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

EFFECTIVE DATE: JULY 22, 2015

REVISION DATE: JANUARY 30, 2018, NOVEMBER 14, 2023

ISSUED TO

BASF CORPORATION - PLASTICS PLANTS

State Registration Number (SRN): M4777

LOCATED AT

1609 Biddle Avenue, Wyandotte, Michigan 48192-3729

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-M4777-2015b

Expiration Date: July 22, 2020

Administratively Complete ROP Renewal Application Due Between January 22, 2019 and January 22, 2020

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 Michigan Air Pollution Control Rule 210(1), 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-M4777-2015b

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Act 451. Pursuant to Michigan Air Pollution Control Rule 214a, 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

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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 are 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.

This permit does not relieve the permittee from any responsibilities or obligations imposed on the permittee, at this source, under Consent Order Number 47-2014, entered on October 2, 2014 between EGLE and the permittee.

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STATE OF MICHIGAN RENEWABLE OPERATING PERMIT

SECTION 1

BASF CORPORATION – PLASTICS PLANTS ENGINEERING PLASTICS COMPOUNDING (EPC) OPERATIONS

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))

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- 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 percent opacity, except for one 6-minute average per hour of not more than 27 percent 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. (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))

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- 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 states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R 336.1213(3)(c))
- 19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. (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.

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- 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))

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- 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))

Section 1: BASF Corporation - Plastics Plants

Expiration Date: July 22, 2020 **EPC Operations** PTI No: MI-PTI-M4777-2015b

d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. (R 336.1217(2)(a)(iv))

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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(8))

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 Part 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):
 - a. June 21, 1999.
 - b. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - c. 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)

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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).

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B. SOURCE-WIDE CONDITIONS

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

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

SOURCE-WIDE CONDITIONS

For the purpose of the contiguous site being a synthetic minor for HAPs, certain Source-Wide Terms and Conditions encompass all process equipment at the site, including equipment covered by other permits, grand-fathered equipment and exempt equipment. For these Conditions the term Source-Wide comprises three stationary sources: the Chemical Production Plants (SRN B4359); Plastics Plants (SRN M4777); and the Labs and Application Centers (SRN M4808).

POLLUTION CONTROL EQUIPMENT

NA

I. <u>EMISSION LIMIT(S)</u>

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|---------------------------|------------------|--|-------------|-------------------------------|--|
| 1. Each individual HAP | tpy ² | 12-month rolling time period as determined at the end of each calendar month | SOURCE-WIDE | SC VI.1 & SC VI.2 | R 336.1205(1) |
| 2. Total HAPs | | 12-month rolling time period as determined at the end of each calendar month | SOURCE-WIDE | SC VI.1 & SC VI.2 | R 336.1205(1) |

For the purpose of the limits at SC I.1 and I.2, SOURCE-WIDE comprises the total and individual HAP emissions from the BASF Corporation M4777, M4808, and B4359 contiguous sites.

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

See Appendix 5-1

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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 and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting, or notification special condition.² (R336.1205(1))

2. The permittee shall keep in a satisfactory manner, monthly and previous 12-month emissions calculation records for individual HAPs and total HAPs from SOURCE-WIDE. For the purpose of this condition SOURCE-WIDE comprises the total and individual HAPs emissions from the BASF Corporation M4777, M4808, and B4359 contiguous sites.² (R336.1205(1))

See Appendices 3-1, 4-1, and 7-1

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A, inclusive of deviations from SC I.1, I.2, VI.1, or VI.2 wherein SOURCE-WIDE comprises the Chemical Production Plants (SRN B4359), Plastics Plants (SRN M4777) and Labs and Application Centers (SRN M4808) stationary sources. (R 336.1213(3)(c)(ii))
- Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A, inclusive of deviations from SC I.1, I.2, VI.1, or VI.2 wherein SOURCE-WIDE comprises the Chemical Production Plants (SRN B4359), Plastics Plants (SRN M4777) and Labs and Application Centers (SRN M4808) stationary sources. 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, inclusive of certification for SC I.1, I.2, VI.1, and VI.2 wherein SOURCE-WIDE comprises the Chemical Production Plants (SRN B4359), Plastics Plants (SRN M4777) and Labs and Application Centers (SRN M4808) stationary sources. 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)

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 |
|-----------------|--|--|---------------------------------------|
| NA | NA | NA I | NA |

IX. OTHER REQUIREMENT(S)

- 1. Each responsible official shall certify annually the compliance status of the stationary source with all stationary source-wide conditions. This certification shall be included as part of the annual certification of compliance as required in the General Conditions in Part A and Rule 213(4)(c). (R 336.1213(4)(c))
- 2. The company shall submit to the AQD an administratively complete application, not more than eighteen (18) months, but not less than six (6) months, before the ROP expiration date, as specified in Part 55 Section 324.5506(5) and Rule 210(8).² (Paragraph 9(b)(1) of Consent Order AQD No 47-2014)

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3. The conditions contained in this ROP for which a Consent Order is the only identified underlying applicable requirement shall be considered null and void upon the effective date of termination of the Consent Order. The effective date of termination is defined for the purposes of this condition as the date upon which the Termination Order is signed by the Chief of the AQD. (R 336.1213(3))

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 CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

| Emission Unit ID | Emission Unit Description (Including Process Equipment & Control Device(s)) | Installation Date/ Modification Date | Flexible Group ID |
|------------------|--|---|-------------------|
| EUEPCCOLDCLEANER | Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979. | NA | FGEPCCOLDCLEANER |
| EUEPCFILLERHNDLG | Equipment used to blend various materials with plastic resin pellets prior to being compounded at the extruders. Baghouses, vent filters, and scrubbers are installed as pollution control devices. This emission unit is comprised of 11 stacks associated with ventilation and exhaust fans. | 10/1/2008 | FGEPCRULE290 |
| EUEPCOVEN | Pyrolysis furnace for cleaning plastic material from extruder parts. The furnace is equipped with an afterburner. | 10/1/2009 | FGEPCRULE290 |

D. FLEXIBLE GROUP 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 |
|-------------------|---|---------------------------------|
| FGEPCCOLDCLEANER | Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979. | EUEPCCOLDCLEANER |
| FGEPCRULE290 | Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290. | EUEPCFILLERHNDLG, EUEPCOVEN |

FGEPCCOLDCLEANERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

Emission Unit: EUEPCCOLDCLEANER

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. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

- 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(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(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))

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- 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:
 - 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.
 - The date the unit was installed, manufactured or that it commenced operation.
 - The air/vapor interface area for any unit claimed to be exempt under Rule 281(h).
 - The applicable Rule 201 exemption.
 - 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))

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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

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).

FGEPCRULE 290 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.

Emission Units: EUEPCFILLERHNDLG, EUEPCOVEN

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(a)(i))
- 2. Each emission unit that the total uncontrolled or controlled emissions of 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(a)(ii))
 - a. For noncarcinogenic 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 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 1,000 or 500 pounds per month, respectively. (R 336.1290(a)(ii)(A))
 - b. For noncarcinogenic 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 microgram 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(a)(ii)(B))
 - c. For carcinogenic 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(a)(ii)(C))
 - d. The emission unit shall not emit any 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(a)(ii)(D))
- 3. Each emission unit that emits only noncarcinogenic particulate air contaminants and other air contaminants that are exempted under Rule 290(a)(i) and/or Rule 290(a)(ii), if all of the following provisions are met: (R 336.1290(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 an exhaust gas flow rate more than 30,000 actual cubic feet per minute. (R 336.1290(a)(iii)(A))

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

IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

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(a)(ii) and (iii). (R 336.1213(3))
 - e. 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. (R 336.1213(3), R 336.1290(c))
- 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(b), R 336.1213(3))
 - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(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))

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3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(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 4-1

VII. REPORTING

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

See Appendix 8-1

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that the requirements identified in the table below are not applicable to 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 |
|------------------------------------|---|--|
| FGEPCRULE290 | 40 CFR Part 63, Subpart F, National Emissions Standards for Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry | The materials produced by the EPC Plant are not synthetic organic chemicals as listed in Table 1 of 40 CFR Part 63, Subpart F. |
| FGEPCRULE290 | 40 CFR Part 63, Subpart G, National Emissions Standards for Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater | The materials produced by the EPC Plant are not synthetic organic chemicals as listed in Table 1 of 40 CFR Part 63, Subpart F. |
| FGEPCRULE290 | 40 CFR Part 63, Subpart U, National Emissions Standards for Hazardous Air Pollutants: Group I Polymers and Resins | The materials produced by the EPC Plant are not elastomers. |
| FGEPCRULE290 | 40 CFR Part 63, Subpart W, National Emissions Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production | The materials produced by the EPC Plant do not include basic liquid epoxy resins or wet strength resins as defined by 40 CFR 63.522. |
| FGEPCRULE290 | 40 CFR Part 63, Subpart III, National Emissions Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production | The EPC Plant does not produce flexible polyurethane foam. |
| FGEPCRULE290 | 40 CFR Part 63, Subpart JJJ, National Emissions Standards for Hazardous Air Pollutants: Group IV Polymers and Resins | The materials produced by the EPC Plant do not include thermoplastic resins as defined by 40 CFR 63.1312. |
| FGEPCRULE290 | 40 CFR Part 63, Subpart PPP, National Emissions Standards for Hazardous Air Pollutants for Polyether Polyols Production | The EPC Plant does not produce polyether polyols. |

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APPENDICES

Appendix 1-1. Abbreviations and Acronyms

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

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

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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

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 4-1. 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

There are no specific testing requirement plans or procedures for this ROP. Therefore, this appendix is not applicable.

Appendix 6-1. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-M4777-2009. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-M4777-2009 is being reissued as Source-Wide PTI No. MI-PTI-M4777-2015b.

| Permit to Install Number | ROP Revision Application Number | Description of Equipment or Change | Corresponding Emission Unit(s) or Flexible Group(s) |
|--------------------------------|------------------------------------|------------------------------------|---|
| NA | NA | NA | NA |

Appendix 7-1. Emission Calculations

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

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Appendix 8-1. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

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

B. Other Reporting

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

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STATE OF MICHIGAN RENEWABLE OPERATING PERMIT

SECTION 2

BASF CORPORATION – PLASTICS PLANTS CELLASTO OPERATIONS

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))

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- 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 percent opacity, except for one 6-minute average per hour of not more than 27 percent 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. (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))

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- 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 states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R 336.1213(3)(c))
- 19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. (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.

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- 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))

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- 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))

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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(8))

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 Part 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):
 - a. June 21, 1999,
 - b. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - c. 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)**

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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).

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B. SOURCE-WIDE CONDITIONS

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

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

SOURCE-WIDE CONDITIONS

For the purpose of the contiguous site being a synthetic minor for HAPs, certain Source-Wide Terms and Conditions encompass all process equipment at the site, including equipment covered by other permits, grand-fathered equipment and exempt equipment. For these Conditions the term Source-Wide comprises three stationary sources: the Chemical Production Plants (SRN B4359); Plastics Plants (SRN M4777); and the Labs and Application Centers (SRN M4808).

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|------------------------|-------|--|-------------|----------------------------------|--|
| 1. Each individual HAP | | 12-month rolling time period as determined at the end of each calendar month | SOURCE-WIDE | SC VI.1 & SC VI.2 | R 336.1205(1) |
| 2. Total HAPs | | 12-month rolling time period as determined at the end of each calendar month | | SC VI.1 & SC VI.2 | R 336.1205(1) |

For the purpose of the limits at SC I.1 and I.2, SOURCE-WIDE comprises the total and individual HAP emissions from the BASF Corporation M4777, M4808, and B4359 contiguous sites.

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

See Appendix 5-2

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting, or notification special condition.² (R336.1205(1))

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 The permittee shall keep in a satisfactory manner, monthly and previous 12-month emissions calculation records for individual HAPs and total HAPs from SOURCE-WIDE. For the purpose of this condition SOURCE-WIDE comprises the total and individual HAPs emissions from the BASF Corporation M4777, M4808, and B4359 contiguous sites.² (R336.1205(1))

See Appendices 3-2, 4-2, and 7-2

VII. REPORTING

- Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A, inclusive of deviations from SC I.1, I.2, VI.1, or VI.2 wherein SOURCE-WIDE comprises the Chemical Production Plants (SRN B4359), Plastics Plants (SRN M4777) and Labs and Application Centers (SRN M4808) stationary sources. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A, inclusive of deviations from SC I.1, I.2, VI.1, or VI.2 wherein SOURCE-WIDE comprises the Chemical Production Plants (SRN B4359), Plastics Plants (SRN M4777) and Labs and Application Centers (SRN M4808) stationary sources. 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, inclusive of certification for SC I.1, I.2, VI.1, and VI.2 wherein SOURCE-WIDE comprises the Chemical Production Plants (SRN B4359), Plastics Plants (SRN M4777) and Labs and Application Centers (SRN M4808) stationary sources. 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)

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 |
|-------|-----------|--|--|---------------------------------------|
| NA | | NA | NA | NA |

IX. OTHER REQUIREMENT(S)

- 1. Each responsible official shall certify annually the compliance status of the stationary source with all stationary source-wide conditions. This certification shall be included as part of the annual certification of compliance as required in the General Conditions in Part A and Rule 213(4)(c). (R 336.1213(4)(c))
- 2. The company shall submit to the AQD an administratively complete application, not more than eighteen (18) months, but not less than six (6) months, before the ROP expiration date, as specified in Part 55 Section 324.5506(5) and Rule 210(8).² (Paragraph 9(b)(1) of Consent Order AQD No 47-2014)

Section 2:

BASF Corporation - Plastics Plants

Cellasto Operations

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3. The conditions contained in this ROP for which a Consent Order is the only identified underlying applicable requirement shall be considered null and void upon the effective date of termination of the Consent Order. The effective date of termination is defined for the purposes of this condition as the date upon which the Termination Order is signed by the Chief of the AQD. (R 336.1213(3))

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 CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

| Emission Unit ID | Emission Unit Description (Including Process Equipment & Control Device(s)) | Installation Date/ Modification Date | Flexible Group ID |
|------------------|---|---|--|
| EUELACOLDCLEANER | Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979. | NA | FGELACOLDCLEANER |
| EUELAOVEN101 | A oven for curing polyurethane parts controlled by a mist eliminator. | 10/1/1987 | FGELAMACTS, FGELARULE290 |
| EUELAOVEN102 | A oven for curing polyurethane parts controlled by a mist eliminator. | 10/1/1987 | FGELAMACTS, FGELARULE290 |
| EUELAOVEN103 | A oven for curing polyurethane parts controlled by a mist eliminator. | 10/1/1987 | FGELAMACTS, FGELARULE290 |
| EUELAOVEN104 | A oven for curing polyurethane parts controlled by a mist eliminator. | 10/1/1987 | FGELAMACTS, FGELARULE290 |
| EUELAOVEN105 | A oven for curing polyurethane parts controlled by a mist eliminator. | 10/1/1987 | FGELAMACTS, FGELARULE290 |
| EUELAOVEN106 | A oven for curing polyurethane parts controlled by a mist eliminator. | 10/1/1987 | FGELAMACTS, FGELARULE290 |
| EUELAOVEN107 | A oven for curing polyurethane parts controlled by a mist eliminator. | 1/1/2002 | FGELAMACTS, FGELARULE290 |
| EUELAOVEN108 | A oven for curing polyurethane parts controlled by a mist eliminator. | 1/1/2002 | FGELAMACTS, FGELARULE290 |
| EUELAOVEN109 | A oven for curing polyurethane parts controlled by a mist eliminator. | 1/1/2002 | FGELAMACTS, FGELARULE290 |
| EUELAREACTOR210 | Production of prepolymer for use in the polyurethane molding operations. Carbon adsorbers are installed for volatile organic compound control. The emission unit includes pre-polymer reactor and associated equipment (storage and feed tanks, flake hopper, piping, pumps, and dosing tanks). | 10/1/1995 | FGELAREACTOR, FGELAMACTS, FGELARULE290 |

| Emission Unit ID | Emission Unit Description (Including Process Equipment & Control Device(s)) | Installation Date/ Modification Date | Flexible Group ID |
|------------------|---|---|--|
| EUELAREACTOR220 | Production of prepolymer for use in the polyurethane molding operations. Carbon adsorbers are installed for volatile organic compound control. The emission unit includes pre-polymer reactor and associated equipment (storage and feed tanks, flake hopper, piping, pumps, and dosing tanks). | 10/1/1995 | FGELAREACTOR, FGELAMACTS, FGELARULE290 |
| EUELAREACTOR230 | Production of prepolymer for use in the polyurethane molding operations. Carbon adsorbers are installed for volatile organic compound control. The emission unit includes pre-polymer reactor and associated equipment (storage and feed tanks, flake hopper, piping, pumps, and dosing tanks). | 10/1/1995 | FGELAREACTOR, FGELAMACTS, FGELARULE290 |
| EUELAREACTOR240 | Production of prepolymer for use in the polyurethane molding operations. Carbon adsorbers are installed for volatile organic compound control. The emission unit includes pre-polymer reactor and associated equipment (storage and feed tanks, flake hopper, piping, pumps, and dosing tanks). | 11/1/2000 | FGELAREACTOR, FGELAMACTS, FGELARULE290 |
| EUELAREACTOR250 | Production of prepolymer for use in the polyurethane molding operations. Carbon adsorbers are installed for volatile organic compound control. The emission unit includes pre-polymer reactor and associated equipment (storage and feed tanks, flake hopper, piping, pumps, and dosing tanks). | 11/1/2000 | FGELAREACTOR, FGELAMACTS, FGELARULE290 |
| EUELADEBURRING | Equipment used to remove burrs and flash from polyurethane parts. Filter socks are installed for particulate control. | 1/1/2003 | FGELAMACTS, FGELARULE290 |
| EUELAMOLDING | Equipment for the reaction injection molding of polyurethane parts. | 11/1/2013 | FGELAMACTS, FGELARULE290 |

D. FLEXIBLE GROUP 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 |
| FGELAREACTOR | Equipment, in aggregate, employed for the production of prepolymer for use in the polyurethane molding operations. Carbon adsorbers are installed for volatile organic compound control. The flexible group includes pre-polymer reactors and associated equipment (storage and feed tanks, flake hopper, piping, pumps, and dosing tanks). | EUELAREACTOR210, EUELAREACTOR220, EUELAREACTOR230, EUELAREACTOR240, EUELAREACTOR250 |
| FGELAMACTS | The flexible polyurethane foam process defined at 40 CFR 63.1292 as "the equipment used to produce a flexible polyurethane foam product", inclusive of "raw material storage; production equipment and associated piping, ductwork, etc.; and curing and storage areas." All permitted, exempt, and grandfathered equipment within the flexible polyurethane foam process constitute the emission unit. | EUELAREACTOR210, EUELAREACTOR220, EUELAREACTOR230, EUELAREACTOR240, EUELAREACTOR250, EUELAOVEN101, EUELAOVEN102, EUELAOVEN103, EUELAOVEN104, EUELAOVEN105, EUELAOVEN106, EUELAOVEN107, EUELAOVEN108, EUELAOVEN109, EUELAOVEN109, EUELADEBURRING, EUELAMOLDING |
| FGELACOLDCLEANER | Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979. | EUELACOLDCLEANER |

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| Flexible Group ID | Flexible Group Description | Associated Emission Unit IDs |
|-------------------|--|---------------------------------|
| FGELARULE290 | Any emission unit that emits air contaminants and is | EUELAREACTOR210, |
| | exempt from the requirements of Rule 201 pursuant | EUELAREACTOR220, |
| | to Rules 278 and 290. | EUELAREACTOR230, |
| | | EUELAREACTOR240, |
| | | EUELAREACTOR250, |
| | | EUELAOVEN101, |
| | | EUELAOVEN102, |
| | | EUELAOVEN103, |
| | | EUELAOVEN104, |
| | | EUELAOVEN105, |
| | | EUELAOVEN106, |
| | | EUELAOVEN107, |
| | | EUELAOVEN108, |
| | | EUELAOVEN109, |
| | | EUELADEBURRING, |
| | | EUELAMOLDING |

FGELAREACTOR FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Equipment, in aggregate, employed for the production of prepolymer for use in the polyurethane molding operations. Carbon adsorbers are installed for volatile organic compound control.

Emission Units: EUELAREACTOR210, EUELAREACTOR220, EUELAREACTOR230, EUELAREACTOR240, EUELAREACTOR250

POLLUTION CONTROL EQUIPMENT

Carbon adsorption units.

I. EMISSION LIMIT(S)

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|--|------------------------------------|--|----------------------------------|--|
| 1. VOC | 0.5 pounds per 1000 pounds of completed organic resin produced | | Applied to each existing production train (inclusive of reactors, blending tanks, and finishing tanks) producing discrete batches of organic resin in FGELAREACTOR | SC VI.1 | R 336.1631(3)(b), R 336.1631(5), R 336.2060(a) |

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any reactor, blending tank, or finishing tank of FGELAREACTOR unless the production train (inclusive of reactors, blending tanks, and finishing tanks producing discrete batches of organic resin) associated with the reactor, blending tank, or finishing tank is operated in compliance with the VOC emission limit at SC I.1. (R 336.1631(3)(b))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The carbon adsorption units at FGELAREACTOR shall be installed, operated, and maintained in a satisfactory manner and in accordance with the air pollution control rules and existing law. (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

See Appendix 5-2

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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 obtain current information and keep records necessary for a determination of compliance with the provisions of R 336.1631. This information may include any of the following information: (a) emissions test data; (b) material balance calculations; (c) process production rates; (d) control equipment specifications and operating parameters. (R 336.1631(6))

See Appendices 3-2, 4-2, and 7-2

VII. REPORTING

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

See Appendix 8-2

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 |
|-----------------|--|--|---------------------------------------|
| NA | NA | NA | NA |

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

FGELAMACTS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

The flexible polyurethane foam process defined at 40 CFR 63.1292 as "the equipment used to produce a flexible polyurethane foam product", inclusive of "raw material storage; production equipment and associated piping, ductwork, etc.; and curing and storage areas." All permitted, exempt, and grandfathered equipment within the flexible polyurethane foam process constitute the emission unit.

Emission Units: EUELAREACTOR210, EUELAREACTOR220, EUELAREACTOR230, EUELAREACTOR240, EUELAREACTOR250, EUELAOVEN101, EUELAOVEN102, EUELAOVEN103, EUELAOVEN104, EUELAOVEN105, EUELAOVEN106, EUELAOVEN107, EUELAOVEN108, EUELAOVEN109, EUELADEBURRING, EUELAMOLDING

POLLUTION CONTROL EQUIPMENT

Mist eliminators on curing ovens, filter socks or knock out box on the deburring operations, carbon adsorbers on the reactors.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. A HAP or HAP-based material shall not be used as an equipment cleaner to flush the mixhead, nor shall it be used elsewhere as an equipment cleaner in a molded flexible polyurethane foam process, as defined at 40 CFR 63.1292, with the following exception. Diisocyanates may be used to flush the mixhead and associated piping during periods of startup or maintenance, provided that the diisocyanate compounds are contained in a closed-loop system and are re-used in production. (40 CFR 63.1300(a))
- 2. A HAP-based mold release agent shall not be used in a molded flexible polyurethane foam source process, as defined at 40 CFR 63.1292. (40 CFR 63.1300(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

See Appendix 5-2

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VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain a product data sheet for each compound other than diisocyanates used to flush the mixhead and associated piping during periods of startup or maintenance, which includes the HAP content, in kg of HAP/kg solids (lb HAP/lb solids), of each solvent other than diisocyanates used to flush the mixhead and associated piping during periods of startup or maintenance. (40 CFR 63.1307(g), 40 CFR 63.1308(a)(1))

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2. The permittee shall maintain a product data sheet for each mold release agent used that includes the HAP content, in kg of HAP/kg solids (lb HAP/lb solids), of each mold release agent. (40 CFR 63.1307(h), 40 CFR 63.1308(a)(1))

See Appendices 3-2, 4-2, and 7-2

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. Under 40 CFR 63.1306(g), the permittee shall annually submit a certification of compliance with the applicable provisions at 40 CFR Part 63 Subparts A and III, based on information consistent with that contained in 40 CFR 63.1308. The certification of compliance shall be signed by the responsible official. The annual compliance certification required pursuant to SC VII.3 may be used to satisfy the requirements of 40 CFR 63.1306(g) provided the information is consistent with that contained at 40 CFR 63.1308. (40 CFR 63.1306(e), 40 CFR 63.1308(a)(2))

See Appendix 8-2

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 |
|-----------------|--|--|---------------------------------------|
| NA | NA | NA | NA |

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IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of 40 CFR 63, Subparts A and III, National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production. (40 CFR 63.1, 40 CFR 63.1290(a) and (b))

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).

FGELACOLDCLEANERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

Emission Unit: EUELACOLDCLEANER

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(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(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))

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- 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(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))

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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

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).

FGELARULE290 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.

Emission Units: EUELAREACTOR210, EUELAREACTOR220, EUELAREACTOR230, EUELAREACTOR240, EUELAREACTOR250, EUELAOVEN101, EUELAOVEN102, EUELAOVEN103, EUELAOVEN104, EUELAOVEN105, EUELAOVEN106, EUELAOVEN107, EUELAOVEN108, EUELAOVEN109, EUELADEBURRING, EUELAMOLDING

POLLUTION CONTROL EQUIPMENT

Mist eliminators on each oven; sock filters on each deburring machine; carbon canisters on reactors.

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(a)(i))
- 2. Each emission unit that the total uncontrolled or controlled emissions of 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(a)(ii))
 - a. For noncarcinogenic 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 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 1,000 or 500 pounds per month, respectively. (R 336.1290(a)(ii)(A))
 - b. For noncarcinogenic 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 microgram 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(a)(ii)(B))
 - c. For carcinogenic 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(a)(ii)(C))
 - d. The emission unit shall not emit any 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(a)(ii)(D))
- 3. Each emission unit that emits only noncarcinogenic particulate air contaminants and other air contaminants that are exempted under Rule 290(a)(i) and/or Rule 290(a)(ii), if all of the following provisions are met: (R 336.1290(a)(iii))

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- 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 an exhaust gas flow rate more than 30,000 actual cubic feet per minute. (R 336.1290(a)(iii)(A))
- The visible emissions from the emission unit are not more than five percent opacity in accordance with the methods contained in Rule 303. (R 336.1290(a)(iii)(B))
- The initial threshold screening level for each particulate air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. (R 336.1290(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)

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 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))
 - Records identifying each air contaminant that is emitted. (R 336.1213(3))
 - Records identifying if each air contaminant is controlled or uncontrolled. (R 336.1213(3)) b.
 - Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. (R 336.1213(3))
 - Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(a)(ii) and (iii). (R 336.1213(3))
 - 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. (R 336.1213(3), R 336.1290(c))
- 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(b), R 336.1213(3))

b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(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))

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3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(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 4-2

VII. REPORTING

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

See Appendix 8-2

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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

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

E. NON-APPLICABLE REQUIREMENTS

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

| Emission | Non-Applicable Requirement | Justification |
|---------------------------|---|--|
| Unit/Flexible Group ID | | |
| FGELARULE290 | 40 CFR Part 63, Subpart F, National Emissions Standards for Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry | The materials produced by the Cellasto Plant are not synthetic organic chemicals as listed in Table 1 of 40 CFR Part 63, Subpart F. |
| FGELARULE290 | 40 CFR Part 63, Subpart G, National Emissions Standards for Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater | The materials produced by the Cellasto Plant are not synthetic organic chemicals as listed in Table 1 of 40 CFR Part 63, Subpart F. |
| FGELARULE290 | 40 CFR Part 63, Subpart I, National Emissions Standards for Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks | The materials produced by the Cellasto Plant do not include the materials at 40 CFR 63.190(b). |
| FGELARULE290 | 40 CFR Part 63, Subpart U, National Emissions Standards for Hazardous Air Pollutants: Group I Polymers and Resins | The materials produced by the Cellasto Plant are not elastomers. |
| FGELARULE290 | 40 CFR Part 63, Subpart W, National Emissions Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production | The materials produced by the Cellasto Plant do not include basic liquid epoxy resins or wet strength resins as defined by 40 CFR 63.522. |
| FGELARULE290 | 40 CFR Part 63, Subpart JJJ, National Emissions Standards for Hazardous Air Pollutants: Group IV Polymers and Resins | The materials produced by the Cellasto Plant do not include thermoplastic resins as defined by 40 CFR 63.1312. |
| FGELARULE290 | 40 CFR Part 63, Subpart PPP, National Emissions Standards for Hazardous Air Pollutants for Polyether Polyols Production | The Cellasto Plant does not produce polyether polyols. |
| FGELAMACTS | 40 CFR Part 63, Subpart OOOOO, National Emissions Standards for Hazardous Air Pollutants: Flexible Polyurethane Foam Production and Fabrication Area Sources. | FGELAMACTS is subject to 40 CFR Part 63, Subpart III Flexible Polyurethane Foam Production as a major source and therefore not subject to the requirements of foam production of the area source rule. Future installations or modifications may be subject to the flexible polyurethane foam fabrication requirements under 40 CFR Part 63, Subpart OOOOOO. |

Section 2: BASF Corporation – Plastics Plants

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APPENDICES

Appendix 1-2. Abbreviations and Acronyms

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

| AQD | is an alphabetical listing of abbreviations/acro | MM | Million |
|--------------------|---|-----------------|--|
| acfm | Actual cubic feet per minute | MSDS | Material Safety Data Sheet |
| BACT | Best Available Control Technology | MW | Megawatts |
| BTU | British Thermal Unit | NA | Not Applicable |
| °C | Degrees Celsius | NAAQS | National Ambient Air Quality Standards |
| CAA | Federal Clean Air Act | NESHAP | National Emission Standard for Hazardous Air |
| CAM | Compliance Assurance Monitoring | NMOC | Pollutants Non-methane Organic Compounds |
| CEM | Continuous Emission Monitoring | NOx | Oxides of Nitrogen |
| CFR | Code of Federal Regulations | NSPS | New Source Performance Standards |
| CO | Carbon Monoxide | NSR | New Source Review |
| 1 | | | |
| COM | Continuous Opacity Monitoring | PM | Particulate Matter |
| department dscf | Michigan Department of Environment, Great Lakes, and Energy Dry standard cubic foot | PM-10 pph | Particulate Matter less than 10 microns in diameter Pound per hour |
| dscm | Dry standard cubic meter | ppm | Parts per million |
| EPA | United States Environmental Protection Agency | ppmv | Parts per million by volume |
| EU | Emission Unit | | Parts per million by weight |
| °F | | ppmw PS | Performance Specification |
| FG | Degrees Fahrenheit | PSD | • |
| | Flexible Group | | Prevention of Significant Deterioration |
| GACS | Gallon of Applied Coating Solids | psia | Pounds per square inch absolute |
| GC | General Condition | psig | Pounds per square inch gauge |
| gr | Grains | PeTE | Permanent Total Enclosure |
| HAP | Hazardous Air Pollutant | PTI | Permit to Install |
| Hg | Mercury | RACT | Reasonable Available Control Technology |
| hr HP | Hour Horsepower | ROP SC | Renewable Operating Permit Special Condition |
| H ₂ S | Hydrogen Sulfide | scf | Standard cubic feet |
| HVLP | High Volume Low Pressure * | sec | Seconds |
| ID | Identification (Number) | SCR | Selective Catalytic Reduction |
| IRSL | Initial Risk Screening Level | SO ₂ | Sulfur Dioxide |
| ITSL | Initial Threshold Screening Level | SRN | State Registration Number |
| LAER | Lowest Achievable Emission Rate | TAC | Toxic Air Contaminant |
| lb | Pound | Temp | Temperature |
| m | Meter | THC | Total Hydrocarbons |
| MACT | Maximum Achievable Control Technology | tpy | Tons per year |
| MAERS | Michigan Air Emissions Reporting System | μg | Microgram |
| MAP | Malfunction Abatement Plan | VE | Visible Emissions |
| EGLE | Michigan Department of Environment, Great | VOC | Volatile Organic Compounds |
| mg mm | Lakes, and Energy Milligram Millimeter | yr | Year |

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

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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 Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 6-2. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-M4777-2009. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-M4777-2009 is being reissued as Source-Wide PTI No. MI-PTI-M4777-2015b.

| Permit to Install Number | ROP Revision Application Number | Description of Equipment or Change | Corresponding Emission Unit(s) or Flexible Group(s) |
|--------------------------------|------------------------------------|------------------------------------|---|
| NA | NA | NA | NA |

Appendix 7-2. Emission Calculations

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

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Appendix 8-2. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

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

B. Other Reporting

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