date and rationale for including the additional process units in the PUG as required by 40 CFR 63.2535(l)(1)(v). **(40 CFR 63.2525(i)(4))**
 - e. The calculation of each primary product redetermination required by 40 CFR 63.2535(l)(2)(iv). **(40 CFR 63.2525(i)(5))**
16. In the SSMP required by 40 CFR 63.6(e)(3), the permittee is not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment. **(40 CFR 63.2525(j))**
17. For each bag leak detector used to monitor PM HAP emissions from a fabric filter, maintain records of any bag leak detection alarm, including the date and time, with a brief explanation of the cause of the alarm and the corrective action taken. **(40 CFR 63.2525(k))**

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 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 comply with the notification and reporting requirements specified in 40 CFR 63.2515, 40 CFR 63.2520, and 40 CFR 63.2525. **(40 CFR 63.2450(a))**
5. When 40 CFR 63.2455 through 63.2490 reference other subparts in 40 CFR 63 that use the term "periodic report," it means "compliance report" for the purposes of 40 CFR Part 63, Subpart FFFF. The compliance report must include the information specified in 40 CFR 63.2520(e), as well as the information specified in referenced subparts. **(40 CFR 63.2450(m)(1))**
6. When there are conflicts between 40 CFR Part 63, Subpart FFFF and referenced subparts for the due dates of reports required by 40 CFR Part 63, Subpart FFFF, reports must be submitted according to the due dates presented in 40 CFR Part 63, Subpart FFFF. **(40 CFR 63.2450(m)(2))**
7. Excused excursions, as defined in 40 CFR Part 63, Subparts G and SS, are not allowed. **(40 CFR 63.2450(m)(3))**
8. If an emission stream contains energetics or organic peroxides that, for safety reasons, cannot meet an applicable emission limit specified in Tables 1 through 7 to Subpart FFFF, then the permittee must submit documentation in the precompliance report explaining why an undue safety hazard would be created if the air emission controls were installed, and the permittee must describe the procedures that will be implemented to minimize HAP emissions from these vent streams. **(40 CFR 63.2450(q))**
9. If complying with the pollution prevention standard, the permittee must include the pollution prevention demonstration plan in the precompliance report required by 40 CFR 63.2520(c). The permittee must identify all days when the annual factors were above the target factors in the compliance reports. **(40 CFR 63.2495(f))**
10. The permittee must submit each applicable report in Table 11 to Subpart FFFF. **(40 CFR 63.2520(a))**

11. Unless the Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report by the date in Table 11 to Subpart FFFF and according to 40 CFR 63.2520(b)(1) through (5). **(40 CFR 63.2520(b))**
12. The permittee must submit a precompliance report to request approval for any of the items in 40 CFR 63.2520(c)(1) through (7). The report will be approved or disapproved within 90 days after receipt. If it is disapproved, the permittee must still be in compliance with the emission limitations and work practice standards in Subpart FFFF by the compliance date. To change any of the information submitted in the report, the permittee must submit a notification 60 days before the planned change is to be implemented. **(40 CFR 63.2520(c))**
13. The permittee must submit a notification of compliance status report according to the schedule in 40 CFR 63.2520(d)(1), and the notification of compliance status report must contain the information specified in 40 CFR 63.2520(d)(2). **(40 CFR 63.2520(d))**
14. The compliance report must contain the information specified in 40 CFR 63.2520(e)(1) through (10). **(40 CFR 63.2520(e))**
15. The permittee must submit all of the notifications in 40 CFR 63.6(h)(4) and (5), 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply by the dates specified. **(40 CFR 63.2515(a))**
16. As specified in 40 CFR 63.9(b)(2), if the affected source starts-up before November 10, 2003, the permittee must submit an initial notification not later than 120 calendar days after November 10, 2003. **(40 CFR 63.2515(b)(1))**
17. As specified in 40 CFR 63.9(b)(3), if the new affected source starts-up on or after November 10, 2003, the permittee must submit an initial notification not later than 120 calendar days after becoming subject to Subpart FFFF. **(40 CFR 63.2515(b)(2))**
18. If required to conduct a performance test, the permittee must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). For any performance test required as part of the initial compliance procedures for batch process vents in Table 2 to Subpart FFFF, the permittee must also submit the test plan required by 40 CFR 63.7(c) and the emission profile with the notification of the performance test. **(40 CFR 63.2515(c))**

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 (NESHAP), as specified in 40 CFR Part 63, Subpart A; Subpart FFFF for Miscellaneous Organic Chemical Manufacturing. **(40 CFR Part 63, Subparts A and FFFF)**
2. The permittee shall determine if an emission stream is a halogenated vent stream, as defined in 40 CFR 63.2550, by calculating the mass emission rate of halogen atoms in accordance with 40 CFR 63.115(d)(2)(v). Alternatively, the permittee may elect to designate the emission stream as halogenated. **(40 CFR 63.2450(b))**
3. Except when complying with 40 CFR 63.2485, if the permittee reduces organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare) or recovery devices, the permittee shall meet the requirements of 40 CFR 63.982(c) and the requirements referenced therein. **(40 CFR 63.2450(e)(1))**

4. Except when complying with 40 CFR 63.2485, if the permittee reduces organic HAP emissions by venting emissions through a closed-vent system to a flare, the permittee shall meet the requirements of 40 CFR 63.982(b) and the requirements referenced therein. **(40 CFR 63.2450(e)(2))**
5. If the permittee uses a halogen reduction device to reduce hydrogen halide and halogen HAP emissions from halogenated vent streams, the permittee shall meet the requirements of 40 CFR 63.994 and the requirements referenced therein. If the permittee uses a halogen reduction device before a combustion device, the permittee shall determine the halogen atom emission rate prior to the combustion device according to the procedures in 40 CFR 63.115(d)(2)(v). **(40 CFR 63.2450(e)(3))**
6. As part of a flare compliance assessment required in 40 CFR 63.987(b), the permittee has the option of demonstrating compliance with the requirements of 40 CFR 63.11(b) by complying with the requirements in either 40 CFR 63.11(b)(6)(i) or 40 CFR 63.987(b)(3)(ii). If the permittee elects to meet the requirements in 40 CFR 63.11(b)(6)(i), the permittee shall keep flare compliance assessment records as specified in 40 CFR 63.2450(f)(2)(i) and (ii). **(40 CFR 63.2450(f))**
7. To determine the percent reduction of a small control device that is used to comply with an emission limit specified in Table 1, 2, 3, or 5, the permittee may elect to conduct a design evaluation as specified in 40 CFR 63.1257(a)(1) instead of a performance test as specified in 40 CFR Part 63, Subpart SS. The permittee shall establish the value(s) and basis for the operating limits as part of the design evaluation. For continuous process vents, the design evaluation must be conducted at maximum representative operating conditions for the process, unless the Administrator specifies or approves alternate operating conditions. For transfer racks, the design evaluation must demonstrate that the control device achieves the required control efficiency during the reasonably expected maximum transfer loading rate. **(40 CFR 63.2450(h))**
8. When 40 CFR 63.997(e)(2)(iii)(C) requires correcting the measured concentration at the outlet of a combustion device to 3% oxygen if supplemental combustion air is added, the requirements in either (a) or (b) below apply for the purposes of 40 CFR Part 63, Subpart FFFF:
 - a. The permittee shall correct the concentration in the gas stream at the outlet of the combustion device to 3% oxygen if supplemental gases are added, as defined in 40 CFR 63.2550, to the vent stream, or; **(40 CFR 63.2450(i)(1))**
 - b. The permittee shall correct the measured concentration for supplemental gases using Equation 1 of 40 CFR 63.2460; the permittee may use process knowledge and representative operating data to determine the fraction of the total flow due to supplemental gas. **(40 CFR 63.2450(i)(2))**
9. For each continuous process vent, the permittee shall either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in 40 CFR 63.115(d), except as specified in 40 CFR 63.2455(b)(1) through (3). **(40 CFR 63.2455(b))**
10. If the permittee uses a recovery device to maintain the TRE above a specified threshold, the permittee shall meet the requirements of 40 CFR 63.982(e) and the requirements referenced therein, except as specified in 40 CFR 63.2450 and 40 CFR 63.2455(c)(1). **(40 CFR 63.2455(c))**
11. If a process has batch process vents, as defined in 40 CR 63.2550, the permittee must determine the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process using the procedures specified in 40 CFR 63.1257(d)(2)(i) and (ii), except as specified in 40 CFR 63.2460(b)(1) through (7). **(40 CFR 63.2460(b))**
12. Exceptions to the requirements for batch process vents in 40 CFR Part 63, Subparts SS and WW are specified in 40 CFR 66.2460(c)(1) through (9). **(40 CFR 63.2460(c))**
13. If any process vents within a process emit hydrogen halide and halogen HAP, the permittee must determine and sum the uncontrolled hydrogen halide and halogen HAP emissions from each of the process vents within the process using the procedures specified in 40 CFR 63.1257(d)(2)(i) and/or (ii), as appropriate. When 40 CFR 63.1257(d)(2)(ii)(E) requires documentation to be submitted in the precompliance report, it means the notification of compliance status report for the purposes of 40 CFR 63.2465(b). **(40 CFR 63.2465(b))**

14. If collective uncontrolled hydrogen halide and halogen HAP emissions from the process vents within a process are greater than or equal to 1,000 pounds per year (lb/yr), the permittee must comply with 40 CFR 63.994 and the requirements referenced therein, except as specified in 40 CFR 63.2465(c)(1) through (3). **(40 CFR 63.2465(c))**
15. To demonstrate compliance with the emission limit in Table 3 to Subpart FFFF for HAP metals at a new source, the permittee must determine the mass emission rate of HAP metals based on process knowledge, engineering assessment, or test data. **(40 CFR 63.2465(d)(1))**
16. If the permittee conducts a performance test or design evaluation for a control device used to control emissions only from storage tanks, the permittee must establish operating limits, conduct monitoring, and keep records using the same procedures as required in 40 CFR Part 63, Subpart SS for control devices used to reduce emissions from process vents instead of the procedures specified in 40 CFR 63.985(c), 40 CFR 63.998(d)(2)(i), and 40 CFR 63.999(b)(2). **(40 CFR 63.2470(c)(1))**
17. When the term "storage vessel" is used in 40 CFR Part 63, Subparts SS and WW, the term "storage tank," as defined in 40 CFR 63.2550 applies for the purposes of Subpart FFFF. **(40 CFR 63.2470(c)(2))**
18. The permittee must meet each requirement in Table 6 to Subpart FFFF that applies to equipment leaks, except as specified in 40 CFR 63.2480(b) through (d). **(40 CFR 63.2480)**
19. The permittee must meet each requirement in Table 7 to Subpart FFFF that applies to wastewater streams and liquid streams in open systems within an MCPU, except as specified in 40 CFR 63.2485(b) through (o). **(40 CFR 63.2485)**
20. The permittee must meet each requirement in Table 10 to Subpart FFFF that applies to heat exchange systems, except that the phrase "a chemical manufacturing process unit meeting the conditions of 40 CFR 63.100 (b)(1) through (b)(3) of this section" in 40 CFR 63.104(a) means "an MCPU meeting the conditions of 40 CFR 63.2435" for the purposes of Subpart FFFF and that the reference to 40 CFR 63.100(c) in 40 CFR 63.104(a) does not apply for the purposes Subpart FFFF. **(40 CFR 63.2490)**
21. For each MCPU for which the permittee is complying with 40 CFR 63.2495(a), the pollution prevention standard, the permittee must calculate annual rolling average values of the HAP and VOC factors (annual factors) in accordance with the procedures specified below. To show continuous compliance, the annual factors must be equal to or less than the target annual factors calculated according to 40 CFR 63.2495(c)(3). **(40 CFR 63.2495(d))**
 - a. To calculate the annual factors, the permittee must divide the consumption of both total HAP and total VOC by the production rate, per process, for 12-month periods at the frequency specified in either paragraph below, as applicable. **(40 CFR 63.2495(d)(1))**
 - i. For continuous processes, the permittee must calculate the annual factors every 30 days for the 12-month period preceding the 30th day (annual rolling average calculated every 30 days). A process with both batch and continuous operations is considered a continuous process for the purposes of this section. **(40 CFR 63.2495(d)(2))**
 - ii. For batch processes, the permittee must calculate the annual factors every 10 batches for the 12-month period preceding the 10th batch (annual rolling average calculated every 10 batches), except as specified if the permittee produces more than 10 batches during a month, the permittee must calculate the annual factors at least once during that month and, if the permittee produces less than 10 batches in a 12-month period, the permittee must calculate the annual factors for the number of batches in the 12-month period since the previous calculations. **(40 CFR 63.2495(d)(3))**
22. To demonstrate compliance with the alternative standard in 40 CFR 63.2505, the permittee must meet the requirements of 40 CFR 63.1258(b)(5) beginning no later than the initial compliance date specified in 40 CFR 63.2445, except as specified below. **(40 CFR 63.2505(b))**
 - a. The permittee must comply with the requirements in 40 CFR 63.983 and the requirements referenced therein for closed-vent systems. **(40 CFR 63.2505(b)(1))**
 - b. When 40 CFR 63.1258(b)(5)(i) refers to 40 CFR 63.1253(d) and 40 CFR 63.1254(c), the requirements in paragraph 40 CFR 63.2505(a) apply for the purposes of Subpart FFFF. **(40 CFR 63.2505(b)(2))**

- c. When 40 CFR 63.1258(b)(5)(i)(B) refers to “HCl,” it means “total hydrogen halide and halogen HAP” for the purposes of Subpart FFFF. **(40 CFR 63.2505(b)(3))**
 - d. When 40 CFR 63.1258(b)(5)(ii) refers to 40 CFR 63.1257(a)(3), it means 40 CFR 63.2450(j)(5) for the purposes of Subpart FFFF. **(40 CFR 63.2505(b)(4))**
 - e. The permittee must submit the results of any determination of the target analytes of predominant HAP in the notification of compliance status report. **(40 CFR 63.2505(b)(5))**
 - f. If the permittee elects to comply with the requirement to reduce hydrogen halide and halogen HAP by greater than or equal to 95% by weight in 40 CFR 63.2505(a)(1)(i)(C), the permittee must meet the requirements below. **(40 CFR 63.2505(b)(6))**
 - i. Demonstrate initial compliance with the 95% reduction by conducting a performance test and setting a site-specific operating limit(s) for the scrubber in accordance with 40 CFR 63.994 and the requirements referenced therein. The permittee must submit the results of the initial compliance demonstration in the notification of compliance status report. **(40 CFR 63.2505(b)(6)(i))**
 - ii. Install, operate, and maintain CPMS for the scrubber as specified in 40 CFR 63.994(c) and 40 CFR 63.2450(k), instead of as specified in 40 CFR 63.1258(b)(5)(i)(C). **(40 CFR 63.2505(b)(6)(ii))**
 - g. If flow to the scrubber could be intermittent, the permittee you must install, calibrate, and operate a flow indicator as specified in 40 CFR 63.2460(c)(7). **(40 CFR 63.2505(b)(7))**
 - h. Use the operating day as the averaging period for CEMS data and scrubber parameter monitoring data. **(40 CFR 63.2505(b)(8))**
 - i. The requirements in 40 CFR 63.2505(a) do not apply to emissions from storage tanks during periods of planned routine maintenance of the control device that do not exceed 240 hr/yr. The permittee may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr in accordance with the procedures specified in 40 CFR 63.2470(d). The permittee must comply with the recordkeeping and reporting specified in 40 CFR 63.998(d)(2)(ii) and 40 CFR 63.999(c)(4) for periods of planned routine maintenance. **(40 CFR 63.2505(b)(9))**
23. For any equipment, emission stream, or wastewater stream subject to the provisions of both 40 CFR Part 63, Subpart FFFF and another rule, the permittee may elect to comply only with the provisions as specified in 40 CFR 63.2535(a) through (l). The permittee also must identify the subject equipment, emission stream, or wastewater stream, and the provisions that will be complied with, in the notification of compliance status report required by 40 CFR 63.2520(d). **(40 CFR 63.2535)**
24. For any Group 2 emission point that becomes a Group 1 emission point after the compliance date for the facility, the permittee shall comply with the Group 1 requirements beginning on the date the switch occurs. An initial compliance demonstration, as specified in 40 CFR Part 63, Subpart FFFF, shall be conducted within 150 days after the switch occurs. **(40 CFR 63.2445(d))**
25. If, after the compliance date for the facility, hydrogen halide and halogen HAP emissions from process vents in a process increase to more than 1,000 lb/yr, or HAP metals emissions from a process at a new affected source increase to more than 150 lb/yr, the permittee shall comply with the applicable emission limits specified in Table 3 of 40 CFR Part 63, Subpart FFFF and the associated compliance requirements beginning on the date the emissions exceed the applicable threshold. An initial compliance demonstration, as specified in 40 CFR Part 63, Subpart FFFF, shall be conducted within 150 days after the switch occurs. **(40 CFR 63.2445(e))**
26. If the permittee has a small control device for process vent or transfer rack emissions that becomes a large control device, as defined in 40 CFR 63.2550(i), the permittee shall comply with monitoring and associated recordkeeping and reporting requirements for large control devices beginning on the date the switch occurs. An initial compliance demonstration, as specified in 40 CFR Part 63, Subpart FFFF, shall be conducted within 150 days after the switch occurs. **(40 CFR 63.2445(f))**

**FGCOATINGSMACT
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Each new and existing miscellaneous coating manufacturing operation as defined in 40 CFR Part 63, Subpart HHHHH, 63.7985(b) that meet the conditions specified in 40 CFR 63.7985(a)(1) through (4). This includes the facility-wide collection of equipment described in 40 CFR 63.7985(b)(1) through (4) used to manufacture coatings as defined in 40 CFR 63.8105 and also includes cleaning operations.

Emission Units: EURULE290, EU04

POLLUTION CONTROL EQUIPMENT

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Organic HAP with vapor pressure > 0.6 kPa	> 75% reduction by weight	Defined in 40 CFR Part 63, Subparts A and HHHHH	EXISTING Stationary Process Vessel	SC V.1, V.2, V.3, V.4, VI.1	40 CFR 63.8005(a)
2. Organic HAP with vapor pressure < 0.6 kPa	> 60% reduction by weight	Defined in 40 CFR Part 63, Subparts A and HHHHH	EXISTING Stationary Process Vessel	SC V.1, V.2, V.3, V.4, VI.1	40 CFR 63.8005(a)
3. Total organic HAP	> 95% reduction by weight	Defined in 40 CFR Part 63, Subparts A and HHHHH	NEW Portable & Stationary Process Vessel	SC V.1, V.2, V.3, V.4, VI.1	40 CFR 63.8005(a)
4. Hydrogen halide and halogen HAP * ---OR--- Halogen atom mass emission rate *	> 95% reduction by weight ---OR--- 0.45 kg/hr	Defined in 40 CFR Part 63, Subparts A and HHHHH	EXISTING Stationary Vessel and NEW Portable and Stationary	SC V.1, V.2, V.3, V.4, VI.1	40 CFR 63.8005(a)
5. Total Organic HAP	≥ 90% reduction by weight	Defined in 40 CFR Part 63, Subparts A and HHHHH	Group 1 Storage Tank	Defined in 40 CFR Part 63, Subparts A and HHHHH	40 CFR 63.8010(a)
6. Total Organic HAP	≥ 80% reduction by weight	Defined in 40 CFR Part 63, Subparts A and HHHHH	Group 2 Storage Tank	Defined in 40 CFR Part 63, Subparts A and HHHHH	40 CFR 63.8010(a)
7. Total Organic HAP	≥ 75% reduction by weight	Defined in 40 CFR Part 63, Subparts A and HHHHH	Group 1 transfer operation vent stream	Defined in 40 CFR Part 63, Subparts A and HHHHH	40 CFR 63.8025(a)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
8. Hydrogen halide and halogen HAP* ---OR--- Halogen atom mass emission rate *	≥ 95% reduction by weight ---OR--- 0.45 kg/hr	Defined in 40 CFR Part 63, Subparts A and HHHHH	Halogenated Group 1 transfer operation vent stream with combustion device	Defined in 40 CFR Part 63, Subparts A and HHHHH	40 CFR 63.8025(a)

* This limit applies to a halogenated vent stream from a process vessel for which a combustion control device is used to control organic HAP emissions.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall comply with the applicable emission limits and work practice standards specified in Tables 1 through 5 of 40 CFR Part 63, Subpart HHHHH at all times, except during periods of startup, shutdown, and malfunction. **(40 CFR 63.8000(a))**
2. If an emission stream contains halogen atoms, and a combustion-based control device (excluding a flare) is used to meet an organic HAP emission limit, the permittee must determine if the emission stream meets the definition of a halogenated stream by calculating the concentration of each organic compound that contains halogen atoms using the procedures specified in 40 CFR 63.115(d)(2)(v), multiplying each concentration by the number of halogen atoms in the organic compound, and summing the resulting halogen atom concentration for all of the organic compounds in the emission stream. Alternatively, the permittee may elect to designate the emission stream as halogenated. **(40 CFR 63.8000(b)(1))**
3. The permittee may open a safety device, as defined in 40 CFR 63.8105, at any time conditions require it to avoid unsafe conditions. **(40 CFR 63.8000(b)(2))**
4. The permittee shall comply with the requirements of 40 CFR Part 63, Subpart SS as specified below for closed vent systems and control devices that are used to comply with an emission limit in Table 1, 2, or 5 of 40 CFR Part 63, Subpart HHHHH, except as stated in 40 CFR 63.8000(d)(1) through (7):
 - a. Meet the requirements of 40 CFR 63.982(c) and the requirements therein, if organic HAP emissions are reduced by venting emissions through a closed-vent system to any combination of control devices (except a flare). **(40 CFR 63.8000(c)(1))**
 - b. Meet the requirements of 40 CFR 63.982(b) and the requirements therein, if organic HAP emissions are reduced by venting emissions through a closed-vent system to a flare. The flare may not be used to control halogenated vent streams or hydrogen halide and halogen HAP emissions. **(40 CFR 63.8000(c)(2))**
 - c. Meet the requirements of 40 CFR 63.994 and the requirements referenced therein if a halogen reduction device is used to reduce hydrogen halide and halogen HAP emissions that are generated by combusting halogenated vent streams. If the halogen reduction device is used before a combustion device, determine the halogen atom emission rate prior to the combustion device according to the procedures in 40 CFR 63.115(d)(2)(v). **(40 CFR 63.8000(c)(3))**
5. For a control device with total inlet HAP emissions less than one ton per year, the permittee shall establish operating limit(s) for parameter(s) that will be measured and recorded at least once per averaging period (daily or block) to verify that the control device is operating properly. The permittee may measure the same parameter(s) required for control devices that control inlet HAP emission equal to or greater than one ton per year. If the parameter will not be measured continuously, the permittee must request approval of the proposed procedure in the precompliance report. The operating limits and measurement frequency must be identified and

rationale provided to support how these measurements demonstrate the control device is operating properly. **(40 CFR 63.8000(d)(3))**

6. The permittee shall equip each portable and stationary process vessel with a cover or lid that must be in place at all times when the vessel contains a HAP, except for material additions and sampling. **(40 CFR 63.8005(a)(1))**
7. The permittee shall reduce the emissions of organic HAP for each existing stationary process vessel using one of the following methods: **(40 CFR 63.8005(a)(1))**
 - a. By considering both capture and any combination of control (except a flare); or
 - b. By venting emissions through a closed-vent system to any combination of control devices (except a flare); or
 - c. By venting emissions from a non-halogenated vent stream through a closed-vent system to a flare; or
 - d. By venting emissions through a closed-vent system to a condenser that reduces the outlet gas temperature to $< 10^{\circ}\text{C}$ if the process vessel contains HAP with a partial pressure < 0.6 kPa, or $< 2^{\circ}\text{C}$ if the process vessel contains HAP with a partial pressure ≥ 0.6 kPa and < 17.2 kPa, or $< -5^{\circ}\text{C}$ if the process vessel contains HAP with a partial pressure ≥ 17.2 kPa.
8. The permittee shall reduce the emissions of total organic HAP for each new portable and/or stationary process vessel using one of the following methods: **(40 CFR 63.8005(a)(1))**
 - a. By venting emissions through a closed-vent system to any combination of control devices (except a flare);
 - b. By venting emissions from a non-halogenated vent stream through a closed-vent system to a flare; or
 - c. By venting emissions through a closed-vent system to a condenser that reduces the outlet gas temperature to $< -4^{\circ}\text{C}$ if the process vessel contains HAP with a partial pressure < 0.7 kPa, or $< -20^{\circ}\text{C}$ if the process vessel contains HAP with a partial pressure ≥ 0.7 kPa and < 17.2 kPa, or $< -30^{\circ}\text{C}$ if the process vessel contains HAP with a partial pressure ≥ 17.2 kPa.
9. If a combustion control device is used to control organic HAP emissions, the permittee shall use a halogen reduction device after the combustion control device to reduce emission of hydrogen halide and halogen HAP. **(40 CFR 63.8005(a)(1))**
10. If a combustion control device is used to control organic HAP emissions, the permittee shall use a halogen reduction device before the combustion control device to reduce the halogen atom mass emission rate. **(40 CFR 63.8005(a)(1))**
11. The permittee shall comply with the emission limits and work practice standards and the applicable requirements of 40 CFR 63.8000(b), except as listed below: **(40 CFR 63.8005(a)(1))**
 - a. Process vessels are not required to meet the emission limits and work practice standards, if the permittee complies with 40 CFR 63.8050 (emissions averaging for stationary process vessels at existing sources) or 40 CFR 63.8055 (weight percent HAP limit in coating products). **(40 CFR 63.8005(a)(1)(i))**
 - b. The emission limits and work practice standards apply to emissions from automatic cleaning operations only, not from manually conducted cleaning operations. **(40 CFR 63.8005(a)(1)(ii))**
12. For each control device on a process vessel used to comply with the emission limitations, the permittee shall comply with the requirements of 40 CFR Part 63, Subpart SS as specified in 40 CFR 63.8000(c), except as stated in 40 CFR 63.8000(d) and 40 CFR 63.8005 (b) through (g). **(40 CFR 63.8005(a)(2))**
13. The permittee shall establish operating limits under the conditions required for the initial compliance demonstration except as specified in 40 CFR 63.8005(e)(1) and (e)(2). **(40 CFR 63.8005(e))**
14. If the permittee elects to establish separate operating limits for different emission episodes, operating block averages may be determined instead of the daily averages specified in 40 CFR 63.998(b)(3). An operating block is a period of time equal to the time from the beginning to end of an emission episode or sequence of emission episodes. **(40 CFR 63.8005(f))**
15. If a flow indicator could be intermittent, the permittee must install, calibrate and operate a flow indicator at the inlet or outlet of the control device to identify periods of no flow. Periods of no flow can not be used in daily or block averages or in fulfilling a minimum data availability requirement. **(40 CFR 63.8005(g))**

16. As an alternative to complying with the emission limits and work practice standards for each stationary process vessel greater than or equal to 250 gallons at an existing affected source, the permittee may elect to comply with emissions averaging as specified in 40 CFR 63.8050(b) through (e). **(40 CFR 63.8050(a))**
17. As an alternative to complying with the emission limits and work practice standards for each stationary process vessel at an existing affected source, the permittee may elect to comply with a 5 weight percent HAP limit for process vessels that are used to manufacture coatings with a HAP content of less than 0.05 kg per kg product as specified in 40 CFR 63.8055(b). **(40 CFR 63.8055(a))**
18. The permittee shall be in compliance with the emission limits and work practice standards at all times, except during periods of startup, shutdown and malfunction. **(40 CFR 63.8010(a))**
19. The permittee shall comply with the following for each storage tank: **(40 CFR 63.8010)**
 - a. The applicable requirements in 40 CFR 63.8000(b) and
 - b. The applicable weight percent reduction for total organic HAP; or
 - c. The requirements of 40 CFR Part 63, Subpart WW except as specified in 40 CFR 63.8010(b); or
 - d. Reduce total organic HAP emissions from the Group 1 or Group 2 storage tank by venting emissions from a non-halogenated vent stream through a closed-vent system to a flare.
20. For each control device used to comply with the emission limits, the permittee must comply with the requirements of 40 CFR Part 63, Subpart SS as specified in 40 CFR 63.8000(c), except as stated in 40 CFR 63.8000(d) and 40 CFR 63.8010(b) through (d). **(40 CFR 63.8010)**
21. The permittee shall be in compliance with the emission limits and work practice standards at all times, except during periods of startup, shutdown and malfunction. **(40 CFR 63.8020(a))**
22. For each wastewater tank used to store a Group 1 wastewater stream, the permittee shall maintain a fixed roof, which may have openings necessary for proper venting of the tank, such as pressure/vacuum vent or j-pipe vent. **(40 CFR 63.8020(a))**
23. For each Group 1 wastewater stream, the permittee shall convey, using hard-piping, and treat the wastewater as a hazardous waste in accordance with 40 CFR Part 264, 265, or 266 either onsite or offsite. If the wastewater contains 50 ppmw of partially soluble HAP, the permittee may elect to treat the wastewater in an enhanced biological treatment system that is located either onsite or offsite. **(40 CFR 63.8020(a))**
24. For each wastewater stream generated: **(40 CFR 63.8020(b))**
 - a. The permittee may designate any wastewater stream as a Group 1 wastewater stream without determining the concentration;
 - b. If any wastewater stream is not designated as a Group 1 wastewater stream, the permittee shall use procedures specified in 40 CFR 63.144(b) to establish concentrations except compounds listed in Table 8 of 40 CFR 63.144 do not apply and alternatives to the test methods specified in 40 CFR 63.144(b)(5)(i) are specified in 40 CFR 63.8020((b)(ii).
25. The permittee shall reduce the emissions of organic HAP for each Group 1 transfer operation vent stream using one of the following methods: **(40 CFR 63.8025(a))**
 - a. By venting emissions through a closed-vent system to any combination of control devices (except a flare); or
 - b. By venting emissions from a non-halogenated vent stream through a closed-vent system to a flare; or
 - c. By using a vapor balancing system designed and operated to collect organic HAP vapors displaced from tank trucks and railcars during loading and route the collected HAP vapors to the storage tank from which the liquid being loaded originated or to another storage tank connected by a common header.
26. If a combustion control device is used to control organic HAP emissions, the permittee shall use a halogen reduction device after the combustion control device to reduce emission of hydrogen halide and halogen HAP. **(40 CFR 63.8025(a))**

27. If a combustion control device is used to control organic HAP emissions, the permittee shall use a halogen reduction device before the combustion control device to reduce the halogen atom mass emission rate. **(40 CFR 63.8025(a))**
28. The permittee shall comply with each emission limit and work practice standard in Table 5 of 40 CFR Part 63, Subpart HHHHH and the applicable requirements in 40 CFR 63.8000(b). For each control device used to comply with Table 5 of 40 CFR Part 63, Subpart HHHHH, the permittee shall comply with the requirements of 40 CFR Part 63, Subpart SS as specified in 40 CFR 63.8000(c), except as stated in 40 CFR 63.8000(d) and 40 CFR 63.8025(b). **(40 CFR 63.8025(a))**
29. For Group 1 transfer operations as defined in 40 CFR 63.8105, all transfer racks used for bulk loading coatings must meet the requirements for high throughput transfer racks in Subpart SS. **(40 CFR 63.8025(b))**
30. For a heat exchange system, as defined in 40 CFR 63.101, the permittee shall comply with the requirements specified in 40 CFR 63.104, except as stated as stated below: **(40 CFR 63.8030(a))**
 - a. The phrase a chemical manufacturing process unit meeting the conditions of 40 CFR 63.100(b)(1) through (b)(3) of Subpart HHHHH in 40 CFR 63.104(a) means the miscellaneous coating manufacturing operations defined in 40 CFR 63.7985(b). **(40 CFR 63.8030(b))**
 - b. The reference to 40 CFR 63.100(c) in 40 CFR 63.104(a) does not apply. **(40 CFR 63.8030(c))**
 - c. The reference to 40 CFR 63.103(c)(1) in 40 CFR 63.104(f)(1) does not apply. Records must be retained as specified in 40 CFR 63.10(b)(1). **(40 CFR 63.8030(d))**
 - d. The reference to the periodic report required by 40 CFR 63.152(c) of 40 CFR Part 63, Subpart G means the compliance report required by 40 CFR 63.8075(e). **(40 CFR 63.8030(e))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. For equipment that is in organic HAP service at an existing source, the permittee shall comply with the following, except as stated in 40 CFR 63.8015(b) through (d): **(40 CFR 63.8015(a))**
 - a. The requirements in 40 CFR 63.424(a) through (d) and 40 CFR 63.428(e), (f) and (h)(4) except as specified in 40 CFR 63.8015(b); or
 - b. The requirements of 40 CFR Part 63, Subpart TT; or
 - c. The requirements of 40 CFR Part 63, Subpart UU, except as specified in 40 CFR 63.8015(c) and (d).
2. For equipment that is in organic HAP service at a new source, the permittee shall comply with the following, except as stated in 40 CFR 63.8015(b) through (d): **(40 CFR 63.8015(a))**
 - a. The requirements of 40 CFR Part 63, Subpart TT; or
 - b. The requirements of 40 CFR Part 63, Subpart UU, except as specified in 40 CFR 63.8015(c) and (d).

V. TESTING/SAMPLING

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

1. The requirements specified in 40 CFR 63.8000(d)(1) apply instead of or in addition to the requirements for performance testing of control devices as specified in 40 CFR Part 63, Subpart SS. **(40 CFR 63.8000(d))**
2. The permittee may elect to conduct a design evaluation as specified in 40 CFR 63.1257(a)(1) to determine the percent reduction of a small control device, instead of a performance test as specified in 40 CFR Part 63, Subpart SS. The values and basis for the operating limits must be established as part of the design evaluation. **(40 CFR 63.8000(d)(2))**
3. The permittee shall demonstrate initial compliance with a percent reduction emission limit by conducting a performance test or design evaluation under conditions as specified in 63.7(e)(1), except that the performance test or design evaluation must be conducted under worst-case conditions. The performance test for a control device used to control emission from process vessels must be conducted according to 40 CFR 63.1257(b)(8), including the submittal of a site-specific test plan for approval prior to testing. **(40 CFR 63.8005(d)(1))**

4. To demonstrate initial compliance for condensers, the permittee shall determine uncontrolled emissions using the procedures specified in 40 CFR 63.1257(d)(2) and determine controlled emissions using the procedures specified in 40 CFR 63.1257(d)(3)(i)(B) and (iii). **(40 CFR 63.8005(d)(2))**
5. The permittee shall demonstrate that each process condenser is properly operated according to the procedures specified in 40 CFR 63.1257(d)(2)(i)(C)(4)(ii) and (d)(3)(iii)(B). As an alternative to measuring the exhaust temperature, the permittee may elect to measure the liquid temperature in the receiver. **(40 CFR 63.8005(d)(3))**
6. The permittee shall conduct a performance test or compliance demonstration equivalent to the initial compliance demonstration within 360 hours of a change in operating conditions that are not considered to be within the previously established worst-case conditions. **(40 CFR 63.8005(d)(4))**

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 keep all records required by 40 CFR 63.8080. These records include, but are not limited to, the following:
 - a. Each applicable record required by 40 CFR Part 63, Subpart A and in referenced Subparts SS, TT, UU and WW of 40 CFR Part 63; **(40 CFR 63.8080(a))**
 - b. If complying with emissions averaging, records of the monthly number of batches for each process vessel, the quarterly actual emissions for each process vessel, the quarterly estimated emissions for each process vessel if it had been controlled as specified in Table 1 to 40 CFR Part 63, Subpart HHHHH, and comparison of the sums of the quarterly actual and estimated emissions as specified in 40 CFR 63.8050(d); **(40 CFR 63.8080(b))**
 - c. A record of each time a safety device is opened to avoid unsafe conditions in accordance with 40 CFR 63.8000(b)(2); **(40 CFR 63.8080(c))**
 - d. Records of the results of each continuous parameter monitoring system (CPMS) calibration check and the maintenance performed, as specified in 40 CFR 63.8000(d)(5); **(40 CFR 63.8080(d))**
 - e. For each continuous emission monitoring system (CEMS), records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period; **(40 CFR 63.8080(e))**
 - f. In the SSMP required by 40 CFR 63.6(e)(3), including Group 2 or non-affected emission points is not required. For equipment leaks only, the SSMP requirement is limited to control devices and is optional for other equipment; **(40 CFR 63.8080(f))**
 - g. If separate operating limits are established as allowed in 40 CFR 63.8005(e), retain a log of operation or a daily schedule indicating the time when changing from one operating limit to another. **(40 CFR 63.8080(g))**
2. The permittee may elect to comply with the monitoring and recordkeeping requirements of 40 CFR Part 63, Subpart HHHHH or the monitoring and recordkeeping requirements of another applicable subpart as specified in 40 CFR 63.8090(a) and (b). **(40 CFR 63.8090)**
3. If a CEMS is used, it must be installed, operated and maintained according to the requirements in 40 CFR 63.8 and 40 CFR 63.8000(d)(4)(i) through (iv). **(40 CFR 63.8000(d)(4))**
4. If a CPMS is used, the permittee shall comply with the requirements in 40 CFR Part 63, Subpart SS and the provisions in 40 CFR 63.8000(d)(5)(i) through (iii). **(40 CFR 63.8000(d)(5))**
5. The exclusion of monitoring data from daily averages collected during periods of SSM as specified in 40 CFR 63.998(b)(2)(iii) and (b)(6)(i)(A) does not apply. **(40 CFR 63.8000(d)(6))**
6. If complying with emissions averaging, the permittee shall keep records of the monthly number of batches for each process vessel, the quarterly actual emissions for each process vessel, the quarterly estimated emissions for each process vessel if it had been controlled as specified in Table 1 to 40 CFR Part 63, Subpart HHHHH, and comparison of the sums of the quarterly actual and estimated emissions as specified in 40 CFR 63.8050(d). **(40 CFR 63.8080(b))**

7. For each enhanced biological treatment unit used, the permittee must monitor total suspended solids (TSS), biological oxygen demand (BOD), and the biomass concentration. In the precompliance report, the permittee shall identify and provide rationale for proposed operating limits for these parameters, methods for monitoring, the frequency of monitoring, and recordkeeping and reporting procedures that will demonstrate proper operation of the enhanced biological treatment unit. Alternatively, the permittee may use the precompliance report to request to monitor other parameters, and must include a description of planned reporting and recordkeeping procedures and the basis for the selected monitoring frequencies and the methods that will be used. **(40 CFR 63.8020(c))**

See Appendix 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 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 all reports required by 40 CFR 63.8075. These reports include, but are not limited to, the following:
 - a. A pre-compliance report, submitted 6 months prior to the compliance date, to request approval of any of the information in 40 CFR 63.8075(c)(1) through (4). The report will be either approved or disapproved by the AQD within 90 days after receipt. If this report is disapproved, compliance with the emission limitations and work practice standards in 40 CFR Part 63, Subpart HHHHH by the compliance date is still required. **(40 CFR 63.8075(c))**
 - b. A notification of compliance status report, submitted no later than 150 days after the applicable compliance date specified in 40 CFR 63.7995, and including the information specified in 40 CFR 63.8075(d)(2). **(40 CFR 63.8075(d))**
 - c. A compliance report, submitted semiannually in accordance with 40 CFR 63.8075(b) which contains the information specified in 40 CFR 63.8075(e)(1) through (8). **(40 CFR 63.8075(e))**
5. The permittee may elect to comply with the reporting requirements of 40 CFR Part 63, Subpart HHHHH or the reporting requirements of another applicable subpart as specified in 40 CFR 63.8090(a) and (b). **(40 CFR 63.8090)**
6. The permittee shall submit all notifications required by 40 CFR 63.8070. These notifications include, but are not limited to, the following:
 - a. All notifications specified in 40 CFR 63.6(h)(4) and (5), 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply by the dates specified; **(40 CFR 63.8070(a))**
 - b. An initial notification as specified in 40 CFR 63.9(b)(2) or (3), submitted not later than 120 calendar days after December 11, 2003, for an existing affected source, or submitted not later than 120 calendar days after becoming subject to this subpart for a new affected source; **(40 CFR 63.8070(b))**
 - c. If a performance test is required, a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). For any performance test required as part of the initial compliance procedures for process vessels in Table 1 of 40 CFR Part 63, Subpart HHHHH, the test plan required by 40 CFR 63.7(c) and the emission profile must also be submitted with the notification of the performance test. **(40 CFR 63.8070(c))**
7. If wastewater is transferred offsite for enhanced biological treatment, the permittee must obtain written certification from the offsite facility stating that the offsite facility will comply with the requirements of 40 CFR Part 63, Subpart HHHHH. **(40 CFR 63.8020(d))**

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 (NESHAP), as specified in 40 CFR Part 63, Subpart A and Subpart HHHHH for Miscellaneous Coating Manufacturing by the initial compliance date. **(40 CFR Part 63, Subparts A and HHHHH)**
2. The permittee shall comply with the applicable General Provisions in 40 CFR 63.1 through 40 CFR 63.15 as specified in Table 10 to 40 CFR Part 63, Subpart HHHHH. **(40 CFR 63.8095)**

**FGBENZENEWASTE-S1
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Benzene waste operations standards that apply to equipment and processes at certain chemical manufacturing plants.

Emission Units: EU04, EU89, EU94, and EURULE290

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall determine the total annual benzene quantity from facility waste when required by, and in compliance with 40 CFR Part 61, Subpart FF, Section 61.355(a) (Test methods, procedures and compliance provisions). **(40 CFR Part 61, Subpart FF)**

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 keep the records required by 40 CFR Part 61, Subpart FF, Sections 61.356(a), (b) and (b)(1) (Recordkeeping requirements). **(40 CFR Part 61, Subpart FF)**

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 total annual benzene quantity from facility waste is less than 10 Mg/year but is equal to or greater than 1 Mg/year, a report updating the information regarding aqueous benzene wastewater streams shall be submitted in compliance with 40 CFR Part 61, Subpart FF, Section 61.357(c) (Reporting requirements). This report is due annually by April 7 or anytime a process change occurs that could cause the total annual benzene quantity from the facility to increase to 10 Mg/yr or more. **(40 CFR Part 61, Subpart FF)**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the applicable requirements of 40 CFR Part 61, Subparts A (General Provisions) and FF (NESHAP for Benzene Wastewater Operations). The applicable sections of Subpart FF may include: **(40 CFR Part 61, Subparts A and FF)**
 - a. 61.340 Applicability
 - b. 61.341 Definitions
 - c. 61.342 Standards: General – paragraphs (a) & (g) only
 - d. 61.355 Test methods, procedures and compliance provisions – paragraph (a) only
 - e. 61.356 Recordkeeping requirements – paragraphs (a), (b) & (b)(1) only
 - f. 61.357 Reporting requirements – paragraphs (a) & (c) only

E. NON-APPLICABLE REQUIREMENTS

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

Emission Unit/Flexible Group ID	Non-Applicable Requirement	Justification
EU89	40 CFR Part 63, Subpart JJJ	The copolymer product produced in EG89 is not a thermoplastic product that would subject the emission unit to Subpart JJJ.
EU94	40 CFR Part 63, Subpart DDDDD	The G and H Crackers function to produce product. Since they are part of the MON MCPU, they are excluded from Boiler MACT according to 40 CFR 63.7491(h).

APPENDICES

Appendix 1-1. 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
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		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 2-1. Schedule of Compliance

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

Appendix 3-1. Monitoring Requirements

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in FGCOATINGSMACT:

1. If a control device used to comply with 40 CFR Part 63, Subpart HHHHH, is also subject to monitoring, recordkeeping and reporting requirements in 40 CFR Part 264, Subpart AA, BB, or CC; or monitoring and recordkeeping requirements in 40 CFR Part 265, Subpart AA, BB, or CC; and the permittee complies with the periodic reporting requirements under 40 CFR Part 264, Subpart AA, BB, or CC, the permittee may elect to comply with the monitoring, recordkeeping and reporting requirements of 40 CFR Part 63, Subpart HHHHH; or the monitoring and recordkeeping requirements of 40 CFR Part 264 or 265 and the reporting requirements in 40 CFR Part 264. If the permittee elects to comply with the monitoring, recordkeeping and reporting requirements of 40 CFR Parts 264 and/or 265, the information required for the compliance report in 40 CFR 63.8075(e) must be reported and the notification of compliance status report required by 40 CFR 63.8075(d) must identify the monitoring, recordkeeping and reporting authority under which the permittee will comply. **(40 CFR 63.8090(a))**
2. For any equipment that is subject to 40 CFR Part 63, Subpart HHHHH, and is also subject to 40 CFR Part 264, Subpart BB or 40 CFR Part 265, Subpart BB, compliance with recordkeeping and reporting requirements of 40 CFR Part 264 and/or 265 may be used to comply with the recordkeeping and reporting requirements of 40 CFR 63.1255, to the extent that the requirements of 40 CFR Part 264 and/or 265 duplicate the requirements of 40 CFR Part 63, Subpart HHHHH. The permittee shall identify, in the notification of compliance status report required by 40 CFR 63.8075(d), compliance with the recordkeeping and reporting authority under 40 CFR Part 264 and/or 265. **(40 CFR 63.8090(b))**
3. Any storage tank used in miscellaneous coating manufacturing operations that is both controlled with a floating roof and in compliance with the provisions of 40 CFR Part 60, Subpart Kb, shall be considered in compliance with 40 CFR Part 63, Subpart HHHHH. Any storage tank with a fixed roof, closed-vent system, and control device in compliance with 40 CFR Part 60, Subpart Kb, shall be considered in compliance with 40 CFR Part 63, Subpart HHHHH, however, the permittee must comply with the monitoring, recordkeeping and reporting requirements in 40 CFR Part 63, Subpart HHHHH. The permittee must identify in the notification of compliance status report required by 40 CFR 63.8075(d) which storage tanks are in compliance with 40 CFR Part 60, Subpart Kb. **(40 CFR 63.8090(c))**

Appendix 4-1. Recordkeeping

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

Appendix 5-1. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 6-1. Permits to Install/ROP Revision Applications

PTIs rolled in since December 2018 ROP MI-ROP-A4033-2017b.

DPP is located at the stationary source that was issued MI-ROP-A4033-2017b on December 14, 2018. The following table lists any PTIs issued or ROP revision applications received from DDP since issuance of MI ROP-A4033-2017b. Those ROP revision applications that are being issued concurrently with this ROP significant modification for DDP are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this significant modification.

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
191-18	201900117*	EU04 became subject to 40 CFR Part 63, Subpart FFFF, and was incorporated into FGMONMACT	EU04, FGMONMACT
167-19	202000017*	Former EU93 (SRN A4033) split into EU08 propylene oxide storage and distribution system and EU07 (DAS/Corteva SRN P1028)	EU08, FGHONFUGITIVES, FGOLDMACT, FGCELLULOSICS, FG954THROX (DAS/Corteva SRN P1028)
159-19	202000069*	Former EU85 (SRN A4033) split into EU06 Anhdrous HCL storage and distribution and EU05 (DAS/Corteva SRN P1028)	EU06, FGHCLSCRUBBER
NA	2020000165 / April 16, 2021	The ROP is Sectioned into 2 Sections since a portion of DDP was owned and operated by N&B as of November 1, 2020. The Emission Unit EU06 is split into a low purity portion EU06-LOWPURITY included in Section 1, and a high purity portion EU06-HIGHPURTIY included in Section 2. The Emission Units and Flexible Groups Conditions remain unchanged, except for moving specific ones under their new owners.	EU06-HIGHPURITY, EU08, EUB2, EUB5, FGHONFUGITIVES, FGCELLULOSICS, FGOLDMACT, FGMONMACT, FGBENZENEWASTE, FGCOLDCLEANERS-S1

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-P1027-2020a.

Permit to Install Number	ROP Revision Application Number - Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
183-19	202200197 / January 3, 2023	Incoproate PTI No. 183-19 into Section 1 of the ROP, which was for EU88 to include changes and corrections, along with updated emission information. EU88 is part of the ion exchange resin manufacturing complex at the facility, and is known as the "Cation process." PTI No. 183-19 updates the facility's emissions and impacts with the most current information. There are no changes to the process itself, although two additional	EU88

Permit to Install Number	ROP Revision Application Number - Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
		vents will now be exhausted to the 963 THROX. This PTI was not required to go through the public participation process.	

Appendix 7-1. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in and EUANION_XCHG.

Section 7.1 – EUANION XCHG

Vent Calculations For Air Contaminants From Vent No. SV963THROX:

Basis: Vent Gas Sampling Results Obtained During Most Recent Performance Test. More specifically, the basis shall be the sampling data obtained on the vapor vent stream flowing into the THROX.

1. Determine the Peak Hourly Average Vapor Loads to the THROX and the Vapor Mole Fractions for Each Air Contaminant (use most recent sampling results)
2. Determine the “Combined Peak Vent Gas Loads” to the THROX coming from Scrubber 1 and Scrubber 2 (Note: This step includes adjusting the incremental loads to account for N₂ purges and losses)
3. Determine the “Total Peak Loads to the THROX”.
4. Determine emission rates of air contaminants to atmosphere via Vent SV963THROX.

Vent Calculations For Air Contaminants From Vent No. SVEG9202:

1. Determine the absorption factor for the air contaminants to be scrubbed out via Scrubber 4, i.e. HCl and methanol. The standard equation for determining absorption factor is listed below.
2. Determine the peak lbmol/hour of air contaminants, except methanol, into Scrubber 4 based on vent stream sampling data. Determine the methanol tank vent composition, in lbmol/hour, based on calculations.
3. Determine the peak lbmol/hour of air contaminants out of Scrubber 4. Use a removal efficiency of 90% for methylal, methanol and HCl and a removal efficiency of 0% for the other air contaminants (isooctane and dimethyl ether).
4. Determine the peak hourly emission rates for the air contaminants’ coming out of Scrubber 4 which are vented through SVEG9202 by multiplying the lbmol/hour determined in step #3 by the contaminant’s molecular weight. For example, the emission rate of methanol would be calculated as follows:

$$\text{MeOH emission rate, in lbs/hour} = (\text{Peak rate of MeOH out of Scrubber No. 4, in lbmol/hour}) \times (32.042 \text{ lbs/ lbmol})$$

Equation for Determining Absorption Factor(s)

$A = \frac{L}{KV}$

Section 1 - DDP

Where:

A is the absorption factor for a given component,

L is the total liquid molar flow rate,

K is the equilibrium constant,

$$\text{i.e. } K = \frac{\text{(concentration of component in gas)}}{\text{(concentration of component in liquid)}} = \frac{y}{x},$$

and V is the total molar gas rate.

Appendix 8-1. Reporting

A. Annual 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.

Section 2 – N&B

ROP No: MI-ROP-P1027-2020b
Expiration Date: December 8, 2025
PTI No: MI-PTI-P1027-2020b

SECTION 2
NUTRITION & BIOSCIENCES USA 1, LLC

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 USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
 - 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))**
- Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that; “based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete.” The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.² **(R 336.1912)**

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
- The applicable requirements are included and are specifically identified in the ROP.
 - The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.

27. Nothing in this ROP shall alter or affect any of the following:
- The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**

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

Revisions

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

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

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

Emission Trading

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

Permit to Install (PTI)

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

Footnotes:

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

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

B. SOURCE-WIDE CONDITIONS

Part B outlines the Source-Wide Terms and Conditions that apply to this stationary source. The stationary source consists of DDP Specialty Electronic Materials US, LLC and Nutrition & Biosciences USA 1, LLC (SRN P1027), The Dow Chemical Company (SRN: A4033), Dow Silicones Corporation (SRN: A4043), SK Saran Americas LLC (SRN: P1026), Corteva Agriscience LLC (DAS/Corteva) (SRN: P1028), and Trinseo LLC (SRN: P1025). 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.

SOURCE WIDE CONDITIONS

DESCRIPTION

All process equipment source-wide including equipment covered by other permits, grand-fathered equipment, and exempt equipment.

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. For any condition specified in the ROP which requires the permittee to monitor and record an operational parameter (e.g., flow rate, pH, pressure drop, etc.) on a “continuous basis” pursuant to AQD R 336.1213(3), monitoring and recording of data “on a continuous basis” is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar day. In the event the permittee collects more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points collected during the 15-minute period. Any response to an excursion of the corresponding operational parameter set point or range specified in the ROP pursuant to R 336.1213(3), shall be based upon these 15-minute values. Unless otherwise noted in the ROP, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies. **(R 336.1213(3))**
2. The permittee shall maintain waste shipment records for all asbestos-containing waste material transported off-site as per 40 CFR Part 61, Subpart M, Section 61.150(d). **(40 CFR Part 61, Subpart M)**

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 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 follow the applicable notification requirements in 40 CFR Part 61, Subpart M, Section 61.145(b) prior to any applicable demolition or renovation activity. **(40 CFR Part 61, Subpart M)**
5. The permittee shall file a report any time a copy of the waste shipment record, signed by the off-site waste disposal site, is not received in a timely manner, in accordance with 40 CFR Part 61, Subpart M, Section 61.150(d)(4). **(40 CFR Part 61, Subpart M)**
6. An Initial Report shall be filed, according to the requirements of 40 CFR Part 61, Subpart M, Section 61.153, within 90 days of startup for any new source subject to section 61.154. **(40 CFR Part 61, Subpart M)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. For any emission unit in the ROP subject to the applicable sections of 40 CFR Part 63, Subpart A (General Provisions) that require a startup, shutdown and malfunction plan, the owner or operator shall adopt a startup, shutdown, and malfunction plan which conforms to the provisions of Part 63. The owner or operator shall operate and maintain the source in accordance with the procedures specified in the current startup, shutdown, and malfunction plan. Any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by Part 63 shall not be deemed to constitute permit revisions under Part 70 or Part 71 of Chapter I. **(40 CFR Part 63, Subpart A, Section 63.6(e)(3)(ix))**
2. The permittee shall comply with the applicable provisions of 1994 PA 451, Section 324.5524 (Fugitive dust sources or emissions) and with the provisions of the most-recently approved operating program received by the AQD, Saginaw Bay District Office. The operating program shall be amended by the permittee so that the operating program is current and reflects any significant change in the fugitive dust source or fugitive dust emissions. An amendment to an operating program shall be consistent with the requirements of Section 324.5524 and shall be submitted to the department for its review and approval. **(1994 PA 451, Section 324.5524)**
3. The permittee shall comply with the applicable requirements of 40 CFR Part 61, Subparts A and M (National Emission Standards for Asbestos). The applicable sections of Subpart M may include: **(40 CFR Part 61, Subparts A and M)**
 - a. 61.140 Applicability
 - b. 61.141 Definitions
 - c. 61.145 Standard for demolition and renovation
 - d. 61.148 Standard for insulating materials
 - e. 61.150 Standard for waste disposal for manufacturing, fabricating, demolition, renovation and spraying operations
 - f. 61.152 Air cleaning
 - g. 61.153 Reporting
 - h. 61.154 Standard for active waste disposal sites
 - i. 61.156 Cross-reference to other asbestos regulations
 - j. Appendix A (Interpretive Rule Governing Roof Removal Operations)

4. The permittee shall follow the applicable procedures for asbestos emission control in 40 CFR Part 61, Subpart M, Section 61.145(c) during any demolition or renovation activity. **(40 CFR Part 61, Subpart M)**
5. The permittee shall not install or reinstall on a facility component any insulating materials that contain commercial asbestos (other than spray-applied insulating materials) if the materials are either molded and friable or wet-applied and friable after drying, as per 40 CFR Part 61, Subpart M, Section 61.148. **(40 CFR Part 61, Subpart M)**
6. The permittee shall follow the applicable waste disposal requirements in 40 CFR Part 61, Subpart M, Section 61.150 for any asbestos removed during demolition or renovation activities. **(40 CFR Part 61, Subpart M)**
7. The permittee shall follow the applicable requirements of 40 CFR Part 61, Subpart M, Section 61.152 if air cleaning is used as part of the method of compliance with sections 61.145 or 61.150. **(40 CFR Part 61, Subpart M)**
8. The permittee shall comply with the applicable requirements of 40 CFR Part 61, Subpart M, Section 61.154 for any active waste disposal site that receives asbestos-containing waste material. **(40 CFR Part 61, Subpart M)**
9. The permittee shall comply with any other applicable asbestos regulation listed in 40 CFR Part 61, Subpart M, Section 61.156. **(40 CFR Part 61, Subpart M)**
10. The permittee shall comply with the applicable requirements of 40 CFR Part 61, Subpart M, Appendix A for any regulated roof removal operation. **(40 CFR Part 61, Subpart M)**
11. For any performance test required pursuant to AQD Part 10 rules, the permittee may submit as a part of their stack test plan, a request to use existing performance test data where such data exists. The AQD will evaluate as a part of the stack test plan review, whether or not such existing data can be used in lieu of conducting a new performance test. For any performance test required by a federal standard, existing performance test data can only be used in lieu of a required stack test if allowed by the standard. **(R 336.2001, R 336.2003, R 336.2004)**
12. The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A, 40 CFR 82.13 (Protection of Stratospheric Ozone, Production and Consumption Controls). **(40 CFR 82.13)**
13. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart GGGGG (National Emission Standards for Hazardous Air Pollutants (NESHAP): Site Remediation). **(40 CFR Part 63, Subpart GGGGG)**

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).

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	Installation Date/ Modification Date	Flexible Group ID
EU06-HIGHPURITY	<p>Anhydrous hydrogen chloride (HCl) storage and distribution process located in the 954 block.</p> <p>The High Purity Anhydrous HCl system receives material via tube trailers. Anhydrous HCl is vaporized and distributed to end users as a gas. Tube Trailer connection piping and emissions from tube trailer vent down are exhausted either to T-101 Scrubber or to the 954 Throx Absorber and 954 Throx Scrubber.</p> <p>This emission unit was permitted in PTI No. 159-19 as EU06.</p>	04-22-04 03-23-20	FG954THROX (SRN P1028) FGHCLSCRUBBER in Section 1
EU08	<p>PO storage and distribution. Equipment is located at 954 Building and includes the following tank:</p> <p>V-600: 50,000-gallon storage tank for storing propylene oxide.</p> <p>This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A, EEEE, and UUUU. In addition, by virtue of being subject to Subpart UUUU, this emission unit is also subject to the equipment leak provisions of the HON (40 CFR Part 63, Subpart H).</p> <p>This emission unit was permitted in PTI 167-19.</p>	09-26-07 01-27-20	FGHONFUGITIVES-S2 FG954THROX (SRN P1028) FGOLDMACT-S2 FGCELLULOSICS
EUB2	Cellulose derivative production plant (METHOCEL™ methylcellulose and	04-07-1992 05-24-2006	FG963THROX (primary control) in Section 1

Emission Unit ID	Emission Unit Description	Installation Date/ Modification Date	Flexible Group ID
	<p>hydroxypropyl methylcellulose process in the METHOCEL™ manufacturing block) with reactors, separators, dryers, storage tanks/silos and related equipment. Cellulose derivative production plant includes finishing and vent recovery.</p> <p>The vent gas recovery system (VGRS) is used to recover volatiles from the cellulose derivative production plant. Volatiles recovered from the process are compressed and nearly 100% condensed. The condensed volatiles are typically returned to the process for reuse. On occasion, condensed volatiles may be sent for incineration. Uncondensed volatiles are exhausted to the 963THROX (afterburner). In the event the 963THROX is unavailable, the uncondensed volatiles will vent to the 954THROX (afterburner).</p> <p>A steam stripper and associated equipment (tanks, pumps, heat exchangers, piping, cooling tower cell) are used to process waste water from the METHOCEL™ process in order to comply with 40 CFR Part 63, Subparts A and UUUU. Concentrated vapors from the steam stripper are condensed and collected in a storage tank and are eventually loaded onto a rail car for incineration. A vapor balance system is used during rail car loading activities. Storage tank breathing and filling losses are routed to the 963THROX (or the 954THROX as backup control). Tank T-1045 is subject to 40 CFR Part 60, Subpart Kb. Under Subpart Kb, the tank is required to vent to a THROX.</p> <p>This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A and UUUU. In addition, by virtue of being subject to Subpart UUUU, EUB2 is subject to the equipment leak provisions of the HON (40 CFR Part 63, Subpart H). This emission unit is also subject to OLD (40 CFR Part 63, Subpart EEEE).</p>		<p>FG954THROX (backup control). (See the ROP for SRN P1028) FGHONFUGITIVES-S2 FGCELLULOSICS FGOLDMACT-S2</p>

Emission Unit ID	Emission Unit Description	Installation Date/ Modification Date	Flexible Group ID
	<p>EUB2 is a CAM subject emission unit subject to the requirements of 40 CFR Part 64. The CAM subject pollutants for this emission unit are VOC and PM-10.</p> <p>This emission unit was permitted in PTI 7-04A.</p>		
EUB5	<p>The ETHOCEL™ ethyl cellulose ether process located in the ETHOCEL™ manufacturing block. Process consists of raw material preparation, followed by reaction, product purification, de-watering and drying, and solid product handling. Also included in the process is a distillation solvent recovery system and tank farm operations. Process may vent to the 954THROX.</p> <p>Portions of this emission unit are subject to the requirements of 40 CFR Part 63, Subparts A, F, G, H, and EEEE. Portions of this emission unit are subject to the requirements of 40 CFR Part 63, Subpart FFFF (MON). This emission unit is also subject to OLD (40 CFR Part 63, Subpart EEEE).</p> <p>EUB5 is a CAM subject emission unit subject to the requirements of 40 CFR Part 64. The CAM subject pollutant for this emission unit is PM-10.</p> <p>This emission unit was permitted in PTI 83-13.</p>	<p>01-30-1989 01-23-2004 08-05-2013</p>	<p>FG954THROX (See the ROP for SRN P1028) FGHONFUGITIVES-S2 FGMONMACT-S2 FGOLDMACT-S2 FGBENZENEWASTE-S2</p>
EUCOLDCLEANER-S2	<p>Any existing cold cleaner (placed into operation prior to July 1, 1979) or new cold cleaner (placed into operation after July 1, 1979) that is exempt from NSR permitting by R 336.1281(h) or R 336.1285 (r)(iv).</p>	NA	FGCOLDCLEANER-S2

EU06-HIGHPURITY EMISSION UNIT CONDITIONS

DESCRIPTION

High Purity Anhydrous hydrogen chloride (HCl) storage and distribution process located in the 954 block.

The High Purity Anhydrous HCl system receives material via tube trailers. Anhydrous HCl is vaporized and distributed to end users as a gas. Tube Trailer connection piping and emissions from tube trailer vent down are exhausted either to T-101 Scrubber or to the 954 Throx Absorber and 954 Throx Scrubber.

This emission unit was permitted in PTI No. 159-19 as EU06.

Flexible Group ID: FG954THROX (SRN P1028), FGHCLSCRUBBER in Section 1

POLLUTION CONTROL EQUIPMENT

FGHCLSCRUBBER in Section 1

- T-101 Scrubber: This scrubber receives the exhaust from E-101 Absorber, along with process exhaust from the anhydrous HCl distribution system in EU06-LOWPURITY in Section 1 and EU06-HIGHPURITY, anhydrous and from the aqueous HCl storage and distribution system in EU05 (SRN P1028). The design vapor flow rate of the scrubber is 470 SCFM and the absorbing media used is recirculated water (approximately 6% HCl). The T-101 Scrubber vents to Vent No. SVHCLSCRUBBER01.

FG954THROX (SRN P1028)

- 954 THROX Absorber (T-3601): The absorber is located after the 954 THROX (thermal heat recovery oxidizer) and prior to the 954 THROX Scrubber. The design vapor flow rate of the absorber is 4470 SCFM and the absorbing media used is water. The absorber receives the exhaust from the 954 THROX and can also receive exhaust directly from the anhydrous HCl distribution system in EU06-LOWPURITY in Section 1 and EU06-HIGHPURITY.
- 954 THROX Scrubber (T-3602): Packed bed scrubber receiving the exhaust from the 954 THROX Absorber. The design vapor flow rate of the scrubber is 6050 scfm and the absorbing media used is water, caustic, and sodium thiosulfate. The scrubber receives the exhaust from the 954 Absorber.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not depressurize the anhydrous HCl distribution system (which includes but is not limited to rail car depressurization, anhydrous HCl storage tank depressurization, and distribution line depressurization) unless one of the following conditions is met.² (**R 336.1225, R 336.1910**)
 - a. The T-101 Scrubber is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the T-101 Scrubber includes the conditions outlined in FGHCLSCRUBBER and attaining at least 99.6 percent removal of HCl.

- b. The 954 THROX Absorber and 954 THROX Scrubber are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the 954 THROX Absorber and Scrubber includes the conditions outlined in FG954THROX and attaining at least 99.6 percent removal of HCl.

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. Within 60 days after issuance of MI-ROP-P1027-2020a, the permittee shall submit a plan to the AQD District Supervisor identifying the operating parameters for FG954THROX that shall be obtained from the operator or owner of FG954THROX. All operating parameter data in the plan for FG954THROX shall be obtained within 30 days of the end of the month to which it pertains. If the plan fails to provide adequate information to demonstrate 99.6 percent removal of HCl, the permittee shall amend the plan. The permittee shall also amend the plan within 45 days after receiving notification from the AQD District Supervisor that the plan does not provide adequate information to demonstrate 99.6 percent removal of HCl. The permittee shall keep the plan and recorded parameter data on file at the facility and make them available to the Department upon request.² (R 336.1910)
2. Within 60 days after issuance of MI-ROP-P1027-2020a, the permittee shall submit a plan to the AQD District Supervisor identifying the operating parameters for FGHCLSCRUBBER that shall be obtained from the operator or owner of FGHCLSCRUBBER. All operating parameter data in the plan for FGHCLSCRUBBER shall be obtained within 30 days of the end of the month to which it pertains. If the plan fails to provide adequate information to demonstrate 99.6 percent removal of HCl, the permittee shall amend the plan. The permittee shall also amend the plan within 45 days after receiving notification from the AQD District Supervisor that the plan does not provide adequate information to demonstrate 99.6 percent removal of HCl. The permittee shall keep the plan and recorded parameter data on file at the facility and make them available to the Department upon request. (R 336.1213(3), R 336.1910)

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)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVHCLSCRUBBER01 (T-101 scrubber) ^a	6 ²	60 ²	R 336.1225, 40 CFR 52.21(c) & (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
2. SV954THROX (T-3602 Scrubber at FG654THROX) ^b	24 ²	60 ²	R 336.1225, 40 CFR 52.21(c) & (d)

^a This stack’s requirements also appear in the conditions for FGHCLSCRUBBER (SRN P1027).

^b This stack’s requirements also appear in the conditions for FG954THROX (SRN P1028).

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).

**EU08
EMISSION UNIT CONDITIONS**

DESCRIPTION

PO storage and distribution. Equipment is located at 954 Building and includes the following tank:
V-600: 50,000-gallon storage tank for storing propylene oxide.

This emission unit is subject to the requirements 40 CFR Part 63, Subparts A, EEEE, and UUUU. In addition, by virtue of being subject to Subpart UUUU, this emission unit is also subject to the equipment leak provisions of the HON (40 CFR Part 63, Subpart H).

This emission unit was permitted in PTI 167-19.

Flexible Group ID: FGHONFUGITIVES-S2, FG954THROX (See the ROP for SRN P1028), FGOLDMACT-S2, FGCELLULOSICS

POLLUTION CONTROL EQUIPMENT

FG954THROX (SRN P1028)

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The operating pressure of the propylene oxide storage tank V-600 shall not exceed 100 psig.² **(R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall not unload propylene oxide from a railcar into a storage tank unless the associated vapor equalization system is installed and operating properly.² **(R 336.1910)**
- 2. The permittee shall not disconnect railcar unloading lines from a storage tank after unloading unless the unloading lines have been blown with nitrogen to the railcar.² **(R 336.1910)**
- 3. The permittee shall not operate EU08 unless the leak detectors for propylene oxide are installed and operating properly, except when the leak detectors are being calibrated or preventive maintenance and repair activities are being performed. These detectors shall sound an alarm in the 938 Building control room in the event a leak is detected.² **(R 336.1910)**
- 4. The permittee shall not operate or perform maintenance on V-600 storage tank and associated piping when the storage tank is venting to the 954 TTU unless the 954 TTU is installed, maintained and operated in a satisfactory manner. Maintenance activities that can be performed without disrupting the 954 TTU control are excluded from this requirement. Satisfactory operation of the 954 TTU is outlined in FG954THROX (See the ROP for SRN P1028).² **(R 336.1910)**

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall monitor and record the operating pressure of the following storage tanks on a continuous basis. For the purpose of this condition, monitoring and recording of data “on a continuous basis” is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar day. In the event the permittee records more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points recorded during the 15-minute period. Any response to an excursion of the corresponding operational parameter set point or range specified in EU08, shall be based upon these 15-minute values. Unless otherwise noted in this table, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies.² **(R 336.1910)**
 - a. Propylene oxide storage tank V-600
2. The permittee shall obtain 15-minute operating parameter data for FG954THROX, to demonstrate destruction of organic compounds, for periods of time when EU08 is vented to FG954THROX. Monitoring data for FG954THROX shall be obtained within 30 days, following the end of each calendar month, for periods of time that EU08 vented to FG954THROX. For periods of time when EU08 is vented to FG954THROX, the permittee shall also obtain notification promptly after the FG954THROX owner has become aware that the conditions used to demonstrate required destruction of organic compounds established during the most recent performance test were not met while venting to FG954THROX. The permittee shall keep the recorded parameter values on file at the facility and make them available to the Department upon request.² **(R 336.1910)**
3. The permittee shall maintain on site the most recent performance test data for 954THROX.² **(R 336.1910)**

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 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))**

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV954THROX ^a	24 ²	60 ²	40 CFR 52.21(c) & (d)

^a This stack’s requirements also appear in the conditions for FG954THROX (SRN P1028).

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EUB2
EMISSION UNIT CONDITIONS****DESCRIPTION**

Cellulose derivative production plant (METHOCEL™ methylcellulose and hydroxypropyl methylcellulose process in the METHOCEL™ manufacturing block) with reactors, separators, dryers, storage tanks/silos and related equipment. Cellulose derivative production plant includes finishing and vent recovery.

The vent gas recovery system (VGRS) is used to recover volatiles from the cellulose derivative production plant. Volatiles recovered from the process are compressed and nearly 100% condensed. The condensed volatiles are typically returned to the process for reuse. On occasion, condensed volatiles may be sent for incineration. Uncondensed volatiles are exhausted to the 963THROX (afterburner). In the event the 963THROX is unavailable, the uncondensed volatiles will vent to the 954THROX (afterburner), See the ROP for Corteva Agriscience LLC (SRN: P1028)

A steam stripper and associated equipment (tanks, pumps, heat exchangers, piping, cooling tower cell) are used to process waste water from the METHOCEL™ process in order to comply with 40 CFR Part 63, Subparts A and UUUU. Concentrated vapors from the steam stripper are condensed and collected in a storage tank and are eventually loaded onto a rail car for incineration. A vapor balance system is used during rail car loading activities. Storage tank breathing and filling losses are routed to the 963THROX (or the 954THROX as backup control). Tank T-1045 is subject to 40 CFR Part 60, Subpart Kb. Under Subpart Kb, the tank is required to vent to a THROX.

This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A and UUUU. In addition, by virtue of being subject to Subpart UUUU, EUB2 is subject to the equipment leak provisions of the HON (40 CFR Part 63, Subpart H). This Emission Unit is also subject to OLD (40 CFR Part 63, Subpart EEEE).

EUB2 is a CAM subject emission unit subject to the requirements of 40 CFR Part 64. The CAM subject pollutants for this emission unit are VOC and PM-10.

This emission unit was permitted in PTI 7-04A.

Flexible Group ID: FGHONFUGITIVES-S2, FGCELLULOSICS, FGOLDMACT-S2

POLLUTION CONTROL EQUIPMENT

- 963THROX (followed by a quench, HCl absorber and caustic/sodium thiosulfate/water scrubber prior to discharge to the atmosphere)-SV963THROX in Section 1. This is a CAM subject control device.
- 954THROX (In the event the 963THROX is not operating properly, EUB2 will vent to the 954THROX.). This is a CAM subject control device (See the ROP for SRN P1028)
- Rail car vapor balance system
- North Dryer Particulate Wet Scrubber-SVB2007
- Water Scrubber (T-1001)-SVB2008. This is a CAM subject control device.
- South Flash Dryer Particulate Wet Scrubber-SVB2009
- South Dryer, Second Stage Particulate Scrubber-SVB2010
- Baghouse DC-301-SVB2014. This is a CAM subject control device.
- Baghouse DC-401-SVB2015. This is a CAM subject control device.
- Baghouse DC-501-SVB2016. This is a CAM subject control device.
- Baghouse and filter:DC1830A and FL1830A-SVB2020. This is a CAM subject control device.
- Baghouse and filter: DC-1830B and FL1830B-SVB2021. This is a CAM subject control device.
- Baghouse and filter DC2001 and FL-2001-SVB2044. This is a CAM subject control device.
- Baghouse and filter DC-1930 and FL-1934-SVB2026. This is a CAM subject control device.
- Baghouse DC-5210-SVB2055
- Baghouse DC-5620-SVB2057. This is a CAM subject control device.

- Baghouse DC-5640-SVB2058. This is a CAM subject control device.
- Baghouse DC-5660-SVB2059
- Baghouse DC-5710/20/30-SVB2060
- Baghouse DC-5650-SVB2061. This is a CAM subject control device.
- Baghouse and filter DC-5841 and F5840-SVB2063. This is a CAM subject control device.
- Water scrubber (T-1975)-SVB2029
- Breather vents SVB2034, SVB2035, and SVB2043.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	1.2 pph ²	Hourly	SV963THROX (or 954THROX as backup control) emissions resulting from METHOCEL process equipment vents**	SC V.1 in FG963THROX	R 336.1702(c)
2. VOC	12 pph ²	Hourly	Equipment venting to SVB2005a**	SC VI.8	R 336.1702(c)
3. VOC	12 pph ²	Hourly	Equipment venting to SVB2005b**	SC VI.8	R 336.1702(c)
4. VOC	7.0 pph ²	Hourly	Equipment venting to SVB2008**	SC III.2, VI.2, VI.3	R 336.1702(c)
5. Methyl Chloride	10 tpy ¹	12-month rolling time period+	EUB2**	SC VI.1, VI.2, VI.3, VI.4	R 336.1225
6. Propylene Oxide	2 tpy ¹	12-month rolling time period+	EUB2**	SC VI.1, VI.2, VI.3, VI.4	R 336.1225
7. Propylene Glycol Dimethyl Ether	1.7 tpy ¹	12-month rolling time period+	EUB2**	SC VI.1, VI.2, VI.3, VI.4	R 336.1225
8. VOC	78 tpy ²	12-month rolling time period+	EUB2**	SC VI.1, VI.2, VI.3, VI.4	R 336.1702(a)
9. PM-10	0.10 lbs per 1000 lbs of exhaust gas ⁺⁺²	Hourly	All particulate emitting vents	SC III.5, VI.8, VI.9, VI.10	R 336.1331, 40 CFR 52.21(c) & (d)

+ 12-month rolling time period as determined at the end of each calendar month.

++ Calculated on a dry gas basis.

** This limit does not include fugitive emissions (emissions from leaking valves, flanges, etc.) from the process.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate portions of the system ducted to the 963THROX unless the 963THROX (or the 954THROX as backup control) is maintained and operated as specified in FG963THROX (or FG954THROX if the backup THROX is in use), as they apply to EUB2.² (R 336.1225, R 336.1702(a), R 336.1910)
2. The liquid flow rate of the vent SVB2008 (scrubber T-1001) packed column water scrubber shall not be less than 42 gallons per minute (gpm) for two trains or 22 gpm for one train, based on a daily average. Compliance with this limit shall be determined per the applicable federal standard. An excursion of the liquid flow rate limit is the exceedance of the operational parameter limit or acceptable range defined in this condition, or demonstrated during testing. Upon detecting an excursion of the liquid flow rate limit, the permittee shall restore operation of

the scrubber 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).² (R 336.1225, R 336.1702(a), R 336.1910, 40 CFR Part 63, Subpart UUUU, 40 CFR 64.6(c), 40 CFR 64.7(d))

3. The liquid flow rate of the vent SVB2029 (scrubber T-1975) packed column water scrubber shall not be less than 10 gpm, based on a daily average.² (R 336.1225, R 336.1702(a), R 336.1910)
4. If the exit gas temperature of the condensers (E-902, E-913, E-105, E-107) associated with the vent gas recovery system (VGRS) exceeds a daily average temperature of 40°C, the permittee shall implement corrective action and maintain a record of action taken to prevent reoccurrence.² (R 336.1910, 40 CFR Part 63, Subpart UUUU)
5. The permittee shall maintain the differential pressure across the secondary inline filter for Vent Nos. SVB2020, SVB2021, SVB2026, SVB2044, and SVB2063 below 200 inches of water (inches WC) based on a daily average, or any other limit demonstrated during stack testing. Upon detecting an excursion of the pressure drop limit (defined in SC VI.10 of this table), the permittee shall restore operation of EUB2 to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). (40 CFR 64.6(c), 40 CFR 64.7(d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the portions of the cellulose derivative process that are vented to the scrubbers and baghouses unless the scrubbers and baghouses are installed and operating properly.² (R 336.1225, R 336.1702(a), R 336.1910)
2. The permittee shall not operate the rail car loading station 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 operate the steps of the process exhausting to the steam organics recovery system (VOCR), and/or the T-1001 packed column water scrubber unless the appropriate emission control systems are installed and operating properly.² (R 336.1225, 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))

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 install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the liquid flow rate for Scrubber T-1975, and the dryer scrubbers on a continuous basis. Monitoring and recording of data "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar day. In the event the permittee collects more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points recorded during the 15-minute period. Any response to an excursion of the corresponding operational parameter set point or range specified in this table shall be based upon these 15-minute values. The permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies.² (R 336.1225, R 336.1702, R 336.1910)

2. The permittee shall monitor and record the liquid flow rate for scrubber T-1001 and the exit gas temperature of the condensers (E-902, E-913, E-105, E-107) associated with the VGRS in accordance with the requirements of 40 CFR Part 63, Subpart UUUU. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (QA/QC) (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 QA/QC shall not be used for 40 CFR Part 64 compliance, 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, in frequent, 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.² **(40 CFR Part 63, Subpart UUUU, 40 CFR 64.6(c), 40 CFR 64.7(c))**
3. The permittee shall maintain scrubber T-1001 with a liquid flow indicator. This includes, but is not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, and maintaining the device according to manufacturer's specifications (e.g., equipment calibration, etc.). **(40 CFR 64.6(c), 40 CFR 64.7(b))**
4. The permittee shall keep, in a satisfactory manner, a record of the liquid flow rate based on a daily average for scrubber T-1975 and the dryer scrubbers as required by SC VI.1. All records shall be kept on file and made available to the Department upon request.² **(R 336.1225, R 336.1702, R 336.1910)**
5. The permittee shall keep, in a satisfactory manner, a written log of the daily hours of operation and the number of batches produced. All records shall be kept on file and made available to the Department upon request.² **(R 336.1225, R 336.1702, R 336.1910)**
6. Within 30 days following the end of each calendar month, the permittee shall calculate and record emissions from the process for the previous calendar month to determine compliance with the 12-month rolling time period emission limits specified in SC I.5, I.6, and I.7.² **(R 336.1225, R 336.1702, R 336.1910)**
7. Within 60 days after issuance of ROP-MI-P1027-2020a, the permittee shall submit a plan to the AQD District Supervisor identifying the operating parameters for FG954THROX that shall be obtained from the operator or owner of FG954THROX. All operating parameter data in the plan for FG954THROX shall be obtained within 30 days of the end of the month to which it pertains. If the plan fails to provide adequate information to demonstrate 99.9% destruction of organic compounds, the permittee shall amend the plan. The permittee shall also amend the plan within 45 days after receiving notification from the AQD District Supervisor that the plan does not provide adequate information to demonstrate 99.9% destruction of organic compounds. The permittee shall keep the plan and recorded parameter data on file at the facility and make them available to the Department upon request. **(R 336.1910)**
8. Within 60 days after issuance of ROP-MI-P1027-2020a, the permittee shall submit a plan to the AQD District Supervisor identifying the operating parameters for FG963THROX that shall be obtained from the operator or owner of FG963THROX. All operating parameter data in the plan for FG963THROX shall be obtained within 30 days of the end of the month to which it pertains. If the plan fails to provide adequate information to demonstrate 99.9% destruction of organic compounds, the permittee shall amend the plan. The permittee shall also amend the plan within 45 days after receiving notification from the AQD District Supervisor that the plan does not provide adequate information to demonstrate 99.9% destruction of organic compounds. The permittee shall keep the plan and recorded parameter data on file at the facility and make them available to the Department upon request. **(R 336.1213(3), R 336.1910)**
9. The permittee shall conduct a quarterly visible emissions check of the following vents during routine operating conditions: Vents SVB2004, SVB2005a, SVB2005b, SVB2007, SVB2009, SVB2010, SVB2029, SVB2055, SVB2059, and SVB2060. For the purpose of this condition, such checks do not have to be in accordance with Method 9. If a check reveals any visible emissions from the vents (excluding uncombined water vapor), the permittee shall perform any maintenance required to eliminate visible emissions. The permittee shall keep records of the results of the quarterly visible emissions check and of any maintenance performed after visible

emissions are observed. These records shall be kept on file and made available to the AQD upon request.²
(R 336.1301)

10. The permittee shall conduct a daily visible emissions check of the following vents during routine operating conditions: Vents SVB2014, SVB2015, SVB2016, SVB2057, SVB2058, and SVB2061. For the purpose of this condition, such checks do not have to be in accordance with Method 9. If a check reveals any visible emissions from the vents excluding uncombined water vapor (an excursion), the permittee shall perform any maintenance required to eliminate visible emissions. The permittee shall keep records of the results of the daily visible emissions check and of any corrective action taken after visible emissions are observed. These records shall be kept on file and made available to the AQD upon request. The owner or operator shall conduct all monitoring in continuous operation (or shall collect data at required intervals) at all times that the pollutant specific emission unit is operating.² **(R 336.1301, 40 CFR 64.6(c), 40 CFR 64.7(c))**
11. The permittee shall monitor and record, on a daily basis, the pressure drop across the secondary inline filter associated with Vent Nos. SVB2020, SVB2021, SVB2026, SVB2044, and SVB2063. For the purpose of this monitoring, “on a daily basis”, means a minimum of one reading per 24-hour period. In the event the permittee collects more than one data point during a 24-hour period, the data point recorded may be the average of all data points collected during the 24-hour period. Any response to an excursion of the corresponding operational parameter set point or range specified in this table shall be based upon these daily values. An excursion is the exceedance of the operational parameter limit or acceptable range defined in this table, or demonstrated during stack testing. The permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies. Except for, as applicable, monitoring malfunctions, associated repairs, and required QA/QC (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 QA/QC shall not be used for 40 CFR Part 64 compliance, 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, in frequent, 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.² **(R 336.1301, 40 CFR 64.6(c), 40 CFR 64.7(c))**
12. Upon detecting a visible emissions excursion for Vent Nos. SVB2014, SVB2015, SVB2016, SVB2057, SVB2058, and SVB2061, the permittee shall restore operation of EUB2 to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**
13. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan if required by the Administrator pursuant to 40 CFR 64.8, 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 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. Each semiannual report of deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. **(40 CFR 64.9(a)(2)(i))**
5. Each semiannual report of deviations shall include summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than monitor downtime associated with zero and span or other daily calibration checks, if applicable). **(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 Level (feet)	Applicable Requirement
1. SVB2004 (Vacuum Pump 1 and 2)	4 ¹	95 ¹	R 336.1225
2. SVB2005a (Blowdown tank A)	16 ¹	80 ¹	R 336.1225
3. SVB2005b (Blowdown tank B)	16 ¹	80 ¹	R 336.1225
4. SVB2006 (VGRS)	2 ¹	21 ¹	R 336.1225
5. SVB2007 ^a (North dryer particulate wet scrubber)	14 ¹	38 ¹	R 336.1225
6. SVB2008 (T-1001 scrubber)	12 ¹	80 ¹	R 336.1225
7. SVB2009 (South flash dryer particulate wet scrubber)	97 ¹	87 ¹	R 336.1225
8. SVB2010 ^a (South dryer second stage particulate wet scrubber)	14 ¹	38 ¹	R 336.1225
9. SVB2014 (DC-301)	10 ¹	65 ¹	R 336.1225
10. SVB2015 (DC-401)	10 ¹	65 ¹	R 336.1225
11. SVB2016 (DC-501)	10 ¹	65 ¹	R 336.1225
12. SVB2020 ^a (DC-1830A and FL-1830A)	8 ¹	9.5 ¹	R 336.1225
13. SVB2021 ^a (DC-1830B and FL-1830B)	8 ¹	9.5 ¹	R 336.1225
14. SVB2026 ^a (DC-1930 and FL-1934)	8 ¹	9 ¹	R 336.1225
15. SVB2029 (Water scrubber T-1975)	10 ¹	42 ¹	R 336.1225
16. SVB2034 (Blender A)	2 ¹	25 ¹	R 336.1225
17. SVB2035 (Blender B)	2 ¹	25 ¹	R 336.1225
18. SVB2043 ^a (Blender)	2 ¹	80 ¹	R 336.1225
19. SVB2044 ^a (DC-2001 and FL-2001)	8 ¹	60 ¹	R 336.1225
20. SV963THROX ^d	18 ²	80 ²	R 336.1225, 40 CFR 52.21(c) & (d)
21. SV954THROX ^c	24 ¹	60 ¹	R 336.1225
22. SVB2055 ^b (DC-5210)	2 ¹	30 ¹	R 336.1225
23. SVB2057 ^b (DC-5620)	20 ¹	95 ¹	R 336.1225
24. SVB2058 ^b (DC-5640)	20 ¹	120 ¹	R 336.1225
25. SVB2059 ^b (DC-5660)	2 ¹	75 ¹	R 336.1225
26. SVB2060 ^b (DC-5710/20/30)	2 ¹	20 ¹	R 336.1225

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
27. SVB2061 ^b (DC-5650)	3 ¹	20 ¹	R 336.1225
28. SVB2063 ^b (DC-5841 and F-5840)	3 ¹	20 ¹	R 336.1225

^a Stack discharge is horizontal.

^b Stack discharge is down or obstructed.

^{c*} This stack’s requirements also appear in the conditions for FG954THROX (SRN P1028)

^d This stack’s requirements also appear in the conditions for FG963THROX in Section 1

IX. OTHER REQUIREMENT(S)

1. The permittee shall equip and maintain the secondary inline filters (FL1830A, FL1830B, FL-2001, FL-1934 & F5840) associated with Vent Nos. SVB2020, SVB2021, SVB2026, SVB2044, and SVB2063 with a pressure drop indication device. This includes, but is not limited to, maintaining the necessary parts for routine repairs of the pressure drop indication device, and maintaining the pressure drop indication device according to manufacturer’s specifications (e.g., equipment calibration, etc.). **(40 CFR 64.6(c), 40 CFR 64.7(b))**
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 CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. **(40 CFR 64.7(e))**

Footnotes:

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

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

EUB5 EMISSION UNIT CONDITIONS

DESCRIPTION

The ETHOCEL™ ethyl cellulose ether process located in the ETHOCEL™ manufacturing block. Process consists of raw material preparation, followed by reaction, product purification, de-watering and drying, and solid product handling. Also included in the process is a distillation solvent recovery system and tank farm operations. Process may vent to the 954THROX (See the ROP for SRN P1028).

Portions of this emission unit are subject to the requirements of 40 CFR Part 63, Subparts A, F, G, and H.
Portions of this emission unit are subject to the requirements of 40 CFR Part 63, Subpart FFFF (MON).
Portions of this emission unit are subject to the requirements of 40 CFR Part 63, Subpart EEEE (OLD).

EUB5 is a CAM subject emission unit subject to the requirements of 40 CFR Part 64. The CAM subject pollutant for this emission unit is PM-10.

This emission unit was permitted in PTI 83-13.

Flexible Group ID: FG954THROX (See the ROP for SRN P1028), FGHONFUGITIVES-S2, FGMONMACT-S2, FGOOLDMACT-S2, FGBENZENEWASTE-S2

POLLUTION CONTROL EQUIPMENT

- 297 fugitive dust scrubber. This scrubber vents to SVB5010. This is a CAM subject control device.
- 803 packaging scrubber. This scrubber vents to SVB5011. This is a CAM subject control device.
- 802 raw material scrubber. This scrubber is used during the transfer of raw materials in 802 Building. This scrubber vents to SVB5014a and SVB5014b. This is a CAM subject control device.
- 803 Building blender baghouse (associated with ethyl cellulose product blending). This baghouse vents to SVB5015. This is a CAM subject control device.
- 803 tote loading baghouse and packaging blower with secondary filter (associated with ethyl cellulose product packaging). This equipment vents to SVB5016. This is a CAM subject control device.
- 313 blender cyclone. This cyclone vents to SVB5017. This is a CAM subject control device.
- 954THROX (See FG954THROX (See the ROP for SRN P1028)) (thermal treatment unit – 954 including absorber No. 1 and Scrubber No. 1). The TTU acts as backup in the event the regenerative thermal oxidizer (RTO) is down.
- Pressure Swing Adsorber (PSA). Two carbon bed adsorption units which cycle between periods of accepting process vent streams and periods of regeneration. The PSA is used to recover solvents in the vents from the reactors, filtration system, solvent removal and recovery process, and tank farm; recovered solvent is returned to the process for reuse. Emissions from the PSA typically vent to the RTO via two liquid ring vent gas compressors (one serves as an in-line spare) but may vent to the 954THROX if the RTO is unavailable or to atmosphere through vent SVB5001 if the RTO and 954THROX are both unavailable or through vent SVB5030 if both liquid ring compressors are unavailable.
- RTO. The RTO will control emissions from dilute vents at the back end of the process. The RTO will also control emissions remaining in the PSA vent stream. The RTO vents to SVB5031. The dilute vents at the back end of the process may vent to atmosphere through vents SVB5006, SVB5007, SVB5008, and SVB5009 if the RTO is unavailable.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC ^a	49 tpy ²	12-month rolling time period as determined at the end of each calendar month	EUB5	SC V.1, VI.2	R 336.1205(3), R 336.1702(a)
2. Ethylene	142 pph ¹	Hourly	SVB5030 of the ethyl cellulose manufacturing process	SC V.1	R 336.1225
3. Total VOC	315 pph ²	Daily average	SVB5001 and SVB5030 combined	SC V.1	R 336.1702(a)
4. PM	0.10 lbs / 1000 lbs ^{2,b}	Hourly ^c	Each of the following vents in EUB5: a. SVB5008 b. SVB5010 c. SVB5011 d. SVB5014a e. SVB5014b f. SVB5015 g. SVB5016 h. SVB5017 i. SVB5009	SC III.3, VI.1, VI.7	R 336.1331

^a This limit does not include fugitive emissions from the process (emissions from leaking valves, flanges, etc.).
^b Calculated on a dry gas basis.
^c If a stack test is used to demonstrate compliance with this emission limit, the hourly emission rate during testing shall be determined by the average of the qualified test runs performed in accordance with the method requirements.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The minimum liquid flow rate for the 297 fugitive dust scrubber (associated with Vent No. SVB5010) shall not be less than 2.5 gallons per minute (gpm), based on an hourly average, or any other liquid flow rate limit demonstrated during stack testing. Upon detecting an excursion of the liquid flow rate limit (defined in SC VI.1 of this table), the permittee shall restore operation of EUB5 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).² **(R 336.1301, R 336.1331, 40 CFR 64.6(c), 40 CFR 64.7(d))**
2. The minimum liquid flow rate for the 803 packaging scrubber (associated with Vent No. SVB5011) shall not be less than 9 gpm, based on an hourly average, or any other liquid flow rate limit demonstrated during stack testing. Upon detecting an excursion of the liquid flow rate limit (defined in SC VI.1 of this table), the permittee shall restore operation of EUB5 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).² **(40 CFR 64.6(c), 40 CFR 64.7(d))**

3. The minimum liquid flow rate for the 313 blender cyclone (associated with Vent No. SVB5017) shall not be less than 6.0 gpm, based on an hourly average, or any other liquid flow rate limit demonstrated during stack testing. Upon detecting an excursion of the liquid flow rate limit (defined in SC VI.2 of this table), the permittee shall restore operation of EUB5 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).² **(40 CFR 64.6(c), 40 CFR 64.7(d))**
4. The minimum liquid flow rate of the 802 Raw Material Scrubber (associated with Vent No. SVB5014a) shall not be less than 4.0 gpm, based on an hourly average, or any other liquid flow rate limit demonstrated during stack testing. The minimum liquid flow rate of the 802 Raw Material Scrubber (associated with Vent No. SVB5014b) shall not be less than 1.6 gpm, based on an hourly average, or any other liquid flow rate limit demonstrated during stack testing. Upon detecting an excursion of the liquid flow rate limit (defined in SC VI.1 of this table), the permittee shall restore operation of EUB5 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).² **(R 336.1301, R 336.1331, 40 CFR 64.6(c), 40 CFR 64.7(d))**
5. The maximum pressure drop across the secondary inline filter associated with the 803 tote loading process (Vent No. SVB5016) shall not be more than five pounds per square inch, based on an hourly average, or any other pressure drop limit demonstrated during stack testing. 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).² **(R 336.1301, R 336.1331, 40 CFR 64.6(c), 40 CFR 64.7(d))**
6. The maximum exit bed temperature of the PSA shall not be more than 100°C.² **(R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910)**
7. The minimum combustion chamber temperature of the RTO shall not be less than 1600°F (871°C).² **(R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910)**
8. The permittee shall establish a range for each parameter that indicates proper operation of the control device, based on the parameter(s) measured during the performance test, as applicable, in accordance with 40 CFR Part 63, Subpart G, Sections 63.114(e), 63.117(f), 63.120(d)(3)(i), 63.127(e), 63.129(c), 63.143(f), 63.146(b)(7) - (9) and/or 63.151(f). **(40 CFR Part 63, Subpart G)**
9. Whenever a parameter monitoring excursion occurs, as defined in 63.152(c)(2)(ii), the permittee shall take appropriate action as per the source's Startup, Shutdown and Malfunction Plan. These excursions shall be reported in the Periodic Reports required in SC VII.4, unless they are excused in accordance with 63.152(c)(2)(ii)(B). **(40 CFR Part 63, Subpart G)**

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 by the AQD, the permittee shall verify the VOC and ethylene emission rates from EUB5 by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.² **(R 336.2001, R 336.2003, R 336.2004)**
2. The permittee shall conduct testing in accordance with the applicable requirements of 40 CFR Part 63, Subparts F & G, including sections 63.103 (General compliance, reporting and recordkeeping provisions), 63.116 (Process vent provisions – performance test methods and procedures to determine compliance), 63.120 (Storage vessel provisions – procedures to determine compliance), 63.121 (Transfer operations provisions – test methods and procedures), 63.144 (Process wastewater provisions – test methods and procedures for determining applicability and Group 1/Group 2 determinations (determining which wastewater streams require control)) and 63.145 (Process wastewater provisions – test methods and procedures to determine compliance). **(40 CFR Part 63, Subparts F & G)**
3. The permittee shall comply with the heat exchange system provisions of 40 CFR Part 63, Subpart F, Section 63.104 (Heat exchange system requirements). **(40 CFR Part 63, Subpart F)**
4. The permittee shall use the test methods and procedures referenced in the applicable sections of 40 CFR Part 63, Subparts F and G, as listed above. **(40 CFR Part 63, Subpart F & G)**
5. Heat exchange system testing shall be performed monthly for the first six months following the compliance date of the standard, and quarterly thereafter, in accordance with 40 CFR Part 63, Subpart F, Section 63.104(b)(1). **(40 CFR Part 63, Subpart F)**

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, on an hourly basis, the following operational parameters.
 - a. The liquid flow rate for the 297 fugitive dust scrubber (associated with Vent No. SVB5010).
 - b. The liquid flow rate for the 803 packaging scrubber (associated with Vent No. SVB5011).
 - c. The liquid flow rate of the 802 raw material scrubber (associated with Vent Nos. SVB5014a and SVB5014b).
 - d. The pressure drop across the secondary inline filter associated with the 803 tote loading process (Vent No. SVB5016).

For the purpose of this monitoring, “on an hourly basis” means a minimum of one reading per hour (e.g., one reading between 1:00 and 2:00 pm). In the event the permittee collects more than one data point during the hour, the data point recorded may be the average of all data points collected during the hour. Any response to an excursion of the corresponding operational parameter set point or range specified in this table shall be based upon these hourly values. An excursion is the exceedance of the operational parameter limit or acceptable range defined in this table, or demonstrated during stack testing. 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).² **(R 336.1205(3), R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(d))**

2. The permittee shall monitor and record, on an hourly basis, the liquid flow rate for the 313 blender cyclone (associated with Vent No. SVB5017). For the purpose of this monitoring, “on an hourly basis” means a minimum of one reading per hour (e.g., one reading between 1:00 and 2:00 pm). In the event the permittee collects more than one data point during the hour, the data point recorded may be the average of all data points collected during the hour. Any response to an excursion of the corresponding operational parameter set point or range specified

in this table shall be based upon these hourly values. An excursion is the exceedance of the operational parameter limit or acceptable range defined in this table, or demonstrated during stack testing. 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).² **(R 336.1205(3), R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(d))**

3. The permittee shall monitor and record, on an hourly basis, the following operational parameters.
 - a. The PSA exit bed temperature.
 - b. The RTO combustion chamber temperature.For the purpose of this table, “on an hourly basis” means a minimum of one reading per hour (e.g., one reading between 1:00 and 2:00 pm). In the event the permittee collects more than one data point during the hour, the data point recorded may be the average of all data points collected during the hour. Any response to an excursion of the corresponding operational parameter set point or range specified in this table shall be based upon these hourly values. 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).² **(R 336.1205(3), R 336.1225, R 336.1331, R 336.1702(a), R 336.1910)**
4. Within 30 days following the end of each calendar month, the permittee shall calculate and record the VOC emissions, excluding fugitive emissions (emissions from leaking valves, flanges, etc.) and including emissions due to the bypass of the RTO and/or 954THROX, from EUB5 for the previous calendar month to demonstrate compliance with the 12-month rolling time period emission limit specified in SC I.1. These records shall be kept on file and made available to the Department upon request.² **(R 336.1205(3), R 336.1702(a))**
5. The permittee shall keep records of each control device malfunction/operating parameter deviation and the corrective action taken for the ETHOCEL Production Facility, with the exception of those events associated with the 954THROX. All records shall be kept on file and made available to the Department upon request.² **(R 336.1205(3), R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911)**
6. The permittee shall keep monthly (based on a calendar month) and 12-month rolling time period records of the number of hours the ETHOCEL Production Facility operates while bypassing the RTO and/or 954THROX via vents SVB5001, SVB5030, SVB5006, SVB5007, SVB5008, and/or SVB5009. All records shall be kept on file and made available to the Department upon request.² **(R 336.1205(3), R 336.1702(a), R 336.1910)**
7. Within 60 days after issuance of ROP-MI-P1027-2020a, the permittee shall submit a plan to the AQD District Supervisor identifying the operating parameters for FG954THROX that shall be obtained from the operator or owner of FG954THROX. All operating parameter data in the plan for FG954THROX shall be obtained within 30 days of the end of the month to which it pertains. If the plan fails to provide adequate information to demonstrate 99.9% destruction of organic compounds, the permittee shall amend the plan. The permittee shall also amend the plan within 45 days after receiving notification from the AQD District Supervisor that the plan does not provide adequate information to demonstrate 99.9% destruction of organic compounds. The permittee shall keep the plan and recorded parameter data on file at the facility and make them available to the Department upon request. **(R 336.1910)**
8. The permittee shall conduct a daily visible emissions check of Vent No. SVB5015 during routine operating conditions. For the purpose of this condition, such checks do not have to be in accordance with Method 9. If a check reveals any visible emissions other than uncombined water vapor from the vent (an excursion), the permittee shall inspect the associated particulate control device and perform any maintenance required to eliminate visible emissions. The permittee shall keep records of the results of the daily visible emissions check

and of any maintenance performed after visible emissions are observed. These records shall be kept on file and made available to the AQD upon request. **(40 CFR 64.6(c))**

9. Upon detecting a visible emissions excursion for Vent No. SVB5015, the permittee shall restore operation of EUB5 to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**
10. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (QA/QC) (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 QA/QC 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 64.7(c))**
11. 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 if required by the Administrator pursuant to 40 CFR 64.8, 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))**
12. The permittee shall comply with the applicable parametric monitoring requirements of 40 CFR Part 63, Subpart G, including sections 63.114 (Process vent provisions – monitoring requirements), 63.120 (Storage vessel provisions – procedures to determine compliance), 63.127 (Transfer operations provisions – monitoring requirements), and 63.143 (Process wastewater provisions – inspections and monitoring of operations), and Tables 3, 4, 7, 11, 12 and 13. **(40 CFR Part 63, Subpart G)**
13. The permittee shall comply with the equipment leak provisions of 40 CFR Part 63, Subpart H (National Emission Standard for NESHAP for Equipment Leaks), as referenced in 40 CFR Part 63, Subpart F, Section 63.102(a). Compliance with this section shall be determined using FGHONFUGITIVES. **(40 CFR Part 63, Subpart F)**
14. The permittee shall comply with the equipment leak provisions of 40 CFR Part 63, Subpart G, Section 63.148 (Leak inspection provisions). **(40 CFR Part 63, Subpart G)**
15. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts F & G, including sections 63.103 (General compliance, reporting and recordkeeping provisions), 63.117 (Process vent provisions – reporting and recordkeeping requirements for group and TRE determinations and performance tests), 63.118 (Process vent provisions – periodic reporting and recordkeeping requirements), 63.123 (Storage vessel provisions – recordkeeping), 63.129 (Transfer operations provisions – reporting and recordkeeping for performance tests and notification of compliance status), 63.130 (Transfer operations provisions – periodic recordkeeping and reporting), 63.147 (Process wastewater provisions – recordkeeping) and 63.152 (General reporting and continuous records, and Subpart G Tables 3, 4 and 7. As an alternative to these requirements, the permittee may comply with the recordkeeping requirements of 63.152(f) & (g) instead. **(40 CFR Part 63, Subparts F & G).**

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 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. Each semiannual report of deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. **(40 CFR 64.9(a)(2)(i))**
5. Each semiannual report of deviations shall include summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than monitor downtime associated with zero and span or other daily calibration checks, if applicable). **(40 CFR 64.9(a)(2)(ii))**
6. Semiannual Periodic Reports are due March 15 and September 15 of each year. Startup, shutdown, and malfunction reports shall be submitted at the same time, in accordance with 63.152(d)(1). **(40 CFR Part 63, Subpart G)**
7. Other reports shall be submitted as applicable, in accordance with 40 CFR Part 63, Subpart G, Section 63.152(d)(2)-(4). **(40 CFR Part 63, Subpart G)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVB5001	16 ¹	70 ¹	R 336.1225
2. SVB5002 *	12 ¹	10 ¹	R 336.1225
3. SVB5006 *	24 ¹	39 ¹	R 336.1225
4. SVB5007	8 ¹	46 ¹	R 336.1225
5. SVB5008	6 ¹	26 ¹	R 336.1225
6. SVB5009 *	10 ¹	31 ¹	R 336.1225
7. SVB5010 *	6 ¹	31 ¹	R 336.1225
8. SVB5011 *	8 ¹	10 ¹	R 336.1225
9. SVB5013	6 ¹	58 ¹	R 336.1225
10. SVB5014a *	12 ¹	2 ¹	R 336.1225
11. SVB5014b*	12 ¹	2 ¹	R 336.1225
12. SVB5015*	10 ¹	61 ¹	R 336.1225
13. SVB5016*	6 ¹	10 ¹	R 336.1225
14. SVB5017	10 ¹	64 ¹	R 336.1225
15. SVB5030*	3 ¹	70 ¹	R 336.1225
16. SVB5031	38 ¹	60 ¹	R 336.1225
17. SV954THROX ⁺	24 ¹	60 ¹	R 336.1225

*Vertical discharge not required

⁺This stack’s requirements also appear in the conditions for FG954THROX (SRN P1028)

IX. OTHER REQUIREMENT(S)

1. The permittee shall not operate the portions of the ethyl cellulose process designed to be vented to the PSA unless the emissions are sent to the PSA and the PSA is installed, maintained, and operated in a satisfactory manner or vents are directed to the TTU-954. Proper operation of the PSA includes routing the vent stream through a liquid ring compressor to the RTO or 954THROX (SRN P1028). In the event of failure of both liquid

ring compressors, or in the event the RTO and 954THROX are both unavailable, the PSA may vent to atmosphere for not more than 24 hours per event.² **(R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910)**

2. The permittee shall not operate the 297 Densification System unless the 297 fugitive dust scrubber is installed, maintained, and operated in a satisfactory manner.² **(R 336.1205(3), R 336.1225, R 336.1331, R 336.1910)**
3. The permittee shall equip and maintain the 297 fugitive dust scrubber (associated with Vent No. SVB5010) with a continuous liquid flow indication device. This includes, but is not limited to, maintaining the necessary parts for routine repairs of the liquid flow indication device, and maintaining the liquid flow indication device according to manufacturer's specifications (e.g., equipment calibration, etc.).² **(R 336.1225, R 336.1331, R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(b))**
4. The permittee shall equip and maintain the 803 packaging scrubber (associated with Vent No. SVB5011) with a continuous liquid flow indication device. This includes, but is not limited to, maintaining the necessary parts for routine repairs of the liquid flow indication device, and maintaining the liquid flow indication device according to manufacturer's specifications (e.g., equipment calibration, etc.).² **(R 336.1225, R 336.1331, R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(b))**
5. The permittee shall equip and maintain the 313 blender cyclone (associated with Vent No. SVB5017) with a continuous liquid flow indication device. This includes, but is not limited to, maintaining the necessary parts for routine repairs of the liquid flow indication device, and maintaining the liquid flow indication device according to manufacturer's specifications (e.g., equipment calibration, etc.).² **(R 336.1225, R 336.1331, R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(b))**
6. The permittee shall not transfer raw materials which vent to the 802 Raw Material Scrubber unless the 802 Raw Material Scrubber is installed, maintained, and operated in a satisfactory manner.² **(R 336.1225, R 336.1331, R 336.1910)**
7. The permittee shall equip and maintain the 802 Raw Material Scrubber (associated with Vent Nos. SVB5014a and SVB5014b) with a continuous liquid flow indication device. This includes, but is not limited to, maintaining the necessary parts for routine repairs of the liquid flow indication device, and maintaining the liquid flow indication device according to manufacturer's specifications (e.g., equipment calibration, etc.).² **(R 336.1225, R 336.1331, R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(b))**
8. The permittee shall not operate the 803 tote loading process with packaging blower unless the associated baghouse with secondary inline filter are installed, maintained, and operated in a satisfactory manner.² **(R 336.1225, R 336.1331, R 336.1910)**
9. The permittee shall equip and maintain the secondary inline filter associated with the 803 tote loading process (Vent No. SVB5016) with a pressure drop indication device. This includes, but is not limited to, maintaining the necessary parts for routine repairs of the pressure drop indication device, and maintaining the pressure drop indication device according to manufacturer's specifications (e.g., equipment calibration, etc.).² **(R 336.1225, R 336.1331, R 336.1910, 40 CFR 64.6(c), 40 CFR 64.7(b))**
10. The permittee shall equip and maintain the PSA with exit bed temperature indication devices.² **(R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910)**
11. The permittee shall equip and maintain the RTO with a combustion chamber temperature indication device.² **(R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910)**
12. The permittee shall not operate the product washing process, the product washing vacuum pumps, the 297 product centrifuge, or the product drying process unless the emissions are sent to the RTO and the RTO is installed, maintained, and operated in a satisfactory manner. In the event of failure of the RTO, the product washing process, the product washing vacuum pumps, the 297 product centrifuge, and the product drying process may vent to atmosphere for not more than 336 hours per 12 month rolling time period as determined at the end of each calendar month.² **(R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910)**

13. 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 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))**
14. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts A (General Provisions). The applicable sections of Subpart A are listed in Table 3 of Subpart F and Table 1A of Subpart G. **(40 CFR Part 63, Subparts A, F & G)**
15. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart F (NESHAP for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Industry). The applicable sections of Subpart F may include: **(40 CFR Part 63, Subpart F)**
 - a. 63.100 Applicability and designation of source
 - b. 63.101 Definitions
 - c. 63.102 General standards
 - d. 63.103 General compliance, reporting and recordkeeping provisions
 - e. 63.104 Heat exchange system requirements
 - f. 63.105 Maintenance wastewater requirements
 - g. 63.107 Identification of process vents subject to this Subpart
16. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart G (NESHAP for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Industry for Process Vents, Storage Vessels, Transfer Operations and Wastewater). The applicable sections of Subpart G may include: **(40 CFR Part 63, Subpart G)**
 - a. 63.110 Applicability
 - b. 63.111 Definitions
 - c. 63.112 Emission standard
 - d. 63.113 Process vent provisions – reference control technology
 - e. 63.114 Process vent provisions – monitoring requirements
 - f. 63.115 Process vent provisions – methods and procedures for process vent group determinations
 - g. 63.116 Process vent provisions – performance test methods and procedures to determine compliance
 - h. 63.117 Process vent provisions – reporting and recordkeeping requirements for group and TRE determinations and performance tests
 - i. 63.118 Process vent provisions – periodic reporting and recordkeeping requirements
 - j. 63.119 Storage vessel provisions – reference control technology
 - k. 63.120 Storage vessel provisions – procedures to determine compliance
 - l. 63.121 Storage vessel provisions – alternative means of emission limitation
 - m. 63.122 Storage vessel provisions – reporting
 - n. 63.123 Storage vessel provisions – recordkeeping
 - o. 63.126 Transfer operations provisions – reference control technology
 - p. 63.127 Transfer operations provisions – monitoring requirements
 - q. 63.128 Transfer operations provisions – test methods and procedures
 - r. 63.129 Transfer operations provisions – reporting and recordkeeping for performance tests and notification of compliance status
 - s. 63.130 Transfer operations provisions – periodic recordkeeping and reporting
 - t. 63.132 Process wastewater provisions – general
 - u. 63.133 Process wastewater provisions – wastewater tanks
 - v. 63.134 Process wastewater provisions – surface impoundments
 - w. 63.135 Process wastewater provisions – containers
 - x. 63.136 Process wastewater provisions – individual drain systems
 - y. 63.137 Process wastewater provisions – oil-water separators
 - z. 63.138 Process wastewater provisions – performance standards for treatment processes managing Group 1 wastewater streams and/or residuals removed from Group 1 wastewater streams
 - aa. 63.139 Process wastewater provisions – control devices

- bb. 63.140 Process wastewater provisions – delay of repair
- cc. 63.143 Process wastewater provisions – inspections and monitoring of operations
- dd. 63.144 Process wastewater provisions – test methods and procedures for determining applicability and Group 1/Group 2 determinations (determining which wastewater streams require control)
- ee. 63.145 Process wastewater provisions – test methods and procedures to determine compliance
- ff. 63.146 Process wastewater provisions – reporting
- gg. 63.147 Process wastewater provisions – recordkeeping
- hh. 63.148 Leak inspection provisions
- ii. 63.149 Control requirements for certain liquid streams in open systems within a chemical manufacturing process unit
- jj. 63.151 Initial notification
- kk. 63.152 General reporting and continuous records

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).

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
FGCOLDCLEANERS-S2	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.	EUCOLDCLEANER-S2
FGHONFUGITIVES-S2	Emission units subject to the requirements of 40 CFR Part 63, Subparts A (General Provisions) and H (HON for Equipment Leaks).	EU08, EUB2, EUB5
FGCELLULOSICS	Emission units subject to the requirements of 40 CFR Part 63, Subpart A (General Provisions) and Subpart UUUU (Cellulosics MACT).	EU08, EUB2
FGOLDMACT-S2	Each new, reconstructed, or existing Organic Liquid Distribution (OLD) (non-gasoline) operation that is part of an emission unit subject to the requirements of 40 CFR Part 63, Subpart EEEE. The 40 CFR Part 63, Subpart EEEE affected source is comprised of storage tanks, transfer racks, equipment leak components associated with storage tanks, transfer racks and pipelines, transport vehicles, and all containers while loading or unloading at transfer racks subject to Subpart EEEE. Equipment listed in 40 CFR 63.2338(c) that is part of an affected source under another National Emission Standards for Hazardous Air Pollutants (NESHAP) is excluded from the affected source.	EU08, EUB5, EUB2
FGMONMACT-S2	These conditions apply to miscellaneous organic chemical manufacturing process units (MCPUs) that are located at, or are part of, a major source as defined in section 112(a) of the Clean Air Act and that meet all the criteria specified in 40 CFR Part 63, Subpart FFFF (40 CFR 63.2435). Specified processes are further defined in 40 CFR 63.2440.	EUB5
FGBENZENEWASTE-S2	Benzene waste operations standards that apply to equipment and processes at certain chemical manufacturing plants.	EUB5

**FGHONFUGITIVES-S2
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Emission units subject to the requirements of 40 CFR Part 63, Subparts A (General Provisions) and H (HON for Equipment Leaks).

Emission Units: EU08, EUB2, EUB5

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Organic HAP – Phase I	10,000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps in light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
2. Organic HAP – Phase II	5000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps in light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
3. Organic HAP – Phase III (general)	1000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps in light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
4. Organic HAP – Phase III (food/medical service)	2000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps in light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
5. Organic HAP – Phase III (polymerizing monomers)	5000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps in light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
6. Organic HAP	No Detectable Emissions (NDE) = 500 ppm above background	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Compressors	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
7. Organic HAP	NDE	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pressure relief devices in gas/vapor service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
8. Organic HAP - Phase I	10,000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Valves in gas/vapor or light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
9. Organic HAP - Phase II and III	500 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Valves in gas/vapor or light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
10. Organic HAP	NDE	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps, valves, connectors & agitators in heavy liquid service; pressure relief devices in liquid service; and instrumentation systems	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
11. Organic HAP	NDE	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Closed-vent systems	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
12. Organic HAP	10,000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Agitators in gas/vapor or light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H
13. Organic HAP	500 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Connectors in gas/vapor or light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	40 CFR Part 63, Subpart H

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall comply with the applicable design criteria for equipment subject to 40 CFR Part 63, Subpart H. Applicable design criteria may include (**40 CFR Part 63, Subpart H**):
 - a. 63.163(e) Design criteria for pumps equipped with dual mechanical seal systems
 - b. 63.163(j) Criteria for designating pumps as unsafe-to-monitor
 - c. 63.164 Design criteria for compressors
 - d. 63.166 Design criteria for sampling systems
 - e. 63.168(h) Criteria for designating unsafe-to-monitor valves
 - f. 63.168(i) Criteria for designating difficult-to-monitor valves
 - g. 63.172(b)-(c) Design criteria for control devices
 - h. 63.173(d) Design criteria for agitators equipped with dual mechanical seal systems
 - i. 63.173(h) Criteria for designating agitators as difficult-to-monitor
 - j. 63.173(j) Criteria for designating agitators as unsafe-to-monitor
 - k. 63.174(f) Criteria for designating connectors as unsafe-to-monitor
 - l. 63.174(g) Criteria for designating connectors as unsafe-to-repair
 - m. 63.174(h) Criteria for designating connectors as inaccessible

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 conduct monitoring for equipment leaks, defined in SC I.1 through SC I.13 of this table, in accordance with 40 CFR Part 63, Subpart H, Sections 63.163 through 63.174, as applicable. **(40 CFR Part 63, Subpart H)**
2. The permittee shall conduct pressure testing, for batch processes using this option, in accordance with 40 CFR Part 63, Subpart H, Section 63.178 (Alternative means of emission limitation: Batch processes). **(40 CFR Part 63, Subpart H)**
3. The permittee shall use Method 21 (except as otherwise specified in 40 CFR Part 63, Subpart H, Section 63.180(b) or (c), or except as allowed under an alternative monitoring method approved by the US EPA in letters dated July 26, 2007 and August 19, 2008) when performing instrument monitoring of equipment, as per 40 CFR Part 63, Subpart H, Section 63.180(b) (Test methods and procedures). **(40 CFR Part 63, Subpart H)**
4. The permittee shall conduct instrument monitoring at the frequencies listed in 40 CFR Part 63, Subpart H, Sections 63.163 through 63.174, as applicable. **(40 CFR Part 63, Subpart H)**
5. Batch process pressure testing, when applicable, shall be conducted each time the process is reconfigured, or at a minimum of once per year, in accordance with 40 CFR Part 63, Subpart H, Section 63.178(b)(1). For processes subject to MON and complying with pressure testing, this provision is allowed for both batch and continuous processes per 40 CFR 63.2480(b)(1). **(40 CFR Part 63, Subpart H and FFFF)**

VI. MONITORING/RECORDKEEPING

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

1. If applicable, control devices used to comply with the provisions of 40 CFR Part 63, Subpart H shall be monitored to ensure proper operation and maintenance, in accordance with 40 CFR Part 63, Subpart H, Section 63.172(e) (Standards: Closed-vent systems and control devices). **(40 CFR Part 63, Subpart H)**
2. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart H, Section 63.181 (Recordkeeping requirements). **(40 CFR Part 63, Subpart H)**.

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 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 applicable, the permittee shall submit an Initial Notification within 120 days of promulgation of a referencing subpart, in accordance with 40 CFR Part 63, Subpart H, Section 63.182(b). **(40 CFR Part 63, Subpart H)**
5. If applicable, the permittee shall submit a Notification of Compliance Status Report within 90 days of any applicable compliance date, in accordance with 40 CFR Part 63, Subpart H, Section 63.182(c). **(40 CFR Part 63, Subpart H)**
6. If applicable, the permittee shall submit semiannual Periodic Reports, beginning six months after the date of the Notification of Compliance Status Report, in accordance with 40 CFR Part 63, Subpart H, Section 63.182(d). **(40 CFR Part 63, Subpart H)**

7. Semiannual periodic reports are due March 15 and September 15 of each year. Reports for rules not included in these date change agreements are due according to the schedule in their applicable flexible group table. Startup, shutdown, and malfunction reports shall be submitted at the same time. **(40 CFR Part 63, Subpart A, Section 63.9(i), 63.10(a)(6), 63.10(d)(5)(i); 40 CFR Part 63, Subpart H, Section 63.182(d)(1))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions). The applicable sections of Subpart A are listed in Table 4 of Subpart H. **(40 CFR Part 63, Subparts A & H)**
2. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart H (National Emission Standards for Organic Hazardous air Pollutants (NESHAP) for Equipment Leaks). The applicable sections of Subpart H may include: **(40 CFR 63 Subpart H)**
 - a. 63.160 Applicability
 - b. 63.161 Definitions
 - c. 63.162 Standards: General
 - d. 63.163 Standards: Pumps in light liquid service
 - e. 63.164 Standards: Compressors
 - f. 63.165 Standards: Pressure relief devices in gas/vapor service
 - g. 63.166 Standards: Sampling connection systems
 - h. 63.167 Standards: Open-ended valves or lines
 - i. 63.168 Standards: Valves in gas/vapor service and in light liquid service
 - j. 63.169 Standards: Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service
 - k. 63.170 Standards: Surge control vessels and bottoms receivers
 - l. 63.171 Standards: Delay of repair
 - m. 63.172 Standards: Closed-vent systems and control devices
 - n. 63.173 Standards: Agitators in gas/vapor service and in light liquid service
 - o. 63.174 Standards: Connectors in gas/vapor service and in light liquid service
 - p. 63.178 Alternative means of emission limitations: Batch processes
 - q. 63.180 Test methods and procedures
 - r. 63.181 Recordkeeping requirements
 - s. 63.182 Reporting requirements

FGCELLULOSICS FLEXIBLE GROUP CONDITIONS
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DESCRIPTION

Emission units subject to the requirements of 40 CFR Part 63, Subpart A (General Provisions) and Subpart UUUU (Cellulosics MACT).

Emission Units: EU08, EUB2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall set operational parameters based on the minimum or maximum parameter measured during the performance test, as applicable, in accordance with 40 CFR Part 63, Subpart UUUU, Table 2. **(40 CFR Part 63, Subpart UUUU)**

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. The permittee shall conduct testing in accordance with the applicable requirements of 40 CFR Part 63, Subpart UUUU, Sections 63.5535 (What performance tests and other procedures must I use?) and 63.5540 (By what date must I conduct a performance test or other initial compliance demonstration?), and with Table 4 (Requirements for Performance Tests). **(40 CFR Part 63, Subpart UUUU)**
2. On or before June 13, 2005, the permittee shall comply with the heat exchange system provisions of 40 CFR Part 63, Subpart F, Section 63.104 (Heat exchange system requirements), as referenced in 40 CFR Part 63, Subpart UUUU, Tables 3 (Initial Compliance with Emission Limits and Work Practice Standards) and 5 (Continuous Compliance with Emission Limits and Work Practice Standards). **(40 CFR Part 63, Subpart UUUU)**
3. The permittee shall use the test methods and procedures referenced in the applicable requirements of 40 CFR Part 63, Subpart UUUU, Sections 63.5535 (What performance tests and other procedures must I use?) and 63.5540 (By what date must I conduct a performance test or other initial compliance demonstration?), and with Table 4 (Requirements for Performance Tests). **(40 CFR Part 63, Subpart UUUU)**
4. Heat exchange system testing shall be performed quarterly, in accordance with 40 CFR Part 63, Subpart F, Section 63.104(b)(1), as referenced in 40 CFR Part 63, Subpart UUUU, Tables 3 (Initial Compliance with Emission Limits and Work Practice Standards) and 5 (Continuous Compliance with Emission Limits and Work Practice Standards). **(40 CFR Part 63, Subpart UUUU)**

VI. MONITORING/RECORDKEEPING

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

1. On or before June 13, 2005, the permittee shall comply with the applicable parametric monitoring requirements of 40 CFR Part 63, Subpart UUUU, Sections 63.5530 (How do I demonstrate initial compliance with the emission limits and work practice standards?), 63.5545 (What are my monitoring installation, operation, and maintenance requirements?), 63.5555 (How do I demonstrate continuous compliance with the emission limits, operating limits, and work practice standards?) and 63.5560 (How do I monitor and collect data to demonstrate continuous compliance?), and with Tables 3 (Initial Compliance with Emission Limits and Work Practice Standards) and 5 (Continuous Compliance with Emission Limits and Work Practice Standards). **(40 CFR Part 63, Subpart UUUU)**
2. On or before June 13, 2005, the permittee shall comply with the equipment leak provisions of either 40 CFR Part 63, Subpart H (National Emission Standard for Hazardous Air Pollutants (NESHAP) for equipment Leaks) or 40 CFR Part 63, Subpart UU (NESHAP for Equipment Leaks – Control Level 2 Standards), as referenced in Subpart UUUU Tables 3 (Initial Compliance with Emission Limits and Work Practice Standards) and 5 (Continuous Compliance with Emission Limits and Work Practice Standards). Compliance with this section shall be determined using the flexible group table “FGHONFUGITIVES”. **(40 CFR Part 63, Subpart UUUU)**
3. On or before June 13, 2005, the permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart UUUU, Sections 63.5585 (What records must I keep?) and 63.5590 (In what form and how long must I keep my records?), and with Tables 3 (Initial Compliance with Emission Limits and Work Practice Standards), 5 (Continuous Compliance with Emission Limits and Work Practice Standards), 6 (Continuous Compliance with Operating Limits) and 9 (Recordkeeping Requirements). **(40 CFR Part 63, Subpart UUUU)**.

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 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. Semiannual Periodic Reports are due March 15 and September 15 of each year, beginning with the first applicable period after the compliance date, in accordance with 40 CFR Part 63, Subpart UUUU, Section 63.5580(b) and Table 8. Startup, shutdown, and malfunction reports shall be submitted at the same time, in accordance with Table 8. **(40 CFR Part 63, Subpart UUUU)**
5. Other reports and notifications are to be submitted as applicable, in accordance with 40 CFR Part 63, Subpart UUUU, Sections 63.5575 and 63.5580, and with Tables 7 and 8. **(40 CFR Part 63, Subpart UUUU)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions). The applicable sections of Subpart A are listed in Table 10 of Subpart UUUU, as per 63.5600. **(40 CFR Part 63, Subparts A & UUUU)**

2. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart UUUU (Cellulose Products Manufacturing MACT). The applicable sections of Subpart UUUU may include: **(40 CFR Part 63, Subpart UUUU)**
- a. 63.5480 What is the purpose of this subpart?
 - b. 63.5485 Am I subject to this subpart?
 - c. 63.5490 What parts of my plant does this subpart cover?
 - d. 63.5495 When do I have to comply with this subpart?
 - e. 63.5505 What emission limits, operating limits, and work practice standards must I meet?
 - f. 63.5515 What are my general requirements for complying with this subpart?
 - g. 63.5530 How do I demonstrate initial compliance with the emission limits and work practice standards?
 - h. 63.5535 What performance tests and other procedures must I use?
 - i. 63.5540 By what date must I conduct a performance test or other initial compliance demonstration?
 - j. 63.5545 What are my monitoring installation, operation, and maintenance requirements?
 - k. 63.5555 How do I demonstrate continuous compliance with the emission limits, operating limits, and work practice standards?
 - l. 63.5560 How do I monitor and collect data to demonstrate continuous compliance?
 - m. 63.5575 What notifications must I submit and when?
 - n. 63.5580 What reports must I submit and when?
 - o. 63.5585 What records must I keep?
 - p. 63.5590 In what form and how long must I keep my records?
 - q. 63.5595 What compliance options do I have if part of my affected source is subject to both this subpart and another subpart?
 - r. 63.5600 What other requirements apply to me?
 - s. 63.5605 Who implements and enforces this subpart?
 - t. 63.5610 What definitions apply to this subpart?

FGOLDMACT-S2 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Each new, reconstructed, or existing Organic Liquid Distribution (OLD) (non-gasoline) operation that is part of an emission unit subject to the requirements of 40 CFR Part 63, Subpart EEEE. The 40 CFR Part 63, Subpart EEEE affected source is comprised of storage tanks, transfer racks, equipment leak components associated with storage tanks, transfer racks and pipelines, transport vehicles, and all containers while loading or unloading at transfer racks subject to Subpart EEEE. Equipment listed in 40 CFR 63.2338(c) that is part of an affected source under another National Emission Standards for Hazardous Air Pollutants (NESHAP) is excluded from the affected source.

Emission Units: EU08, EUB2, EUB5

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Total organic HAP	Reduce emissions by 95 wt% OR ≤ 20ppmv* exhaust concentration	Defined in 40 CFR Part 63, Subparts A and EEEE	Storage Tanks See Table 2 of 40 CFR Part 63, Subpart EEEE	SC V.1 – V.8	40 CFR 63.2346(a)
2. Total organic HAP	Reduce emissions by 95 wt% OR ≤ 20ppmv* exhaust concentration	Defined in 40 CFR Part 63, Subparts A and EEEE	Transfer Racks See Table 2 of 40 CFR Part 63, Subpart EEEE	SC V.1 – V.8	40 CFR 63.2346(b)

* Corrected to 3% oxygen for combustion devices using supplemental combustion air

3. The permittee shall comply with the applicable requirements for storage tanks and transfer racks specified in 40 CFR Part 63, Subpart SS for meeting emission limits, substituting the term storage tank at each occurrence of the term storage vessel in Subpart SS. **(40 CFR 63.2346(a)(1))**
4. The permittee must be in compliance with the emission limitations at all times when the equipment identified in 40 CFR 63.2338(b)(1) through (4) is in OLD operation. The emission limitations apply during periods of Startup, Shutdown and Malfunction (SSM) except as provided in 40 CFR 63.2378(b)(2) and (3). **(40 CFR 63.2350(a), 40 CFR 63.2378(b)(1))**

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. For each storage tank identified in Table 2 of 40 CFR Part 63, Subpart EEEE, items 1 through 5, the permittee shall reduce the emissions of organic HAP using one of the following work practice standards:
 - a. Route emissions to a fuel gas system or back into a process as specified in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2346(a)(2))**
 - b. Comply with 40 CFR Part 63, Subpart WW (control level 2); or **(40 CFR 63.2346(a)(3))**
 - c. Use a vapor balancing system that complies with 40 CFR 63.2346(a)(4)(i) through (vii) and with the recordkeeping requirements in 40 CFR 63.2390(e). **(40 CFR 63.2346(a)(4))**
2. For each storage tank identified in Table 2 of 40 CFR Part 63, Subpart EEEE, item 6, the permittee shall reduce the emissions of organic HAP using one of the following work practice standards:
 - a. Route emissions to a fuel gas system or back into a process as specified in 40 CFR Part 63, Subpart SS; or **(40 CFR 63.2346(a)(2))**
 - b. Use a vapor balancing system that complies with 40 CFR 63.2346(a)(4)(i) through (vii) and with the recordkeeping requirements in 40 CFR 63.2390(e). **(40 CFR 63.2346(a)(4))**
3. For each **new** transfer rack that meets the criterion for control in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee shall reduce the emissions of organic HAP during loading of organic liquids into transport vehicles or containers using one of the following work practice standards:
 - a. Route emissions to a fuel gas system or back into a process as specified in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2346(b)(2))**
 - b. Use a vapor balancing system that routes organic HAP vapors displaced from the loading of organic liquids into transport vehicles to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header; and **(40 CFR 63.2346(b)(3)(i))**
 - c. Use a vapor balancing system that routes organic HAP vapors displaced from the loading of organic liquids into containers directly (e.g., no intervening tank or containment area such as a room) to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header. **(40 CFR 63.2346(b)(3)(ii))**
4. For each **existing** transfer rack that meets the criterion for control in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee shall reduce the emissions of organic HAP during loading of organic liquids into transport vehicles using one of the following work practice standards:
 - a. Route emissions to a fuel gas system or back into a process as specified in 40 CFR Part 63, Subpart SS; or **(40 CFR 63.2346(b)(2))**
 - b. Use a vapor balancing system that routes organic HAP vapors displaced from the loading of organic liquids into transport vehicles to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header. **(40 CFR 63.2346(b)(3)(i))**
5. For each pump, valve, and sampling connection that operates in organic liquids service for at least 300 hours per year at an affected source that has at least one storage tank or transfer rack that meets the applicability criteria for control in Table 2 of 40 CFR Part 63, Subpart EEEE, the permittee must comply with 40 CFR Part 63, Subpart TT (control level 1); 40 CFR Part 63, Subpart UU (control level 2); or 40 CFR Part 63, Subpart H. **(40 CFR 63.2346(c))**
6. For each transport vehicle equipped with vapor collection equipment that is loaded at a transfer rack subject to control based on the criteria specified in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee must follow the steps in 40 CFR 60.502(e) to ensure that organic liquids are loaded only into vapor-tight transport vehicles and comply with the provisions in 40 CFR 60.502(f) through (i), substituting the term “transport vehicle” at each occurrence of the term “tank truck” or “gasoline tank truck”. **(40 CFR 63.2346(d)(1))**
7. For each transport vehicle without vapor collection equipment that is loaded at a transfer rack subject to control based on the criteria specified in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee must ensure that organic liquids are loaded only into transport vehicles that have current certification in accordance with the U.S. Department of Transportation (DOT) pressure test requirements in 49 CFR Part 180 for cargo tanks or 49 CFR 173.31 for tank cars. **(40 CFR 63.2346(d)(2))**

8. For each existing, new and reconstructed high throughput transfer rack routing emissions to a control device to comply with an emission limit in Table 2 of 40 CFR Part 63, Subpart EEEE, the permittee shall meet the operating limits specified in Table 3 of 40 CFR Part 63, Subpart EEEE as identified below. The permittee must establish the operating limits during the initial performance test or design evaluation. The operating limits shall be met at all times after they are established, when the equipment identified in 40 CFR 63.2338(b)(1) through (4) is in OLD operation. **(40 CFR 63.2346(e), 40 CFR 63.2350(a), 40 CFR 63.2370(b) and Table 3)**

Control Device	Operating Limit
Thermal oxidizer	Maintain the daily average fire box or combustion zone temperature greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Catalytic oxidizer	a. Replace the existing catalyst bed before the age of the bed exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND b. Maintain the daily average temperature at the inlet of the catalyst bed greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND c. Maintain the daily average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Absorber	a. Maintain the daily average concentration level of organic compounds in the absorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR b. Maintain the daily average scrubbing liquid temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND c. Maintain the difference between the specific gravities of the saturated and fresh scrubbing fluids greater than or equal to the difference established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Condenser	a. Maintain the daily average concentration level of organic compounds at the condenser exit less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR b. Maintain the daily average condenser exit temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Adsorption system with adsorbent regeneration	a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR b. Maintain the total regeneration stream mass flow during the adsorption bed regeneration cycle greater than or equal to the reference stream mass flow established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND c. Before the adsorption cycle commences, achieve and maintain the temperature of the adsorption bed after regeneration less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND d. Achieve a pressure reduction during each adsorption bed regeneration cycle greater than or equal to the pressure reduction established during the design evaluation or performance test that demonstrated compliance with the emission limit.

Control Device	Operating Limit
Adsorption system without adsorbent regeneration	a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR b. Replace the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation or performance test before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND c. Maintain the temperature of the adsorption bed less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Flare	a. Comply with the equipment and operating requirements in 40 CFR 63.987(a); AND b. Conduct an initial flare compliance assessment in accordance with 40 CFR 63.987(b); AND c. Install and operate monitoring equipment as specified in 40 CFR 63.987(c).
Another type of control	Submit a monitoring plan as specified in 40 CFR 63.995(c) and 40 CFR 63.2366(b), and monitor the control device in accordance with that plan.

9. For each storage tank and low throughput transfer rack, the permittee shall comply with the respective requirements for monitored parameters as specified in 40 CFR Part 63, Subpart SS. Alternatively, the permittee may comply with the operating limits in Table 3 of 40 CFR Part 63, Subpart EEEE. **(40 CFR 63.2346(e))**
10. For noncombustion devices using total organic compounds (TOC) rather than organic HAP to demonstrate compliance with a percent reduction requirement in Table 2 to 40 CFR Part 63, Subpart EEEE, the permittee must first demonstrate, subject to the approval of the Administrator, that TOC is an appropriate surrogate for organic HAP (for storage tank(s) and/or transfer rack(s), the percent destruction of organic HAP is equal to or higher than the percent destruction of TOC). This demonstration must be conducted prior to or during the initial compliance test. **(40 CFR 63.2346(f))**
11. When electing to comply with 40 CFR Part 63, Subpart EEEE by combining emissions from different emission sources into a single control device, the permittee must comply with the provisions in 40 CFR 63.982(f). **(40 CFR 63.2346(j))**
12. The permittee shall develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3), except for sources not required to be controlled as specified in 40 CFR 63.2343. The permittee must follow the requirements in 40 CFR 63.6(e)(1) and (3) during periods of startup, shutdown, malfunction, or nonoperation of the affected source or any part thereof. In addition, the provisions of 40 CFR 63.2378(b)(1) through (3) apply. **(40 CFR 63.2350(c), 40 CFR 63.2378(b))**
13. The permittee must be in compliance with the operating limits at all times when the equipment identified in 40 CFR 63.2338(b)(1) through (4) is in OLD operation. **(40 CFR 63.2350(a))**
14. The permittee shall operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(E)(l)(i). **(40 CFR 63.2350(b))**

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. The permittee shall demonstrate initial compliance with each applicable emission limitation and work practice standard as specified in Tables 6 and 7 of 40 CFR Part 63, Subpart EEEE. **(40 CFR 63.2370(a))**
2. The permittee shall demonstrate continuous compliance with each applicable emission limitation, operating limit, and work practice standard in Tables 2 through 4 of 40 CFR Part 63, Subpart EEEE according to the methods specified in 40 CFR Part 63, Subpart SS and in Tables 8 through 10 of 40 CFR Part 63, Subpart EEEE, as applicable. **(40 CFR 63.2378(a))**
3. For each performance test, design evaluation, and/or compliance determination conducted, the permittee shall use the following procedures:
 - a. Performance tests according to the procedures in 40 CFR Part 63, Subpart SS and the provisions specified in 40 CFR 63.2354(b); **(40 CFR 63.2354(a)(1))**
 - b. Design evaluations according to the procedures in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2354(a)(2))**
 - c. Performance evaluations of a continuous emission monitoring system (CEMS) according to the requirements in 40 CFR 63.8(e); **(40 CFR 63.2354(a)(3))**
 - d. Compliance determination of the organic HAP or Total Organic Compounds (TOC) emission limit according to either of the following (in addition to EPA Method 25 or 25A):
 - i. Method 18 of 40 CFR Part 60, Appendix A; as specified in 40 CFR 63.2354(b)(3)(i); or **(40 CFR 63.2354(b)(3))**
 - ii. Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry under the conditions specified in 40 CFR 63.2354(b)(3)(ii). **(40 CFR 63.2354(b)(3))**
 - e. Compliance determination of the HAP content of organic liquids according to either EPA Method 311 of 40 CFR Part 63, Appendix A or other method approved by the Administrator. **(40 CFR 63.2354(c))**
4. The permittee shall conduct initial performance tests and design evaluations by the following dates, whichever is earlier: **(40 CFR 63.2358(a))**
 - a. According to the schedule in 40 CFR 63.7(a)(2); or
 - b. The compliance date specified in any applicable State or Federal new source review construction permit.
5. For storage tanks and transfer racks choosing to comply with the emission limits in Table 2 of 40 CFR Part 63, Subpart EEEE, the permittee shall demonstrate initial compliance according to the following schedule:
 - a. For existing transfer racks, by August 4, 2007; **(40 CFR 63.2358(b)(1))**
 - b. For existing storage tanks with a floating roof, the next time the tank is emptied and degassed, but not later than February 3, 2014; **(40 CFR 63.2358(b)(1)(i))**
 - c. For reconstructed and new sources, within 180 days after initial start up. **(40 CFR 63.2358(b)(2))**
6. For storage tanks at existing sources choosing to comply with the work practice standards in Table 4 of 40 CFR Part 63, Subpart EEEE, the permittee shall conduct the initial compliance demonstration the next time the tank is emptied and degassed but not later than February 3, 2014. **(40 CFR 63.2358(c)(1))**
7. For transfer racks and equipment leak components at existing sources that are complying with the work practice standards in Table 4 of 40 CFR Part 63, Subpart EEEE, the permittee shall conduct the initial compliance demonstration by August 4, 2007. **(40 CFR 63.2358(c)(2))**
8. For storage tanks, transfer racks and equipment leak components at reconstructed or new sources that are complying with the work practice standards in Table 4 of 40 CFR Part 63, Subpart EEEE, the permittee shall conduct the initial compliance demonstration within 180 days after the initial start up date for the affected source. **(40 CFR 63.2358(d))**
9. For nonflare control devices, the permittee shall conduct subsequent performance tests required in Table 5 of 40 CFR Part 63, Subpart EEEE, item 1 at any time EPA requests. **(40 CFR 63.2362(a))**

10. For each owned transport vehicle that is equipped with vapor collection equipment that is loaded with organic liquids at transfer racks subject to control based on the criteria in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee shall perform the vapor tightness testing required in Table 5 of 40 CFR Part 63, Subpart EEEE, item 2 at least once per year. **(40 CFR 63.2362(b)(1))**
11. For each owned transport vehicle that does not have vapor collection equipment, the permittee shall maintain current certification in accordance with the U.S. DOT pressure test requirements in 49 CFR Part 180 for cargo tanks or 49 CFR 173.31 for tank cars. **(40 CFR 63.2362(b)(2))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii), 40 CFR 63.2394)**

1. For each storage tank with a capacity less than 5,000 gallons and each transfer rack that only unloads organic liquids, the permittee shall keep documentation that verifies that each storage tank and transfer rack identified in 40 CFR 63.2343(a) is not required to be controlled. 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). **(40 CFR 63.2343(a))**
2. For each storage tank using a vapor balancing system per 40 CFR 63.2346(a)(4), the permittee shall keep the following records:
 - a. Current certification in accordance with the U.S. DOT pressure test requirements of 49 CFR Part 180 – cargo tanks; **(40 CFR 63.2390(e)(1))**
 - b. Current certification in accordance with the U.S. DOT pressure test requirements of 49 CFR 173.31 – tank cars, **(40 CFR 63.2390(e)(1))**
 - c. Pressure relief vent setting specified in 40 CFR 63.2346(a)(4)(v), **(40 CFR 63.2390(e)(2))**
 - d. A record of the equipment to be used and procedures to be followed when reloading cargo tanks or tank cars and displacing vapors back to the storage tank from which the liquid originates. **(40 CFR 63.2390(e)(3)(i))**
 - e. A record of each time the vapor balancing system is used to comply with 40 CFR 63.2346(a)(4)(vi)(B) **(40 CFR 63.2390(e)(3)(ii))**
3. For each transport vehicle into which organic liquids are loaded at a transfer rack that is subject to control based on the criteria in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee shall keep the following records:
 - a. The documentation described in 40 CFR 60.505(b) for transport vehicles equipped with vapor collection; **(40 CFR 63.2390(c)(1))**
 - b. Current certification in accordance with U.S. DOT pressure test requirements in 49 CFR Part 180 for cargo tanks without vapor collection equipment; **(40 CFR 63.2390(c)(2))**
 - c. Current certification in accordance with U.S. DOT pressure test requirements in 49 CFR Part 173 for tank cars without vapor collection equipment; **(40 CFR 63.2390(c)(2))**Alternatively, the permittee may record that the verification of U.S. DOT tank certification or Method 27 in 40 CFR Part 60, Appendix A has been performed. **(40 CFR 63.2390(c)(3))**
4. 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 Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10. **(40 CFR 63.2390(d))**
5. For each control device required to comply with 40 CFR Part 63, Subpart EEEE, the permittee shall install, operate, and maintain a Continuous Monitoring System (CMS). If using a Continuous Parameter Monitoring System (CPMS), the permittee shall comply with the applicable requirements in 40 CFR Part 63, Subpart SS. If using a CEMS, the permittee shall comply with the applicable requirements in 40 CFR 63.8. **(40 CFR 63.2366(a))**
6. For nonflare control devices controlling storage tanks and low throughput transfer racks, the permittee shall submit a monitoring plan according to the requirements in 40 CFR Part 63, Subpart SS. **(40 CFR 63.2366(b))**
7. When using a control device to comply with 40 CFR Part 63, Subpart EEEE, the permittee shall monitor continuously or collect data at all required intervals at all times the emission source and control device are in

OLD operation to demonstrate continuous compliance The permittee is not required to monitor and collect data during the following situations:

- a. Malfunctions of the CMS; **(40 CFR 63.2374(b))**
- b. Repairs of the CMS; **(40 CFR 63.2374(b))**
- c. Required quality assurance or control activities (including calibration checks and required zero span adjustments). **(40 CFR 63.2374(b))**

Furthermore, the permittee shall not use data recorded during the above situations in data averages and calculations used to report emission and operating levels. **(40 CFR 63.2374(c))**

8. The permittee shall keep 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. **(40 CFR 63.2394(a))**
9. The permittee shall keep records of all information for five years following the date of each occurrence, measurement, maintenance, corrective action, report or record as specified in 40 CFR 63.10(b)(1). **(40 CFR 63.2394(b))**
10. The permittee shall keep each record on site for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report or record as specified in 40 CFR 63.10(b)(1). These same records may be kept off site for the remaining three years. **(40 CFR 63.2394(c))**
11. The permittee shall keep all records required by 40 CFR 63.2343 for each emission source that does not require control under 40 CFR Part 63, Subpart EEEE. **(40 CFR 63.2390(a))**
12. The permittee shall keep all of the following records for each emission source that requires control under 40 CFR Part 63, Subpart EEEE:
 - a. All records in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2390(b))**
 - b. All records in Table 12 of 40 CFR Part 63, Subpart EEEE; **(40 CFR 63.2390(b))**
 - c. All records required to show continuous compliance as required in 40 CFR Part 63, Subpart SS and in Tables 8 through 10 of 40 CFR Part 63, Subpart EEEE. **(40 CFR 63.2390(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 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. For each storage tank having a capacity greater than or equal to 5,000 gallons that is not subject to control based on the criteria specified in Table 2 of 40 CFR Part 63, Subpart EEEE, items 1 through 6, the permittee shall comply with the requirements specified in 40 CFR 63.2343(b)(1) through (b)(3). **(40 CFR 63.2343(b))**
5. For each transfer rack that loads organic liquids and is not subject to control based on the criteria in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee shall comply with the requirements specified in 40 CFR 63.2343(c)(1) through (c)(3). **(40 CFR 63.2343(c))**
6. The permittee must submit a subsequent Compliance report as specified in paragraphs 40 CFR 63.2343(b)(3) and (c)(3) if one or more of the following events occur since the filing of the Notification of Compliance Status or the last Compliance report:
 - a. Any storage tank or transfer rack became subject to control under this Subpart EEEE; **(40 CFR 63.2343(d)(1))**

- b. Any storage tank equal to or greater than 18.9 cubic meters (5,000 gallons) became part of the affected source but is not subject to any of the emission limitations, operating limits, or work practice standards of this subpart; **(40 CFR 63.2343(d)(2))**
 - c. Any transfer rack (except those racks at which only unloading of organic liquids occurs) became part of the affected source; **(40 CFR 63.2343(d)(3))**
 - d. Any of the information required in 40 CFR 63.2386(c)(1), (2) or (3) has changed. **(40 CFR 63.2343(d)(4))**
7. The permittee shall submit the following notifications according to the schedule in Table 12 of 40 CFR Part 63, Subpart EEEE:
- a. Each notification in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2382(a))**
 - b. Each notification in Table 12 of 40 CFR Part 63, Subpart EEEE; **(40 CFR 63.2382(a))**
 - c. Initial notification according to the schedule specified in 40 CFR 63.2382(b); **(40 CFR 63.2382(b))**
 - d. Notification of Intent to conduct a performance test as required in 40 CFR 63.7(b)(1); **(40 CFR 63.2382(c))**
 - e. Notification of Compliance Status including the information required in 40 CFR 63.999(b) and 40 CFR 63.2382(d)(2)(i) through (viii). **(40 CFR 63.2382(d))**
- These notifications must be submitted according to the schedule in Table 12 of 40 CFR Part 63, Subpart EEEE and as specified in paragraphs (b) through (d) of 40 CFR 63.2382.
8. The permittee shall submit all applicable reports in 40 CFR 63.2386 according to the schedule in Table 11 of 40 CFR Part 63, Subpart EEEE and by the dates specified in 40 CFR 63.2386(b)(1) through (3). These reports include, but are not limited to, the following:
- a. Each report in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2386(a))**
 - b. Each report in Table 11 of 40 CFR Part 63, Subpart EEEE; **(40 CFR 63.2386(a))**
 - c. Each report in Table 12 of 40 CFR Part 63, Subpart EEEE; **(40 CFR 63.2386(a))**
 - d. First Compliance Report containing the information specified in 40 CFR 63.2386(c)(1) through (10); **(40 CFR 63.2386(c))**
 - e. Subsequent Compliance Reports containing the information specified in 40 CFR 63.2386(c)(1) through (9) and 40 CFR 63.2386(d)(1) through (4) where applicable; **(40 CFR 63.2386(d))**
 - f. Report of all deviations for each affected source that has obtained a Renewable Operating Permit. **(40 CFR 63.2386(e))**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the NESHAP, as specified in 40 CFR Part 63, Subpart A and Subpart EEEE for Organic Liquid Distribution by the initial compliance date. **(40 CFR Part 63, Subparts A and EEEE)**

FGMONMACT-S2 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

These conditions apply to miscellaneous organic chemical manufacturing process units (MCPU) that are located at, or are part of, a major source as defined in section 112(a) of the Clean Air Act and that meet all the criteria specified in 40 CFR Part 63, Subpart FFFF (40 CFR 63.2435). Specified processes are further defined in 40 CFR 63.2440.

Emission Unit: EUB5

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

1. The permittee shall comply with the emission limits in Tables 1 through 5 of Subpart FFFF at all times, except during periods of startup, shutdown, and malfunction, or the alternative emission limits specified in 40 CFR 63.2495, 40 CFR 63.2500, or 40 CFR 63.2505, except as specified in 40 CFR 63.2450 (b) through (s). **(40 CFR 63.2450(a))**
2. The permittee shall comply with each applicable emission limit in Table 1 of Subpart FFFF for continuous process vents. **(40 CFR 63.2455(a))**
3. The permittee shall comply with each applicable emission limit in Table 2 of Subpart FFFF for batch process vents. **(40 CFR 63.2460(a))**
4. The permittee shall comply with each applicable emission limit in Table 3 of Subpart FFFF for process vents that emit hydrogen halide and halogen HAP or HAP metals. **(40 CFR 63.2465(a))**
5. The permittee shall comply with each applicable emission limit in Table 4 of Subpart FFFF for storage tanks. **(40 CFR 63.2470(a))**
6. The emission limits in Table 4 to Subpart FFFF for control devices used to control emissions from storage tanks do not apply during periods of planned routine maintenance. **(40 CFR 63.2470(d))**
7. As an alternative to the emission limits specified in Table 4 to Subpart FFFF, the permittee may elect to implement vapor balancing in accordance with 40 CFR 63.1253(f), except as specified in 40 CFR 63.2470(e)(1) through (3). The permittee may comply with the vapor balancing alternative in 40 CFR 63.1253(f) when the storage tank is filled from a barge. All requirements for tank trucks and railcars specified in 40 CFR 63.1253(f) also apply to barges, except when 40 CFR 63.1253(f)(2) refers to pressure testing certifications, the requirements in 40 CFR 61.304(f) apply for barges. **(40 CFR 63.2470(e))**
8. For each surge control vessel or bottoms receiver that meets the capacity and vapor pressure thresholds for a Group 1 storage tank, the permittee shall comply with the emission limits specified in Table 4 of Subpart FFFF. **(40 CFR 63.2450(r))**
9. The permittee shall comply with each applicable emission limit in Table 5 of Subpart FFFF for transfer racks. **(40 CFR 63.2475(a))**
10. The permittee may elect to comply with the pollution prevention alternative requirements specified below in lieu of the emission limitations and work practice standards contained in Tables 1 through 7 to Subpart FFFF for any MCPU for which initial startup occurred before April 4, 2002. The permittee may comply with the requirements of 40 CFR 63.2495(a)(1) for a series of processes, including situations where multiple processes are merged, if

the permittee demonstrates to the satisfaction of the Administrator that the multiple processes were merged after the baseline period into an existing process or processes. **(40 CFR 63.2495(a))**

- a. The permittee must reduce the production-indexed HAP consumption factor (HAP factor) by at least 65% from a 3-year average baseline beginning no earlier than the 1994 through 1996 calendar years. For any reduction in the HAP factor achieved by reducing HAP that are also volatile organic compounds (VOC), the permittee must demonstrate an equivalent reduction in the production-indexed VOC consumption factor (VOC factor) on a mass basis. For any reduction in the HAP factor achieved by reducing a HAP that is not a VOC, the permittee may not increase the VOC factor. **(40 CFR 63.2495(a)(1))**
 - b. Any MCPU for which the permittee seeks to comply by using the pollution prevention alternative must begin with the same starting material(s) and end with the same product(s). The permittee may not comply by eliminating any steps of a process by transferring the step offsite (to another manufacturing location). The permittee may also not merge a solvent recovery step conducted offsite to onsite and as part of an existing process as a method of reducing consumption. **(40 CFR 63.2495(a)(2))**
 - c. The permittee may comply with the requirements of paragraph (a) above for a series of processes, including situations where multiple processes are merged, if the permittee demonstrates to the satisfaction of the Administrator that the multiple processes were merged after the baseline period into an existing process or processes. **(40 CFR 63.2495(a)(3))**
 - d. The permittee must comply with the emission limitations and work practice standards contained in Tables 1 through 7 of Subpart FFFF for all HAP that are generated in the MCPU and that are not included in consumption, as defined in 40 CFR 63.2550. If any vent stream routed to the combustion control is a halogenated vent stream, as defined in 40 CFR 63.2550, then hydrogen halides that are generated as a result of combustion control must be controlled according to the requirements of 40 CFR 63.994 and the requirements referenced therein. The permittee may not merge nondedicated formulation or nondedicated solvent recovery processes with any other processes. **(40 CFR 63.2495(b))**
 - e. To demonstrate initial compliance with the pollution prevention alternative requirements (40 CFR 63.2495(a)), the permittee must prepare a demonstration summary in accordance with 40 CFR 63.2495(c)(1) and calculate baseline and target annual HAP and VOC factors in accordance with 40 CFR 63.2495(c)(2) and (3). **(40 CFR 63.2495(c))**
11. For an existing source, the permittee may elect to comply with the percent reduction emission limitations in Tables 1, 2, 4, 5, and 7 to Subpart FFFF by complying with the emissions averaging provisions specified in 40 CFR 63.150, except as specified below. **(40 CFR 63.2500(a))**
- a. The batch process vents in an MCPU collectively are considered one individual emission point for the purposes of emissions averaging, except that only individual batch process vents must be excluded to meet the requirements of 40 CFR 63.150(d)(5). **(40 CFR 63.2500(b))**
 - b. References in 40 CFR 63.150 to 40 CFR 63.112 through 40 CFR 63.130 mean the corresponding requirements in 40 CFR 63.2450 through 40 CFR 63.2490, including applicable monitoring, recordkeeping, and reporting. **(40 CFR 63.2500(c))**
 - c. References to “periodic reports” in 40 CFR 63.150 mean “compliance report” for the purposes of Subpart FFFF. **(40 CFR 63.2500(d))**
 - d. For batch process vents, estimate uncontrolled emissions for a standard batch using the procedures in 40 CFR 63.1257(d)(2)(i) and (ii) instead of the procedures in 40 CFR 63.150(g)(2). Multiply the calculated emissions per batch by the number of batches per month when calculating the monthly emissions for use in calculating debits and credits. **(40 CFR 63.2500(e))**
 - e. References to “storage vessels” in 40 CFR 63.150 mean “storage tank” as defined in 40 CFR 63.2550 for the purposes of Subpart FFFF. **(40 CFR 63.2500(f))**
12. As an alternative to complying with the emission limits and work practice standards for process vents and storage tanks in Tables 1 through 4 to Subpart FFFF and the requirements in 40 CFR 63.2455 through 40 CFR 63.2470, the permittee may comply with the emission limits below and demonstrate compliance in accordance with the requirements in 40 CFR 63.2505(b). **(40 CFR 63.2505)**
- a. The permittee must route vent streams through a closed-vent system to a control device that reduces HAP emissions as specified in either paragraph below. **(40 CFR 63.2505(a)(1))**
 - i. If the permittee uses a combustion control device, it must reduce HAP emissions to an outlet TOC concentration of 20 parts per million by volume (ppmv) or less and to an outlet concentration of hydrogen halide and halogen HAP of 20 ppmv or less, or as an alternative, if the permittee controls halogenated vent streams emitted from a combustion device followed by a scrubber, reduce the hydrogen halide and

- halogen HAP generated in the combustion device by greater than or equal to 95% by weight in the scrubber. **(40 CFR 63.2505(a)(1)(i))**
- ii. If the permittee uses a noncombustion control device(s), it must reduce HAP emissions to an outlet total organic HAP concentration of 50 ppmv or less, and an outlet concentration of hydrogen halide and halogen HAP of 50 ppmv or less. **(40 CFR 63.2505(a)(1)(ii))**
 - b. Any Group 1 process vents within a process that are not controlled according to this alternative standard must be controlled according to the emission limits in Tables 1 through 3 to Subpart FFFF. **(40 CFR 63.2505(a)(2))**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall comply with the work practice standards in Tables 1 through 7 of Subpart FFFF at all times, except during periods of startup, shutdown, and malfunction, and comply with the requirements specified in 40 CFR 63.2455 through 40 CFR 63.2490 (or the alternative means of compliance in 40 CFR 63.2495, 40 CFR 63.2500, or 40 CFR 63.2505), except as specified in 40 CFR 63.2450 (b) through (s). **(40 CFR 63.2450(a))**
2. When organic HAP emissions from different emission types (e.g., continuous process vents, batch process vents, storage tanks, transfer operations, and waste management units) are combined, the permittee shall comply with the requirements of either 40 CFR 63.2450(c)(1) or 40 CFR 63.2450(c)(2). **(40 CFR 63.2450(c))**
3. The permittee shall not use a flare to control halogenated vent streams or hydrogen halide and halogen HAP emissions. **(40 CFR 63.2450(o))**
4. Opening a safety device, as defined in 40 CFR 63.2550, is allowed at any time conditions require it to avoid unsafe conditions. **(40 CFR 63.2450(p))**
5. For each surge control vessel or bottoms receiver that meets the capacity and vapor pressure thresholds for a Group 1 storage tank, the permittee shall comply with the work practice standards specified in Table 4 of Subpart FFFF. **(40 CFR 63.2450(r))**
6. For the purposes of determining group status for continuous process vents, batch process vents, and storage tanks in 40 CFR 63.2455, 40 CFR 63.2460, and 40 CFR 63.2470, the permittee shall consider hydrazine to be an organic HAP. **(40 CFR 63.2450(s))**
7. Periods of planned routine maintenance of each control device used to control emissions from storage tanks, during which the control device does not meet the emission limit specified in Table 4 to Subpart FFFF, must not exceed 240 hours per year (hr/yr). The permittee may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr. The application must explain why the extension is needed, it must indicate that no material will be added to the storage tank between the time the 240-hr limit is exceeded and the control device is again operational, and it must be submitted at least 60 days before the 240-hr limit will be exceeded. **(40 CFR 63.2470(d))**
8. The permittee must comply with each work practice standard in Table 5 to Subpart FFFF that applies to transfer racks, and the permittee must meet each applicable requirement in 40 CFR 63.2475(b) and (c). When the term "high throughput transfer rack" is used in 40 CFR Part 63, Subpart SS, the term "Group 1 transfer rack," as defined in 40 CFR 63.2550, applies for the purposes of Subpart FFFF. **(40 CFR 63.2475)**

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. The requirements specified in 40 CFR 63.2450 (g)(1) through (5) apply instead of or in addition to the requirements specified in 40 CFR Part 63, Subpart SS. **(40 CFR 63.2450(g))**
2. To demonstrate compliance with the emission limit in Table 3 to Subpart FFFF for HAP metals at a new source, the permittee must conduct an initial performance test of each control device that is used to comply with the emission limit for HAP metals specified in Table 3 to Subpart FFFF. The permittee must conduct the performance test according to the procedures in 40 CFR 63.997. The permittee must use Method 29 of Appendix A of 40 CFR Part 60 to determine the HAP metals at the inlet and outlet of each control device, or use Method 5 of Appendix A of 40 CFR Part 60 to determine the total particulate matter (PM) at the inlet and outlet of each control device. The permittee has demonstrated initial compliance if the overall reduction of either HAP metals or total PM from the process is greater than or equal to 97% by weight. **(40 CFR 63.2465(d)(2))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall comply with the recordkeeping requirements specified in 40 CFR 63.2515, 40 CFR 63.2520, and 40 CFR 63.2525. **(40 CFR 63.2450(a))**
2. Each continuous emissions monitoring system (CEMS) must be installed, operated, and maintained according to the requirements in 40 CFR 63.8 and 40 CFR 63.2450(j)(1) through (5). **(40 CFR 63.2450(j))**
3. The provisions in 40 CFR 63.2450(k)(1) through (6) of this section apply in addition to the requirements for continuous parameter monitoring system (CPMS) in 40 CFR Part 63, Subpart SS. **(40 CFR 63.2450(k))**
4. 40 CFR 63.152(f)(7)(ii) through (iv) and 40 CFR 63.998(b)(2)(iii) and (b)(6)(i)(A), which apply to the exclusion of monitoring data collected during periods of startup, shutdown, and malfunction from daily averages, do not apply for the purposes of 40 CFR Part 63, Subpart FFFF. **(40 CFR 63.2450(l))**
5. To demonstrate compliance with the emission limit in Table 3 to Subpart FFFF for HAP metals at a new source, the permittee must comply with the monitoring requirements specified in 40 CFR 63.1366(b)(1)(xi) for each fabric filter used to control HAP metals. **(40 CFR 63.2465(d)(3))**
6. The permittee must keep records of HAP and VOC consumption, production, and the rolling annual HAP and VOC factors for each MGPU for which the permittee is complying with 40 CFR 63.2495(a), the pollution prevention standard. **(40 CFR 63.2495(e))**
7. The permittee shall keep each applicable record required by 40 CFR Part 63, Subpart A and in referenced subparts of 40 CFR 63 F, G, SS, UU, WW, and GGG and in referenced Subpart F of 40 CFR Part 63 **(40 CFR 63.2525(a))**
8. The permittee shall keep records of each operating scenario as specified below:
 - a. A description of the process and the type of process equipment used; **(40 CFR 63.2525(b)(1))**
 - b. An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in 40 CFR 63.2505; wastewater point of determination (POD); storage tanks; and transfer racks; **(40 CFR 63.2525(b)(2))**
 - c. The applicable control requirements of Subpart FFFF, including the level of required control, and for vents, the level of control for each vent; **(40 CFR 63.2525(b)(3))**
 - d. The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device; **(40 CFR 63.2525(b)(4))**
 - e. The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s); **(40 CFR 63.2525(b)(5))**
 - f. The applicable monitoring requirements of Subpart FFFF and any parametric level that assures compliance for all emissions routed to the control device or treatment process; **(40 CFR 63.2525(b)(6))**

- g. Calculations and engineering analyses required to demonstrate compliance; **(40 CFR 63.2525(b)(7))**
 - h. For reporting purposes, a change to any of these elements not previously reported, except for 40 CFR 63.2525(b)(5), constitutes a new operating scenario. **(40 CFR 63.2525(b)(8))**
9. The permittee shall keep a schedule or log of operating scenarios for processes with batch vents from batch operations updated each time a different operating scenario is put into effect. **(40 CFR 63.2525(c))**
10. The permittee shall keep records of the information specified below for Group 1 batch process vents in compliance with a percent reduction emission limit in Table 2 to Subpart FFFF if some of the vents are controlled to less the percent reduction requirement. **(40 CFR 63.2525(d))**
- a. Records of whether each batch operated was considered a standard batch; **(40 CFR 63.2525(d)(1))**
 - b. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch. **(40 CFR 63.2525(d)(2))**
11. The permittee shall keep records of the information specified below, as applicable, for each process with Group 2 batch process vents or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr. No records are required if the permittee documented in the notification of compliance status report that the MCPU meets any of the situations described in 40 CFR 63.2525(e)(1)(i), (ii), or (iii). **(40 CFR 63.2525(e))**
- a. If the permittee documented in the notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive organic HAP is the only HAP and usage is less than 10,000 lb/yr, as specified in 40 CFR 63.2460(b)(7), the permittee must keep records of the amount of HAP material used, and calculate the daily rolling annual sum of the amount used no less frequently than monthly. If a record indicates usage exceeds 10,000 lb/yr, the permittee must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and begin recordkeeping as specified in 40 CFR 63.2525(e)(4). After 1 year, the permittee may revert to recording only usage if the usage during the year is less than 10,000 lb. **(40 CFR 63.2525(e)(2))**
 - b. If the permittee documented in the notification of compliance status report that total uncontrolled organic HAP emissions from the batch process vents in an MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, then the permittee must keep records of the number of batches operated and calculate a daily rolling annual sum of batches operated no less frequently than monthly. If the number of batches operated results in organic HAP emissions that exceed 1,000 lb/yr, the permittee must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and begin recordkeeping as specified in 40 CFR 63.2525(e)(4). After one year, the permittee may revert to recording only the number of batches if the number of batches operated during the year results in less than 1,000 lb of organic HAP emissions. **(40 CFR 63.2525(e)(3))**
 - c. If none of the conditions specified in 40 CFR 63.2525(e)(1) through (3) are met, the permittee must keep records of the information specified below. **(40 CFR 63.2525(e)(4))**
 - i. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions. **(40 CFR 63.2525(e)(4)(i))**
 - ii. A record of whether each batch operated was considered a standard batch. **(40 CFR 63.2525(e)(4)(ii))**
 - iii. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch. **(40 CFR 63.2525(e)(4)(iii))**
 - iv. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly. **(40 CFR 63.2525(e)(4)(iv))**
12. The permittee shall keep a record of each time a safety device is opened to avoid unsafe conditions in accordance with 40 CFR 63.2450(s). **(40 CFR 63.2525(f))**
13. The permittee shall keep record of the results of each CPMS calibration check and the maintenance performed, as specified in 40 CFR 63.2450(k)(1). **(40 CFR 63.2525(g))**
14. For each CEMS, The permittee must keep records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period. **(40 CFR 63.2525(h))**

15. For each process unit groups (PUG), the permittee must keep records specified below. **(40 CFR 63.2525(i))**
 - a. Descriptions of the MCPU and other process units in the initial PUG required by 40 CFR 63.2535(l)(1)(v). **(40 CFR 63.2525(i)(1))**
 - b. Rationale for including each MCPU and other process unit in the initial PUG (identify the overlapping equipment between process units) required by 40 CFR 63.2535(l)(1)(v). **(40 CFR 63.2525(i)(2))**
 - c. Calculations used to determine the primary product for the initial PUG required by 40 CFR 63.2535(l)(2)(iv). **(40 CFR 63.2525(i)(3))**
 - d. Descriptions of process units added to the PUG after the creation date and rationale for including the additional process units in the PUG as required by 40 CFR 63.2535(l)(1)(v). **(40 CFR 63.2525(i)(4))**
 - e. The calculation of each primary product redetermination required by 40 CFR 63.2535(l)(2)(iv). **(40 CFR 63.2525(i)(5))**
16. In the SSMP required by 40 CFR 63.6(e)(3), the permittee is not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment. **(40 CFR 63.2525(j))**
17. For each bag leak detector used to monitor PM HAP emissions from a fabric filter, maintain records of any bag leak detection alarm, including the date and time, with a brief explanation of the cause of the alarm and the corrective action taken. **(40 CFR 63.2525(k))**

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 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 comply with the notification and reporting requirements specified in 40 CFR 63.2515, 40 CFR 63.2520, and 40 CFR 63.2525. **(40 CFR 63.2450(a))**
5. When 40 CFR 63.2455 through 63.2490 reference other subparts in 40 CFR 63 that use the term “periodic report,” it means “compliance report” for the purposes of 40 CFR Part 63, Subpart FFFF. The compliance report must include the information specified in 40 CFR 63.2520(e), as well as the information specified in referenced subparts. **(40 CFR 63.2450(m)(1))**
6. When there are conflicts between 40 CFR Part 63, Subpart FFFF and referenced subparts for the due dates of reports required by 40 CFR Part 63, Subpart FFFF, reports must be submitted according to the due dates presented in 40 CFR Part 63, Subpart FFFF. **(40 CFR 63.2450(m)(2))**
7. Excused excursions, as defined in 40 CFR Part 63, Subparts G and SS, are not allowed. **(40 CFR 63.2450(m)(3))**
8. If an emission stream contains energetics or organic peroxides that, for safety reasons, cannot meet an applicable emission limit specified in Tables 1 through 7 to Subpart FFFF, then the permittee must submit documentation in the precompliance report explaining why an undue safety hazard would be created if the air emission controls were installed, and the permittee must describe the procedures that will be implemented to minimize HAP emissions from these vent streams. **(40 CFR 63.2450(q))**
9. If complying with the pollution prevention standard, the permittee must include the pollution prevention demonstration plan in the precompliance report required by 40 CFR 63.2520(c). The permittee must identify all days when the annual factors were above the target factors in the compliance reports. **(40 CFR 63.2495(f))**
10. The permittee must submit each applicable report in Table 11 to Subpart FFFF. **(40 CFR 63.2520(a))**

11. Unless the Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report by the date in Table 11 to Subpart FFFF and according to 40 CFR 63.2520(b)(1) through (5). **(40 CFR 63.2520(b))**
12. The permittee must submit a precompliance report to request approval for any of the items in 40 CFR 63.2520(c)(1) through (7). The report will be approved or disapproved within 90 days after receipt. If it is disapproved, the permittee must still be in compliance with the emission limitations and work practice standards in Subpart FFFF by the compliance date. To change any of the information submitted in the report, the permittee must submit a notification 60 days before the planned change is to be implemented. **(40 CFR 63.2520(c))**
13. The permittee must submit a notification of compliance status report according to the schedule in 40 CFR 63.2520(d)(1), and the notification of compliance status report must contain the information specified in 40 CFR 63.2520(d)(2). **(40 CFR 63.2520(d))**
14. The compliance report must contain the information specified in 40 CFR 63.2520(e)(1) through (10). **(40 CFR 63.2520(e))**
15. The permittee must submit all of the notifications in 40 CFR 63.6(h)(4) and (5), 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply by the dates specified. **(40 CFR 63.2515(a))**
16. As specified in 40 CFR 63.9(b)(2), if the affected source starts-up before November 10, 2003, the permittee must submit an initial notification not later than 120 calendar days after November 10, 2003. **(40 CFR 63.2515(b)(1))**
17. As specified in 40 CFR 63.9(b)(3), if the new affected source starts-up on or after November 10, 2003, the permittee must submit an initial notification not later than 120 calendar days after becoming subject to Subpart FFFF. **(40 CFR 63.2515(b)(2))**
18. If required to conduct a performance test, the permittee must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). For any performance test required as part of the initial compliance procedures for batch process vents in Table 2 to Subpart FFFF, the permittee must also submit the test plan required by 40 CFR 63.7(c) and the emission profile with the notification of the performance test. **(40 CFR 63.2515(c))**

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 (NESHAP), as specified in 40 CFR Part 63, Subpart A; Subpart FFFF for Miscellaneous Organic Chemical Manufacturing. **(40 CFR Part 63, Subparts A and FFFF)**
2. The permittee shall determine if an emission stream is a halogenated vent stream, as defined in 40 CFR 63.2550, by calculating the mass emission rate of halogen atoms in accordance with 40 CFR 63.115(d)(2)(v). Alternatively, the permittee may elect to designate the emission stream as halogenated. **(40 CFR 63.2450(b))**
3. Except when complying with 40 CFR 63.2485, if the permittee reduces organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare) or recovery devices, the permittee shall meet the requirements of 40 CFR 63.982(c) and the requirements referenced therein. **(40 CFR 63.2450(e)(1))**

4. Except when complying with 40 CFR 63.2485, if the permittee reduces organic HAP emissions by venting emissions through a closed-vent system to a flare, the permittee shall meet the requirements of 40 CFR 63.982(b) and the requirements referenced therein. **(40 CFR 63.2450(e)(2))**
5. If the permittee uses a halogen reduction device to reduce hydrogen halide and halogen HAP emissions from halogenated vent streams, the permittee shall meet the requirements of 40 CFR 63.994 and the requirements referenced therein. If the permittee uses a halogen reduction device before a combustion device, the permittee shall determine the halogen atom emission rate prior to the combustion device according to the procedures in 40 CFR 63.115(d)(2)(v). **(40 CFR 63.2450(e)(3))**
6. As part of a flare compliance assessment required in 40 CFR 63.987(b), the permittee has the option of demonstrating compliance with the requirements of 40 CFR 63.11(b) by complying with the requirements in either 40 CFR 63.11(b)(6)(i) or 40 CFR 63.987(b)(3)(ii). If the permittee elects to meet the requirements in 40 CFR 63.11(b)(6)(i), the permittee shall keep flare compliance assessment records as specified in 40 CFR 63.2450(f)(2)(i) and (ii). **(40 CFR 63.2450(f))**
7. To determine the percent reduction of a small control device that is used to comply with an emission limit specified in Table 1, 2, 3, or 5, the permittee may elect to conduct a design evaluation as specified in 40 CFR 63.1257(a)(1) instead of a performance test as specified in 40 CFR Part 63, Subpart SS. The permittee shall establish the value(s) and basis for the operating limits as part of the design evaluation. For continuous process vents, the design evaluation must be conducted at maximum representative operating conditions for the process, unless the Administrator specifies or approves alternate operating conditions. For transfer racks, the design evaluation must demonstrate that the control device achieves the required control efficiency during the reasonably expected maximum transfer loading rate. **(40 CFR 63.2450(h))**
8. When 40 CFR 63.997(e)(2)(iii)(C) requires correcting the measured concentration at the outlet of a combustion device to 3% oxygen if supplemental combustion air is added, the requirements in either (a) or (b) below apply for the purposes of 40 CFR Part 63, Subpart FFFF:
 - a. The permittee shall correct the concentration in the gas stream at the outlet of the combustion device to 3% oxygen if supplemental gases are added, as defined in 40 CFR 63.2550, to the vent stream, or; **(40 CFR 63.2450(i)(1))**
 - b. The permittee shall correct the measured concentration for supplemental gases using Equation 1 of 40 CFR 63.2460; the permittee may use process knowledge and representative operating data to determine the fraction of the total flow due to supplemental gas. **(40 CFR 63.2450(i)(2))**
9. For each continuous process vent, the permittee shall either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in 40 CFR 63.115(d), except as specified in 40 CFR 63.2455(b)(1) through (3). **(40 CFR 63.2455(b))**
10. If the permittee uses a recovery device to maintain the TRE above a specified threshold, the permittee shall meet the requirements of 40 CFR 63.982(e) and the requirements referenced therein, except as specified in 40 CFR 63.2450 and 40 CFR 63.2455(c)(1). **(40 CFR 63.2455(c))**
11. If a process has batch process vents, as defined in 40 CR 63.2550, the permittee must determine the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process using the procedures specified in 40 CFR 63.1257(d)(2)(i) and (ii), except as specified in 40 CFR 63.2460(b)(1) through (7). **(40 CFR 63.2460(b))**
12. Exceptions to the requirements for batch process vents in 40 CFR Part 63, Subparts SS and WW are specified in 40 CFR 66.2460(c)(1) through (9). **(40 CFR 63.2460(c))**
13. If any process vents within a process emit hydrogen halide and halogen HAP, the permittee must determine and sum the uncontrolled hydrogen halide and halogen HAP emissions from each of the process vents within the process using the procedures specified in 40 CFR 63.1257(d)(2)(i) and/or (ii), as appropriate. When 40 CFR 63.1257(d)(2)(ii)(E) requires documentation to be submitted in the precompliance report, it means the notification of compliance status report for the purposes of 40 CFR 63.2465(b). **(40 CFR 63.2465(b))**

14. If collective uncontrolled hydrogen halide and halogen HAP emissions from the process vents within a process are greater than or equal to 1,000 pounds per year (lb/yr), the permittee must comply with 40 CFR 63.994 and the requirements referenced therein, except as specified in 40 CFR 63.2465(c)(1) through (3). **(40 CFR 63.2465(c))**
15. To demonstrate compliance with the emission limit in Table 3 to Subpart FFFF for HAP metals at a new source, the permittee must determine the mass emission rate of HAP metals based on process knowledge, engineering assessment, or test data. **(40 CFR 63.2465(d)(1))**
16. If the permittee conducts a performance test or design evaluation for a control device used to control emissions only from storage tanks, the permittee must establish operating limits, conduct monitoring, and keep records using the same procedures as required in 40 CFR Part 63, Subpart SS for control devices used to reduce emissions from process vents instead of the procedures specified in 40 CFR 63.985(c), 40 CFR 63.998(d)(2)(i), and 40 CFR 63.999(b)(2). **(40 CFR 63.2470(c)(1))**
17. When the term “storage vessel” is used in 40 CFR Part 63, Subparts SS and WW, the term “storage tank,” as defined in 40 CFR 63.2550 applies for the purposes of Subpart FFFF. **(40 CFR 63.2470(c)(2))**
18. The permittee must meet each requirement in Table 6 to Subpart FFFF that applies to equipment leaks, except as specified in 40 CFR 63.2480(b) through (d). **(40 CFR 63.2480)**
19. The permittee must meet each requirement in Table 7 to Subpart FFFF that applies to wastewater streams and liquid streams in open systems within an MCPU, except as specified in 40 CFR 63.2485(b) through (o). **(40 CFR 63.2485)**
20. The permittee must meet each requirement in Table 10 to Subpart FFFF that applies to heat exchange systems, except that the phrase “a chemical manufacturing process unit meeting the conditions of 40 CFR 63.100 (b)(1) through (b)(3) of this section” in 40 CFR 63.104(a) means “an MCPU meeting the conditions of 40 CFR 63.2435” for the purposes of Subpart FFFF and that the reference to 40 CFR 63.100(c) in 40 CFR 63.104(a) does not apply for the purposes Subpart FFFF. **(40 CFR 63.2490)**
21. For each MCPU for which the permittee is complying with 40 CFR 63.2495(a), the pollution prevention standard, the permittee must calculate annual rolling average values of the HAP and VOC factors (annual factors) in accordance with the procedures specified below. To show continuous compliance, the annual factors must be equal to or less than the target annual factors calculated according to 40 CFR 63.2495(c)(3). **(40 CFR 63.2495(d))**
 - a. To calculate the annual factors, the permittee must divide the consumption of both total HAP and total VOC by the production rate, per process, for 12-month periods at the frequency specified in either paragraph below, as applicable. **(40 CFR 63.2495(d)(1))**
 - i. For continuous processes, the permittee must calculate the annual factors every 30 days for the 12-month period preceding the 30th day (annual rolling average calculated every 30 days). A process with both batch and continuous operations is considered a continuous process for the purposes of this section. **(40 CFR 63.2495(d)(2))**
 - ii. For batch processes, the permittee must calculate the annual factors every 10 batches for the 12-month period preceding the 10th batch (annual rolling average calculated every 10 batches), except as specified if the permittee produces more than 10 batches during a month, the permittee must calculate the annual factors at least once during that month and, if the permittee produces less than 10 batches in a 12-month period, the permittee must calculate the annual factors for the number of batches in the 12-month period since the previous calculations. **(40 CFR 63.2495(d)(3))**
22. To demonstrate compliance with the alternative standard in 40 CFR 63.2505, the permittee must meet the requirements of 40 CFR 63.1258(b)(5) beginning no later than the initial compliance date specified in 40 CFR 63.2445, except as specified below. **(40 CFR 63.2505(b))**
 - a. The permittee must comply with the requirements in 40 CFR 63.983 and the requirements referenced therein for closed-vent systems. **(40 CFR 63.2505(b)(1))**
 - b. When 40 CFR 63.1258(b)(5)(i) refers to 40 CFR 63.1253(d) and 40 CFR 63.1254(c), the requirements in paragraph 40 CFR 63.2505(a) apply for the purposes of Subpart FFFF. **(40 CFR 63.2505(b)(2))**

- c. When 40 CFR 63.1258(b)(5)(i)(B) refers to “HCl,” it means “total hydrogen halide and halogen HAP” for the purposes of Subpart FFFF. **(40 CFR 63.2505(b)(3))**
 - d. When 40 CFR 63.1258(b)(5)(ii) refers to 40 CFR 63.1257(a)(3), it means 40 CFR 63.2450(j)(5) for the purposes of Subpart FFFF. **(40 CFR 63.2505(b)(4))**
 - e. The permittee must submit the results of any determination of the target analytes of predominant HAP in the notification of compliance status report. **(40 CFR 63.2505(b)(5))**
 - f. If the permittee elects to comply with the requirement to reduce hydrogen halide and halogen HAP by greater than or equal to 95% by weight in 40 CFR 63.2505(a)(1)(i)(C), the permittee must meet the requirements below. **(40 CFR 63.2505(b)(6))**
 - i. Demonstrate initial compliance with the 95% reduction by conducting a performance test and setting a site-specific operating limit(s) for the scrubber in accordance with 40 CFR 63.994 and the requirements referenced therein. The permittee must submit the results of the initial compliance demonstration in the notification of compliance status report. **(40 CFR 63.2505(b)(6)(i))**
 - ii. Install, operate, and maintain CPMS for the scrubber as specified in 40 CFR 63.994(c) and 40 CFR 63.2450(k), instead of as specified in 40 CFR 63.1258(b)(5)(i)(C). **(40 CFR 63.2505(b)(6)(ii))**
 - g. If flow to the scrubber could be intermittent, the permittee you must install, calibrate, and operate a flow indicator as specified in 40 CFR 63.2460(c)(7). **(40 CFR 63.2505(b)(7))**
 - h. Use the operating day as the averaging period for CEMS data and scrubber parameter monitoring data. **(40 CFR 63.2505(b)(8))**
 - i. The requirements in 40 CFR 63.2505(a) do not apply to emissions from storage tanks during periods of planned routine maintenance of the control device that do not exceed 240 hr/yr. The permittee may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr in accordance with the procedures specified in 40 CFR 63.2470(d). The permittee must comply with the recordkeeping and reporting specified in 40 CFR 63.998(d)(2)(ii) and 40 CFR 63.999(c)(4) for periods of planned routine maintenance. **(40 CFR 63.2505(b)(9))**
23. For any equipment, emission stream, or wastewater stream subject to the provisions of both 40 CFR Part 63, Subpart FFFF and another rule, the permittee may elect to comply only with the provisions as specified in 40 CFR 63.2535(a) through (l). The permittee also must identify the subject equipment, emission stream, or wastewater stream, and the provisions that will be complied with, in the notification of compliance status report required by 40 CFR 63.2520(d). **(40 CFR 63.2535)**
24. For any Group 2 emission point that becomes a Group 1 emission point after the compliance date for the facility, the permittee shall comply with the Group 1 requirements beginning on the date the switch occurs. An initial compliance demonstration, as specified in 40 CFR Part 63, Subpart FFFF, shall be conducted within 150 days after the switch occurs. **(40 CFR 63.2445(d))**
25. If, after the compliance date for the facility, hydrogen halide and halogen HAP emissions from process vents in a process increase to more than 1,000 lb/yr, or HAP metals emissions from a process at a new affected source increase to more than 150 lb/yr, the permittee shall comply with the applicable emission limits specified in Table 3 of 40 CFR Part 63, Subpart FFFF and the associated compliance requirements beginning on the date the emissions exceed the applicable threshold. An initial compliance demonstration, as specified in 40 CFR Part 63, Subpart FFFF, shall be conducted within 150 days after the switch occurs. **(40 CFR 63.2445(e))**
26. If the permittee has a small control device for process vent or transfer rack emissions that becomes a large control device, as defined in 40 CFR 63.2550(i), the permittee shall comply with monitoring and associated recordkeeping and reporting requirements for large control devices beginning on the date the switch occurs. An initial compliance demonstration, as specified in 40 CFR Part 63, Subpart FFFF, shall be conducted within 150 days after the switch occurs. **(40 CFR 63.2445(f))**

**FGBENZENEWASTE-S2
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Benzene waste operations standards that apply to equipment and processes at certain chemical manufacturing plants.

Emission Units: EUB5

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall determine the total annual benzene quantity from facility waste when required by, and in compliance with 40 CFR Part 61, Subpart FF, Section 61.355(a) (Test methods, procedures and compliance provisions). **(40 CFR Part 61, Subpart FF)**

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 keep the records required by 40 CFR Part 61, Subpart FF, Sections 61.356(a), (b) and (b)(1) (Recordkeeping requirements). **(40 CFR Part 61, Subpart FF)**

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 total annual benzene quantity from facility waste is less than 10 Mg/year but is equal to or greater than 1 Mg/year, a report updating the information regarding aqueous benzene wastewater streams shall be submitted in compliance with 40 CFR Part 61, Subpart FF, Section 61.357(c) (Reporting requirements). This report is due annually by April 7 or anytime a process change occurs that could cause the total annual benzene quantity from the facility to increase to 10 Mg/yr or more. **(40 CFR Part 61, Subpart FF)**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the applicable requirements of 40 CFR Part 61, Subparts A (General Provisions) and FF (NESHAP for Benzene Wastewater Operations). The applicable sections of Subpart FF may include: **(40 CFR Part 61, Subparts A and FF)**
 - a. 61.340 Applicability
 - b. 61.341 Definitions
 - c. 61.342 Standards: General – paragraphs (a) & (g) only
 - d. 61.355 Test methods, procedures and compliance provisions – paragraph (a) only
 - e. 61.356 Recordkeeping requirements – paragraphs (a), (b) & (b)(1) only
 - f. 61.357 Reporting requirements – paragraphs (a) & (c) only

FGCOLDCLEANERS-S2 FLEXIBLE GROUP CONDITIONS
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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: EUCOLDCLEANER-S2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

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

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

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

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

VII. REPORTING

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

See Appendix 8-2

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

E. NON-APPLICABLE REQUIREMENTS

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

APPENDICES

Appendix 1-2. 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
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		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 2-2. Schedule of Compliance

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

Appendix 3-2. Monitoring Requirements

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 4-2. Recordkeeping

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

Appendix 5-2. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 6-2. Permits to Install/ROP Revision Applications

PTIs rolled in since December 2018 ROP MI-ROP-A4033-2017b.

DPP is located at the stationary source that was issued MI-ROP-A4033-2017b on December 14, 2018. The following table lists any PTIs issued or ROP revision applications received from DDP since issuance of MI ROP-A4033-2017b. Those ROP revision applications that are being issued concurrently with this ROP significant modification for DDP are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this significant modification.

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
167-19	202000017*	Former EU93 (SRN A4033) split into EU08 propylene oxide storage and distribution system and EU07 (DAS/Corteva SRN P1028)	EU08, FGHONFUGITIVES, FGOLDMACT, FGCELLULOSICS, FG954THROX (DAS/Corteva SRN P1028)
159-19	202000069*	Former EU85 (SRN A4033) split into EU06 Anhydrous HCL storage and distribution and EU05 (DAS/Corteva SRN P1028)	EU06, FGHCLSCRUBBER
NA	2020000165 / April 16, 2021	The ROP is Sectioned into 2 Sections since a portion of DDP was owned and operated by N&B as of November 1, 2020. The Emission Unit EU06 is split into a low purity portion EU06-LOWPURITY included in Section 1, and a high purity portion	EU06-HIGHPURITY, FGHONFUGITIVES, FGCELLULOSICS, FGOLDMACT, FGMONMACT, FGBENZENEWASTE,

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
		EU06-HIGHPURTIY included in Section 2. The Emission Units and Flexible Groups Conditions remain unchanged, except for moving specific ones under their new owners. Section 1 removed Emssion Units EU08, EUB2, and EUB5 and moved them to Section 2. They are owned and operated by N&B.	FGCOLDCLEANERS-S2

Appendix 7-2. Emission Calculations

There are no specific emission calculations to be used for this ROP. Therefore, this appendix is not applicable.

Appendix 8-2. Reporting

A. Annual 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.