DRAFT Part 70 Permit No. 47-065-1170

This Permit Shall Remain in Full Force and Effect From July 30, 2025, through July 29, 2030

Issued to:

BASF CORPORATION (PLANT #2) 2120 POLYMER DRIVE CHATTANOOGA, TENNESSEE 37421-2263

Designated Representative: Bradley Siegan Senior EHS Specialist Telephone: 423.838.0411

Responsible Official:

Shelly King Site Director

An Application for Renewal Must Be Submitted to the Executive Director of the Chattanooga-Hamilton County Air Pollution Control Bureau No Later Than January 29, 2030

CHATTANOOGA-HAMILTON COUNTY AIR POLLUTION CONTROL BUREAU

CBL Center II 2034 Hamilton Place Blvd., Suite 300 Chattanooga, Tennessee 37421-6127 Telephone: 423.643.5970

> Ronald Drumeller Executive Director

Prepared by Alan Frazier

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EMISSION UNIT SUMMARY

The emission units regulated by this permit are the following:

Emission Unit No.	Previous Certificate of Operation No.	Description
014	1170-30188801-14C*	Plant Fugitive Emissions
017	1170-30102611-17C* 1170-30102611-38C*	Ten Flash Tanks, Latex Stripping Column, and Surge Tank
030	1170-40704003-30C	Acrylic Acid and Methacrylic Acid Storage Tanks
032	1170-30182001-32C*	Wastewater Treatment Process
033	1170-40703613-33C	Styrene Storage Tank
037	1170-40723298-37C	Two tert-Dodecyl Mercaptan Storage Tanks
039	1170-30102614-39C	Additives Makeup System
040	1170-10200602-40C	Hurst Boilers #1 and #2
041	1170-40704403-41C	Butyl Acrylate Storage Tank
042	n/a	Cummins Emergency Generator Engine

*Federally Enforceable Certificate

CONDITIONS OF GENERAL APPLICABILITY

This permittee, <u>BASF Corporation (Plant #2)</u>, is subject to each of the conditions expressed below and is required to comply with them throughout the term of this Part 70 permit. By accepting this permit and operating under it, BASF Corporation agrees to comply with all terms, provisions, limitations, and requirements herein.

Where the term "Chattanooga Air Pollution Control Ordinance" is used in this permit, it means Part II, Chapter 4, of the Chattanooga City Code and any provisions of amendatory ordinances enacted subsequent to the date of the most recent codification of the Chattanooga City Code. ALL SECTIONS OF BOTH THE CHATTANOOGA AIR POLLUTION CONTROL ORDINANCE AND THE CODE OF FEDERAL REGULATIONS CITED IN THIS PERMIT ARE INCORPORATED HEREIN BY REFERENCE. Section numbers referred to in this permit which are not otherwise identified refer to sections in the Chattanooga Air Pollution Control Ordinance.

- 1.0 **Definitions**. Unless specifically defined within a provision of the Chattanooga Air Pollution Control Ordinance referenced elsewhere in this permit, the definitions in §4-2 and §4-53 shall apply. §4-2; §4-53
- 2.0 <u>Severability</u>. If any provision, part of a provision, sentence, clause, or phrase in this permit is for any reason declared to be unconstitutional or otherwise invalid by any court of competent jurisdiction, such decision shall not affect the validity of any other portion of this permit, and only such invalid portion shall be disregarded. \$4-57(a)(5)

3.0 <u>Compliance</u>.

- 3.1 The permittee must comply with all conditions of this Part 70 permit. Noncompliance with any permit provision constitutes a violation of either the Chattanooga Air Pollution Control Ordinance; the Tennessee Air Quality Act, T.C.A. 68-201-101 *et seq.*; and/or the federal Clean Air Act, as amended, Title 42 United States Code (U.S.C.) §7401 *et seq.* and is grounds for joint or several enforcement action; for permit termination, revocation, or modification; or for denial of a permit renewal application. Enforcement by the Chattanooga-Hamilton County Air Pollution Control Board (the Board) or the Director of the Chattanooga-Hamilton County Air Pollution Control Bureau (the Bureau) shall be conducted in accordance with the provisions of §4-4, §4-7, §4-14, §4-15, §4-17, §4-18, §4-20, §4-61, §4-62, §4-63, §4-64, and §4-65, as appropriate to the circumstances. *§4-57(a)(6)(i)*
- 3.2 It shall not be a defense for a 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 permit. \$4-57(a)(6)(ii)

- 3.3 This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination; or the filing of a notification of planned changes or anticipated noncompliance does not stay any condition in this permit. \$4-57(a)(6)(iii)
- 3.4 <u>Annual compliance certifications</u> shall be submitted by **July 30** of each year throughout the term of this permit. Separate compliance certifications shall be submitted to:

Chattanooga-Hamilton County Air Pollution Control Bureau CBL Center II 2034 Hamilton Place Blvd., Suite 300 Chattanooga, TN 37421-6127

and to the U.S. Environmental Protection Agency (EPA) Region 4:

via email to EPA_R4_CAA_Reports@epa.gov *or* via the U.S. EPA Compliance and Emissions Data Reporting Interface (CEDRI) system

Each such compliance certification shall include the following information (provided that the identification of applicable information may cross-reference the permit or previous reports as applicable):

- 3.4.1 Identification of each term or condition of the permit that is the basis of the certification; $\S 4-57(c)(5)(iii)(A)$
- 3.4.2 Compliance status; \$4-57(c)(5)(iii)(C)
- 3.4.3 Whether compliance was continuous or intermittent; $\S 4-57(c)(5)(iii)(B)$
- 3.4.4 The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with \$4-57(a)(3); \$4-57(c)(5)(iii)(B)
- 3.4.5 Where any specific emission test method requires quality assurance audit samples and the audit result does not validate the source's sample within the specified parameters, the source must retest until such time as the audit result does validate the sample within the specified parameters; except that the Bureau Director may waive retesting if the source's emission test sample is in compliance with this permit even if not validated within the specified quality assurance parameters; \$4-3(d)

- 3.4.6 Such other facts as the Board or the Bureau Director may require to determine the compliance status of the Part 70 source; and \$4-57(c)(5)(iii)(D)
- 3.4.7 Such additional requirements as may be required for enhanced monitoring compliance certification under Title 42 U.S.C. \$7414(a)(3) and \$7661c(b) of the Clean Air Act. \$4-57(c)(5)(v)

The annual compliance period that is covered by each compliance certification shall be from July 1 of the previous year through June 30 of the current year. \$4-57(c)(5)

- 3.5 The methods set forth in §4-3 shall be applicable for determining compliance with all terms, provisions, limitations, and requirements contained in this permit, except where otherwise specifically provided in this permit. §4-3
- 4.0 <u>**Property Rights**</u>. This permit does not convey any property rights of any sort or any exclusive privilege. This permit is not assignable except as provided in $\frac{4-58(d)(1)(iv)}{\frac{4-57(a)(6)(iv)}{54-57(a)(6)(iv)}}$
- 5.0 **Information to be furnished**. The permittee shall furnish to the Bureau Director, within a reasonable period of time, any information that the Board or the Bureau Director may request in writing to determine whether cause exists for modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board or the Bureau Director copies of records required to be kept by the permit. For information claimed to be confidential, the permittee may furnish such records directly to the Administrator of the U.S. EPA along with a claim of confidentiality. Eligibility for confidential treatment shall be determined by the Board pursuant to the provisions of §4-19 for information submitted directly to the Administrator. S4-57(a)(6)(v)
- 6.0 <u>Fees</u>. The permittee shall pay fees to the Bureau Director consistent with the fee provisions set forth in \$4-60. \$4-57(a)(7)
- 7.0 <u>Changes Provided for by Permit</u>. No permit revision shall be required under any economic incentives, marketable permits, emissions trading, or similar program or process which is included in the Chattanooga City Code, Part II, Chapter 4, Article III, for changes that are provided for in this permit pursuant to such program or process. §4-57(a)(8)
- 8.0 <u>**Reasonably Anticipated Operating Scenarios.</u>** Contemporaneously with making a change from one operating scenario to another, the permittee must record in a log at the Part 70 source premises a record of the scenarios under which it is operating. \$4-57(a)(9)</u>

- 9.0 <u>Acid Precipitation Requirements</u>. Where an applicable requirement of the Clean Air Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Clean Air Act and incorporated by reference at $\S4-52(d)$, both provisions are herein incorporated into this permit by reference and shall be legally enforceable. This source does not lawfully hold any allowance under Title IV of the Clean Air Act. $\S4-57(a)(1)(ii)$
- 10.0 <u>Federal Enforceability</u>. All terms and conditions in this Part 70 permit, including any provisions designed to limit the potential to emit of this Part 70 source, are enforceable by the Administrator of the U.S. EPA and by citizens pursuant to the applicable citizen suit provisions under Section 304 of the Clean Air Act (Title 42 U.S.C. §7604) except for the following, which are locally enforceable only:
 - 10.1 §4-41, Rule 12 (Regulation of Odors in the Ambient Air) and
 - 10.2 §4-41, Rule 14 (Nuisances).

Any terms and conditions included in the permit that are not required under the Clean Air Act or under any of its applicable requirements are specifically designated in this permit as not being federally enforceable under the Clean Air Act. \$4-57(b)

- 11.0 **Inspection of Permitted Source(s)**. Upon presentation of identification and in the performance of their duties, the permittee shall allow the Bureau Director and other Bureau employees to perform the following:
 - 11.1 Enter upon the permittee's premises or buildings where a Part 70 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
 - 11.2 Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - 11.3 Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - 11.4 Sample or monitor substances or parameters, and collect and preserve evidence for the purpose of assuring compliance with the permit or applicable requirements thereunder at reasonable times and for taking such other actions as are appropriate under the law in accordance with Item 3.1 of these Conditions of General Applicability.
 - 11.5 For the purposes of Items 11.2, 11.3, and 11.4 of these Conditions of General Applicability, "reasonable times" shall be considered to be customary business hours, unless reasonable cause exists to suspect noncompliance with the

Chattanooga Air Pollution Control Ordinance or any "applicable requirement," as defined in §4-53, or with any permit issued thereunder, and the Bureau Director specifically authorizes a designee to inspect a facility at any other time.

11.6 In the alternative, the Bureau Director, other Bureau employees, or any other law enforcement officer may obtain a search warrant to obtain, collect, and preserve evidence.

§4-16; §4-57(c)(2)

12.0 **<u>Recordkeeping and Reporting.</u>**

- 12.1 <u>Record Retention Requirements</u>. All required monitoring data and related support information shall be retained by the permittee for **five (5) years** after the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and logs and copies of all reports required by the permit. \$4-57(a)(3)(ii)(B)
- 12.2 <u>Reporting of Emission Limitation Exceedances</u>. The permittee shall promptly notify the Bureau Director within twenty-four (24) hours of any emission limitation exceedance. A written report shall be submitted to the Bureau Director within seven (7) days of the onset of the exceedance. The report shall include the probable cause of the exceedance and any corrective actions or preventive measures that were taken. $\S4-57(a)(3)(iii)(B);$ \$4-57(c)(1)

Any excess emissions that create an <u>imminent hazard requiring immediate</u> <u>action to protect health or safety</u> must be reported by telephone immediately to the Bureau Director, to the Hamilton County Local Emergency Planning Committee, to the Tennessee Emergency Management Agency, and to the National Response Center. §4-12(e)(2)

13.0 <u>Emergency Provision</u>. If the Bureau Director or the Administrator of the Chattanooga-Hamilton County Health Department finds that a condition of air pollution exists or is likely to exist, and that it creates any emergency requiring immediate action to protect human health or safety, the mayor with the concurrence of the Bureau Director or the Administrator of the Chattanooga-Hamilton County Health Department shall order persons causing or contributing to the air pollution to reduce or discontinue immediately the emission of air pollutants. Upon issuance of any such order, the Bureau Director shall fix a place and time, not later than twenty-four (24) hours thereafter, for a hearing to be held before the Board. Not more than twenty-four (24) hours after commencement of such hearing, and without adjournment thereafter, the Board shall affirm, modify, or recommend to the mayor that the order be affirmed, modified, or set aside. §4-20 14.0 <u>Certification</u>. Any application form, report, or compliance certification submitted pursuant to this permit shall contain a certification, as defined in §4-53, by a responsible official, as defined in §4-53, of truth, accuracy, and completeness. Any certification required by this permit shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. §4-56(d)

15.0 <u>Modifications</u>.

- 15.1 <u>Administrative amendments</u> to this permit shall be requested and may be granted in accordance with \$4-58(d), and only for the reasons set forth therein. The permittee is required to submit an application for an administrative amendment within sixty (60) days after a change of the name of the permittee is registered with the Tennessee Secretary of State. \$4-58(d)
- 15.2 <u>Minor permit modifications</u> to this permit shall be requested and may be granted in accordance with \$4-58(e)(1) and (2). \$4-58(e)(1) and (2)
- 15.3 <u>Significant permit modifications</u> to this permit shall be requested and may be granted in accordance with \$4-58(e)(3). \$4-58(e)(3)
- 15.4 <u>Operational flexibility</u> allows changes within this permitted source without requiring a permit revision, if the changes are not modifications under Title I of the Clean Air Act and the changes do not exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions), provided that:
 - 15.4.1 The permittee provides the U.S. EPA and the Bureau Director with written notification at least seven (7) days in advance of the proposed changes; and
 - 15.4.2 For each such change, said written notification shall include a brief description of the change within the permitted source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

The permit shield described in \$4-57(f) shall not apply to any change made pursuant to operational flexibility. \$4-58(i)

- 15.5 <u>Installation permit</u> application and issuance requirements in §4-8(a) will apply to this permittee and emission units located at this Part 70 source if modifications to or new construction of a Part 70 source are subject to the following:
 - 15.5.1 §4-41, Rule 18 (Prevention of Significant Air Quality Deterioration);

- 15.5.2 §4-41, Rule 25.3 (General Provisions and Applicability for Volatile Organic Compounds Standards for New Sources);
- 15.5.3 §4-41, Rule 23 (General Provisions and Applicability for Process Gaseous Emissions Standards);
- 15.5.4 Any standard or other requirement pursuant to regulations promulgated under Title 42 U.S.C. §7411 in Title 40 *Code of Federal Regulations* Part 60;
- 15.5.5 Case-by-case determinations made pursuant to Title 42 U.S.C. §7412(g) and (j) as set forth at §4-53 "Applicable requirements (4)"; or
- 15.5.6 Case-by-case determinations made pursuant to §4-41, Rule 27 (Particulate Matter Controls for New Sources and New Modifications After August 29, 1995).

§4-50

16.0 **Off-Permit Changes**.

- 16.1 An off-permit change is one that:
 - 16.1.1 Is not addressed or prohibited by the permit;
 - 16.1.2 is not a modification under Title I of the Clean Air Act;
 - 16.1.3 is not subject to any requirements under Title IV of the Clean Air Act;
 - 16.1.4 Meets all applicable requirements, as described in this permit; and
 - 16.1.5 Does not violate, or cause or contribute to a violation of, any existing permit term or condition.
- 16.2 A contemporaneous notification shall be submitted to the Bureau Director and to the U.S. EPA except for changes that qualify as insignificant under 4-56(c)(11) and (12).
- 16.3 The permittee shall keep a record describing off-permit changes made at the Part 70 source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those off-permit changes.

16.4 The permit shield described in §4-57(f) shall not apply to any change made pursuant to off-permit changes.

§4-58(j)

- 17.0 <u>**Permit Reopening**</u>. This permit shall be reopened and revised under any of the following circumstances, as set forth at $\frac{4-58(f)(1)}{1}$:
 - 17.1 Additional applicable requirements become applicable by amendment of the Chattanooga Air Pollution Control Ordinance to this source and the remaining permit term is three (3) or more years. Such reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire;
 - 17.2 Additional requirements (including excess emissions requirements) become applicable to an affected source as defined in §4-53. Upon approval by the Administrator of the U.S. EPA and amendment of the Chattanooga Air Pollution Control Ordinance, excess emissions offset plans shall be incorporated into the permit;
 - 17.3 The Board, the Bureau Director, or the Administrator of the U.S. EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - 17.4 The Board, the Bureau Director, or the Administrator of the U.S. EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and issue a revised permit shall follow the same procedures as apply to initial permit issuance, described in §4-58, and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable, but only after notice of such intent is provided to this permittee by the Bureau Director at least thirty (30) days in advance of the date that permit is to be reopened. A shorter time period may be provided in the case of an emergency. §4-58(f)

This permit is also subject to reopening for cause by the U.S. EPA, as described in §4-58(g). §4-58(g)

18.0 **<u>Rules Applicable to All Permittee Activities</u>**. The following conditions apply to all activities of this permittee, including insignificant activities:

- 18.1 <u>Nitrogen Oxides</u>. The permittee shall comply with §4-41, Rules 2.4, 2.5, and 2.7, regarding emissions of nitrogen oxides.
- 18.2 <u>Visible Emissions</u>. The permittee shall comply with §4-41, Rule 3, which stipulates that the opacity of visible emissions shall not exceed twenty (20) percent for an aggregate of more than five (5) minutes in any one-hour period or more than twenty (20) minutes in any twenty-four-hour period. The permittee shall also comply with §4-41, Rule 9, regarding visible emissions from internal combustion engines. In addition, the permittee shall comply with §4-41, Rule 11, which stipulates that the opacity of visible emissions from the handling, processing, or storage of any material in the open air shall not exceed twenty (20) percent for more than three (3) minutes in any consecutive sixty-minute period or more than twenty (20) minutes in any twenty-four-hour period. §4-3(c)(9)
- 18.3 <u>Certain Fuels</u>. The permittee shall comply with §4-41, Rule 4, regarding importation, sale, transportation, use, or consumption of fuels containing in excess of four (4) percent sulfur by weight.
- 18.4 <u>Prohibition of Hand-Fired Fuel-Burning Equipment</u>. The permittee shall comply with §4-41, Rule 5, regarding the prohibition of the use of hand-fired fuel-burning equipment with solid fuels.
- 18.5 <u>Open Burning</u>. The permittee is prohibited from conducting open burning except in accordance with §4-41, Rule 6.
- 18.6 <u>Fuel-Burning Equipment</u>. The permittee shall comply with §4-41, Rule 8, regarding particulate matter emissions from fuel-burning equipment.
- 18.7 <u>Process Emissions</u>. The permittee shall comply with §4-41, Rule 10, regarding process particulate matter emissions.
- 18.8 <u>Odors in Ambient Air</u>. The permittee shall comply with §4-41, Rule 12, regarding emissions of objectionable odors. (*Local rule only*)
- 18.9 <u>Sulfur Oxides</u>. The permittee shall comply with §4-41, Rule 13, regarding emissions of sulfur oxides.
- 18.10 <u>Nuisances</u>. The permittee shall comply with §4-41, Rule 14, regarding discharges from any source of air contaminants or other material which shall cause a nuisance. (*Local rule only*)
- 18.11 <u>Hazardous Air Pollutants</u>. The permittee shall comply with §4-41, Rules 16.1 through 16.4, regarding emission standards for hazardous air pollutants other than asbestos.

- 18.12 <u>Asbestos Demolition or Renovation</u>. The permittee shall comply with §4-41, Rules 17.5, 17.10, 17.12, and 17.13, when conducting any demolition or renovation activities at the permitted source.
- 18.13 <u>Stack Heights</u>. The permittee shall comply with §4-41, Rule 22, regarding good engineering practice stack heights.
- 18.14 <u>Particulate Matter Controls for New Sources and New Modifications</u>. The permittee shall comply with §4-41, Rule 27, regarding particulate matter controls for any new source or modification for which installation commences after August 29, 1995.
- 19.0 <u>Stratospheric Ozone and Climate Protection</u>. The permittee is subject to the standards for recycling and emissions reduction promulgated at Title 40 *Code of Federal Regulations* Part 82, Subpart F, including the use of certified technicians only. §4-53
- 20.0 **<u>Dismantled Equipment</u>**. The permittee shall report the permanent discontinuance or dismantlement of any equipment or activity covered by this permit to the Bureau Director within thirty (30) days. *§*4-11(*a*)
- 21.0 <u>Monitoring</u>. All monitoring and related reporting shall be conducted in compliance with $\frac{4-57(a)(3)}{3}$.
- 22.0 <u>Applicable Requirements</u>. In addition to the Conditions of General Applicability, Conditions Applicable to the Entire Facility, and Emission Unit Special Conditions in this permit, "applicable requirements" as defined in \$4-53 shall apply. \$4-57(a)(1)
- 23.0 **<u>Basis of Permit</u>**. This permit is being issued based on the statements made and the information provided in the Part 70 permit application submitted under oath by this source. \$4-56

CONDITIONS APPLICABLE TO THE ENTIRE FACILITY

1.0 Semiannual Compliance Monitoring Reports. In addition to reports that are required by the Conditions of General Applicability, a semiannual compliance monitoring report shall be submitted by January 30 and July 30 of each year throughout the term of this permit. The compliance monitoring report shall be submitted to:

Chattanooga-Hamilton County Air Pollution Control Bureau CBL Center II 2034 Hamilton Place Blvd., Suite 300 Chattanooga, TN 37421-6127

Each such compliance monitoring report shall include the following information:

- 1.1 A summary of monitoring that was performed of all applicable equipment components (Emission Unit 014) at the facility in accordance with the leak detection and repair (LDAR) program. The summary shall include the following:
 - 1.1.1 For each equipment component type (e.g., connectors, valves, pumps), the **number of equipment components that were monitored** during each calendar quarter (either January 1–March 31 and April 1–June 30 or July 1–September 30 and October 1–December 31) in the reporting period;
 - 1.2.1 For each equipment component type, the **number of equipment components for which leaks were detected** during each calendar quarter in the reporting period; and
 - 1.3.1 The **date of detection** and the **date of repair** for each leak that was detected during the reporting period, including an **explanation of why any repair was delayed** beyond fifteen (15) calendar days.

For each equipment component type, the **number of any components** that were required to be monitored during each calendar quarter in the reporting period but **that were not actually monitored** shall also be noted; \$4-41, Rule 16.5(c) [40 CFR 63.11495(a)(3), (4), and (5) and 63.11502]; \\$4-57(c)(1)

- 1.2 The annual throughput of water for the wastewater air-stripping column of the wastewater treatment process (Emission Unit 032) during the preceding twelve (12) calendar months (ending on the last day of the reporting period);
- 1.3 The annual **quantity of styrene** that was loaded into the styrene storage tank **(Emission Unit 033)** during the preceding **twelve (12) calendar months** (ending on the last day of the reporting period);

- 1.4 The annual **quantity of natural gas** that was burned in Hurst Boilers #1 and #2 (Emission Unit 040) combined during the preceding twelve (12) calendar months (ending on the last day of the reporting period);
- 1.5 The annual **quantity of butyl acrylate** that was loaded into the butyl acrylate storage tank (Emission Unit 041) during the preceding twelve (12) calendar months (ending on the last day of the reporting period);
- 1.6 The annual **number of hours** that the Cummins emergency generator engine **(Emission Unit 042)** was operated during the preceding **twelve (12) calendar months** (ending on the last day of the reporting period);
- 1.7 A semiannual compliance report that contains the information specified in §63.11501(d)(1–8) of "National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources," Title 40 Code of Federal Regulations Part 63, Subpart VVVVV, as applicable; and §4-41, Rule 16.5(c) [40 CFR 63.11501(d)]
- 1.8 A detailed summary of **emission limitation exceedances** (including those attributable to malfunctions) **and all other deviations from permit requirements** during the reporting period, including every instance in which an emission unit was operated while air pollution control equipment that was required to be used was not in operation, bypassed (by way of a pressure relief valve, blown rupture disk, blown gasket, etc.), or operated outside of a required parameter (e.g., operating temperature). For each such incident, the nature and cause of the incident, affected equipment, calendar date, beginning time, elapsed time, and value of any operating parameter that was not met shall be included in the summary. Furthermore, for each incident of an emission limitation exceedance, the estimated resulting emissions shall be included in the summary. \$4-57(a)(3)(iii)(A); \$4-57(c)(1)

The six (6)-month reporting period that is covered by each compliance monitoring report that is due on January 30 shall be from **July 1 through December 31** of the previous year. The six (6)-month reporting period that is covered by each compliance monitoring report that is due on July 30 shall be from **January 1 through June 30** of the current year. $\S4-57(a)(3)(iii)(A)$

2.0 **Facility-Wide Hazardous Air Pollutant (HAP) Emission Limitations.**

2.1 Emissions of any single HAP from the entire facility shall not exceed 9.90 tons during any period of twelve (12) consecutive calendar months, not disregarding other limitations in this permit.

2.2 Emissions of all HAP combined from the entire facility shall not exceed 24.90 tons during any period of twelve (12) consecutive calendar months, not disregarding other limitations in this permit.

[These emission limitations are specified in order to confirm the status of the facility as an area (non-major) source.] \$4-57(a)(1)

- 3.0 <u>Air Pollution Control Equipment Replacement</u>. The addition of air pollution control equipment to achieve additional emissions reductions and/or the replacement of air pollution control equipment with equipment of equal or greater control efficiency for each pollutant controlled by the original equipment are changes that qualify as operational flexibility with the exception that air pollution control technology required by any regulation promulgated pursuant to Section 112 of the Clean Air Act codified at Title 40 *Code of Federal Regulations* Part 63, including control measures employed to demonstrate early reductions of HAP, is not eligible for replacement under operational flexibility. Operational flexibility changes are subject to the notification requirements of Item 15.4 of the Conditions of General Applicability. $\S4-58(i)$
- 4.0 <u>Air Pollution Control Equipment Maintenance</u>. Preventative maintenance on each piece of air pollution control equipment at the facility shall be performed at regular intervals in accordance with the permittee's maintenance procedures. This air pollution control equipment consists of four condensers (Emission Units 017 and 033), a thermal oxidizer (Emission Unit 017), four carbon adsorption drums (Emission Units 030 and 037), and two cooling systems (Emission Units 033 and 041). §4-57(a)(1)

FACILITY-WIDE FEDERAL STANDARD

1.0 BASF Corporation (Plant #2) is subject to and shall comply with all applicable requirements of "National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources," Title 40 Code of Federal Regulations Part 63, Subpart VVVVV. This plant is a chemical manufacturing process unit (CMPU) that uses hazardous air pollutants (HAP) that are listed in Table 1 of Subpart VVVVVV. Specific requirements of Subpart VVVVVV that are applicable to this plant are listed in the following table.

Citation	Requirement		
Facility-Wide Mana	gement Practices and Other Requirements		
63.11495(a)	<i>Management practices.</i> If you have a CMPU subject to this subpart, you must comply with paragraphs (a)(1) through (5) of this section.		
63.11495(a)(1)	Each process vessel must be equipped with a cover or lid that must be closed at all times when it is in organic HAP service or metal HAP service, except for manual operations that require access, such as material addition and removal, inspection, sampling and cleaning. This requirement does not apply to process vessels containing only metal HAP that are in a liquid solution or other form that will not result in particulate emissions of metal HAP (e.g., metal HAP that is in ingot, paste, slurry, or moist pellet form or other form).		
63.11495(a)(2)	You must use any of the methods listed in paragraphs $(a)(2)(i)$ through (iv) of this section to control total organic HAP emissions from transfer of liquids containing Table 1 organic HAP to tank trucks or railcars. You are not required to comply with this paragraph $(a)(2)$ if you have notified the Administrator in your initial notification that a material is reactive or resinous, and you will not be able to comply with any of the methods in paragraphs $(a)(2)(i)$ through (iv) of this section for the transfer of such material.		
	(i) Use submerged loading or bottom loading.		
	 (ii) Route emissions to a fuel gas system or process in accordance with §63.982(d) of Subpart SS. 		
	(iii) Vapor balance back to the storage tank or another storage tank connected by a common header.		
	(iv) Vent through a closed-vent system to a control device.		

63.11495(a)(3)	You must conduct inspections of process vessels and equipment for each CMPU in organic HAP service or metal HAP service, as specified in paragraphs (a)(3)(i) through (v) of this section, to demonstrate compliance with paragraph (a)(1) of this section and to determine that the process vessels and equipment are sound and free of leaks. Alternatively, except when the subject CMPU contains metal HAP as particulate, inspections may be conducted while the subject process vessels and equipment are in volatile organic compound (VOC) service, provided that leaks can be detected when in VOC service.			
	(i) Inspections must be conducted at least quarterly.			
	 (ii) For these inspections, detection methods incorporating sight, sound, or smell are acceptable. Indications of a leak identified using such methods constitute a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstration in the next quarterly monitoring period. 			
	 (iii) As an alternative to conducting inspections, as specified in paragraph (a)(3)(ii) of this section, you may use Method 21 of 40 CFR part 60, appendix A-7, with a leak definition of 500 parts per million by volume (ppmv) to detect leaks. You may also use Method 21 with a leak definition of 500 ppmv to determine if indications of a leak identified during an inspection conducted in accordance with paragraph (a)(3)(ii) of this section are due to a condition other than loss of HAP. The procedures in this paragraph (a)(3)(iii) may not be used as an alternative to the inspection required by paragraph (a)(3)(ii) of this section for process vessels that contain metal HAP as particulate. 			
	(iv) Inspections must be conducted while the subject CMPU is operating.			
	(v) No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in organic HAP service or metal HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required.			
63.11495(a)(4)	You must repair any leak within fifteen (15) calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this paragraph (a)(4), a leak will be considered "repaired" if a condition specified in paragraph (a)(4)(i), (ii), or (iii) of this section is met.			
	(i) The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or			
	(ii) No bubbles are observed at potential leak sites during a leak check using soap solution, or			

	(iii) The system will hold a test pressure.
63.11495(a)(5)	You must keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.
63.11495(b)	<i>Small heat exchange systems.</i> For each heat exchange system subject to this subpart with a cooling water flow rate less than 8,000 gallons per minute (gal/min) and not meeting one or more of the conditions in §63.104(a), you must comply with paragraphs (b)(1) through (3) of this section, or as an alternative, you may comply with any one of the requirements in Item 1.a. or 1.b. of Table 8 to this subpart.
63.11495(b)(1)	You must develop and operate in accordance with a heat exchange system inspection plan. The plan must describe the inspections to be performed that will provide evidence of hydrocarbons in the cooling water. Among other things, inspections may include checks for visible floating hydrocarbon on the water, hydrocarbon odor, discolored water, and/or chemical addition rates. You must conduct inspections at least once per quarter, even if the previous inspection determined that the indications of a leak did not constitute a leak as defined by §63.104(b)(6).
63.11495(b)(2)	You must perform repairs to eliminate the leak and any indications of a leak or demonstrate that the HAP concentration in the cooling water does not constitute a leak, as defined by §63.104(b)(6), within 45 calendar days after indications of the leak are identified, or you must document the reason for any delay of repair in your next semiannual compliance report.
63.11495(b)(3)	You must keep records of the dates and results of each inspection, documentation of any demonstrations that indications of a leak do not constitute a leak, the dates of leak repairs, and, if applicable, the reasons for any delay in repair.
63.11495(c)	<i>Startup, shutdown and malfunction.</i> Startup, shutdown, and malfunction (SSM) provisions in subparts that are referenced in paragraphs (a) and (b) of this section do not apply.
63.11495(d)	<i>General duty.</i> At all times, you must operate and maintain any affected CMPU, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the CMPU.

Process Vent Requirements			
63.11496(a)	Organic HAP emissions from batch process vents. You must comply with the requirements in paragraphs (a)(1) through (4) of this section for organic HAP emissions from your batch process vents for each CMPU using Table 1 organic HAP. If uncontrolled organic HAP emissions from all batch process vents from a CMPU subject to this subpart are equal to or greater than 10,000 pounds per year (lb/yr), you must also comply with the emission limits and other requirements in Table 2 to this subpart.		
63.11496(a)(1)	You must determine the sum of actual organic HAP emissions from all of your batch process vents within a CMPU subject to this subpart using process knowledge, engineering assessment, or test data. Emissions for a standard batch in a process may be used to represent actual emissions from each batch in that process. You must maintain records of the calculations. Calculations of annual emissions are not required if you meet the emission standards for batch process vents in Table 2 to this subpart.		
Table 2, Item 1.a., of 40 CFR 63, Subpart VVVVV	For batch process vents in a CMPU at an existing source for which the total organic HAP emissions are equal to or greater than 10,000 lb/yr, you must reduce collective uncontrolled total organic HAP emissions from the sum of all batch process vents by \geq 85 percent by weight or to \leq 20 ppmv by routing emissions from a sufficient number of the batch process vents through a closed vent system to any combination of control devices (except a flare) in accordance with the requirements of §63.982(c) and the requirements referenced therein, except compliance may be based on either total organic HAP or total organic carbon (TOC) and as specified in §63.11496(g).		
63.11496(b)	Organic HAP emissions from continuous process vents. You must comply with the requirements in paragraphs (b)(1) through (3) of this section for organic HAP emissions from your continuous process vents for each CMPU subject to this subpart using Table 1 organic HAP. If the total resource-effectiveness (TRE) index value for a continuous process vent is less than or equal to 1.0, you must also comply with the emission limits and other requirements in Table 3 to this subpart.		
63.11496(b)(1)	You must determine the TRE index value according to the procedures in §63.115(d), except as specified in paragraphs (b)(1)(i) through (iii) of this section.		
63.11496(b)(1)(i)	You are not required to calculate the TRE index value if you control emissions in accordance with Table 3 to this subpart.		

Table 3, Item 1.a., of 40 CFR 63, Subpart VVVVV	For each continuous process vent with a TRE ≤ 1.0 , you must reduce emissions of total organic HAP by ≥ 95 percent by weight (≥ 85 percent by weight for periods of startup or shutdown) or to ≤ 20 ppmv by routing emissions through a closed vent system to any combination of control devices (except a flare) in accordance with the requirements of §63.982(c) and the requirements referenced therein, except compliance may be based on either total organic HAP or TOC and as specified in §63.11496(g).		
63.982(c)	Closed vent system and nonflare control device. Owners or operators whe control emissions through a closed vent system to a nonflare control device shall meet the requirements in $\S63.983$ for closed vent systems, the applicable recordkeeping and reporting requirements of $\$\63.998 an 63.999, and the applicable requirements listed in paragraphs (c)(1) throug (3) of this section.		
	(1) For storage vessels and low throughput transfer racks, the owner or operator shall meet the requirements in §63.985 for nonflare control devices and the monitoring, recordkeeping, and reporting requirements referenced therein. No other provisions of this subpart apply to low throughput transfer rack emissions or storage vessel emissions vented through a closed vent system to a nonflare control device unless specifically required in the monitoring plan submitted under §63.985(c).		
	(2) For process vents and high throughput transfer racks, the owner or operator shall meet the requirements applicable to the control devices being used in §63.988, §63.990 or §63.995; the applicable general monitoring requirements of §63.996 and the applicable performance test requirements and procedures of §63.997; and the monitoring, recordkeeping and reporting requirements referenced therein. Owners or operators subject to halogen reduction device requirements under a referencing subpart must also comply with §63.994 and the monitoring, recordkeeping, and reporting requirements referenced therein. The requirements of §§63.984 through 63.986 do not apply to process vents or high throughput transfer racks.		
	(3) For equipment leaks, owners or operators shall meet the requirements in §63.986 for nonflare control devices used for equipment leak emissions and the monitoring, recordkeeping, and reporting requirements referenced therein. No other provisions of this subpart apply to equipment leak emissions vented through a closed vent system to a nonflare control device.		

63.11496(g)	<i>Exceptions and alternatives to 40 CFR Part 63, Subpart SS.</i> If you are complying with the emission limits and other requirements for continuous process vents in Table 3 to this subpart, the provisions in paragraphs $(g)(1)$ through (7) and (9) of this section apply in addition to the provisions in 40 CFR Part 63, Subpart SS. If you are complying with the emission limits and other requirements for batch process vents in Table 2 to this subpart, the provisions in paragraphs $(g)(1)$ through (8) of this section apply in addition to the provisions in Subpart SS.
63.11496(g)(2)	Design evaluation. To determine initial compliance with a percent reduction or outlet concentration emission limit, you may elect to conduct a design evaluation as specified in $(53.1257(a)(1))$ instead of a performance test as specified in Subpart SS of this Part 63. You must establish the value(s) and basis for the operating limits as part of the design evaluation. For continuous process vents, the design evaluation must be conducted at maximum representative operating conditions for the process, unless the Administrator specifies or approves alternate operating conditions. For batch process vents, the design evaluation must be conducted under worst-case conditions, as specified in $(53.2460(c)(2))$.
63.1257(a)	General. Except as specified in paragraph (a)(5) of this section, the procedures specified in paragraphs (c), (d), (e), and (f) of this section are required to demonstrate initial compliance with §§63.1253, 63.1254, 63.1256, and 63.1252(e), respectively. The provisions in paragraphs (a)(2) and (3) apply to performance tests that are specified in paragraphs (c), (d), and (e) of this section. The provisions in paragraph (a)(5) of this section are used to demonstrate initial compliance with the alternative standards specified in §§63.1253(d) and 63.1254(c). The provisions in paragraph (a)(6) of this section are used to comply with the outlet concentration requirements specified in §§63.1256(h)(2). Performance tests shall be conducted under such conditions representative of performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.
63.1257(a)(1)	Design evaluation. To demonstrate that a control device meets the required control efficiency, a design evaluation must address the composition and organic HAP concentration of the vent stream entering the control device. A design evaluation also must address other vent stream characteristics and control device operating parameters as specified in any one of paragraphs $(a)(1)$ (i) through (vi) of this section, depending on the type of control device that is used. If the vent stream is not the only inlet to the control device, the efficiency demonstration also must consider all other vapors, gases, and liquids, other than fuels, received by the control device.

For an enclosed combustion device used to comply with the provisions of $(63.1253 \ (b)(2) \ or \ (c)(2), \ or \ (63.1256(h)(2)(i)(C) \ with a minimum residence time of 0.5 seconds and a minimum temperature of 760 °C, the design evaluation must document that these conditions exist.$
For a combustion control device that does not satisfy the criteria in paragraph $(a)(1)(i)$ of this section, the design evaluation must document control efficiency and address the following characteristics, depending on the type of control device:
For a thermal vapor incinerator, the design evaluation must consider the autoignition temperature of the organic HAP, must consider the vent stream flow rate, and must establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.
Continuous parameter monitoring. The provisions in $(63.2450(k))(1)$ through (6) apply in addition to the requirements for continuous parameter monitoring systems (CPMS) in Subpart SS of this Part 63, except as specified in paragraphs (g)(4)(i) and (ii) of this section.
(i) You may measure pH or caustic strength of the scrubber effluent at least once per day for any halogen scrubber within a CMPU subject to this rule.
 (ii) The requirements in §63.2450(k)(6) to request approval of a procedure to monitor operating parameters does not apply for the purposes of this subpart. You must provide the required information in your notification of compliance status (NOCS) report required by §63.11501(b).
Startup, shutdown, malfunction. Sections $63.996(c)(2)(ii)$ and $63.998(b)(2)(iii)$, $(b)(6)(i)(A)$, $(c)(1)(ii)(E)$ and $(d)(3)$ do not apply for the purposes of this subpart.
<i>Excused excursions.</i> Excused excursions, as defined in Subpart SS of this Part 63, are not allowed.
Parameter monitoring averaging periods. Daily averages required in §63.998(b)(3) apply at all times except during startup and shutdown. Separate averages shall be determined for each period of startup and period of shutdown.
<i>Surge control vessels and bottoms receivers.</i> For each surge control vessel and bottoms receiver that meets the applicability criteria for storage tanks specified in Table 5 to this subpart, you must meet the emission limits and control requirements specified in Table 5 to this subpart.

63.11496(i)	<i>Startup, shutdown, and malfunction.</i> References to SSM provisions in subparts that are referenced in paragraphs (a) through (h) of this section or Tables 2 through 5 to this subpart do not apply.			
Wastewater Require	ements			
63.11498(a)	You must comply with the requirements in paragraph (a)(1) and (2) of this section and in Table 6, Item 1, to this subpart for all wastewater streams from a CMPU subject to this subpart. If the partially soluble HAP concentration in a wastewater stream is equal to or greater than 10,000 parts per million by weight (ppmw) and the wastewater stream contains a separate organic phase, then you must also comply with Table 6, Item 2, to this subpart for that wastewater stream. Partially soluble HAP are listed in Table 7 to this subpart.			
	(1) Except as specified in paragraph (a)(2) of this section, you must determine the total concentration of partially soluble HAP in each wastewater stream using process knowledge, engineering assessment, or test data. Also, you must reevaluate the concentration of partially soluble HAP if you make any process or operational change that affects the concentration of partially soluble HAP in a wastewater stream.			
	(2) You are not required to determine the partially soluble concentration in wastewater that is hard piped to a combustion unit or hazardous waste treatment unit, as specified in Table 6, Item 2.b, to this subpart.			
	(3) Separated organic material that is recycled to a process is no longer wastewater and no longer subject to the wastewater requirements after it has been recycled.			
63.11498(b)	The requirements in Item 2 of Table 6 to this subpart do not apply during periods of startup or shutdown. References to SSM provisions in subparts that are referenced in paragraph (a) of this section or Table 6 to this subpart do not apply.			
Table 6, Item 1.a., of 40 CFR 63, Subpart VVVVV	For each wastewater stream, you must discharge to onsite or offsite wastewater treatment or hazardous waste treatment and maintain records identifying each wastewater stream and documenting the type of treatment that it receives. Multiple wastewater streams with similar characteristics and from the same type of activity in a CMPU may be grouped together for recordkeeping purposes.			
Table 6, Item 2., of40CFR63,Subpart VVVVV	For each wastewater stream containing partially soluble HAP at a concentration $\geq 10,000$ ppmw and separate organic and water phases, you must either			
	a. Use a decanter, steam stripper, thin film evaporator, or distillation unit to separate the water phase from the organic phase(s)			

		i.	For the water phase, comply with the requirements in Item 1 of this table,
		ii.	For the organic phase(s), recycle to a process, use as fuel, or dispose as hazardous waste either onsite or offsite, and
		iii.	Keep records of the wastewater streams subject to this requirement and the disposition of the organic phase(s).
	or		
	b.	Haro haza of tr reco disp	d pipe the entire wastewater stream to onsite treatment as a ardous waste, or hard pipe the entire wastewater stream to a point ransfer to onsite or offsite hazardous waste treatment and keep rds of the wastewater streams subject to this requirement and the osition of the wastewater streams.
Notification, Recor	Notification, Recordkeeping, and Reporting Requirements		
63.11501(a)	Gen prov The requ strin requ	eral vision gene irement ires c	<i>provisions.</i> You must meet the requirements of the general s in 40 CFR Part 63, Subpart A, as shown in Table 9 to this subpart. eral provisions in other parts do not apply except when a ent in an overlapping standard, which you determined is at least as as subpart VVVVV and with which you have opted to comply, compliance with general provisions in another part.
63.11501(b)	<i>Notification of compliance status.</i> Your NOCS required by §63.9(h) must include the following additional information as applicable:		
	(1)	This	certification of compliance, signed by a responsible official:
		(i)	"This facility complies with the management practices in §63.11495."
		(i)	"This facility complies with the requirements in §63.11496 for HAP emissions from process vents."
		(iii)	"This facility complies with the requirements in §63.11496 and §63.11497 for surge control vessels, bottoms receivers, and storage tanks."
		(iv)	"This facility complies with the requirements in §63.11498 to treat wastewater streams."
		(v)	"This facility complies with the requirements in §63.11499 for heat exchange systems."
	(2)	If yo this in §e	bu comply with the alternative standard as specified in Table 2 to subpart or Table 3 to this subpart, include the information specified 63.1258(b)(5), as applicable.

	(3)	If you establish an operating limit for a parameter that will not be monitored continuously in accordance with \S (3.11496(g)(4) and 63.2450(k)(6), provide the information as specified in \S (3.11496(g)(4) and 63.2450(k)(6).	
	(4)	A list of all transferred liquids that are reactive or resinous materials, as defined in §63.11502(b).	
	(5)	If you comply with provisions in an overlapping rule in accordance with §63.11500, identify the affected CMPU, heat exchange system, and/or wastewater system; provide a list of the specific provisions with which you will comply; and demonstrate that the provisions with which you will comply are at least as stringent as the otherwise applicable requirements, including monitoring, recordkeeping, and reporting requirements, in this Subpart VVVVVV.	
63.11501(c)	Recordkeeping. You must maintain files of all information required by this subpart for at least 5 years following the date of each occurrence according to the requirements in $\S63.10(b)(1)$. If you are subject, you must comply with the recordkeeping and reporting requirements of $\S63.10(b)(2)(iii)$ and (vi) through (xiv), and the applicable requirements specified in paragraphs (c)(1) through (8) of this section.		
63.11501(c)(1)	(c)(1) For each CMPU subject to this subpart, you must keep in paragraphs (c)(1)(i) through (viii) of this secti		
	(i)	Records of management practice inspections, repairs, and reasons for any delay of repair, as specified in §63.11495(a)(5).	
	(ii)	Records of small heat exchange system inspections, demonstrations of indications of leaks that do not constitute leaks, repairs, and reasons for any delay in repair as specified in §63.11495(b).	
	(iii)	If batch process vent emissions are less than 10,000 lb/yr for a CMPU, records of batch process vent emission calculations, as specified in $63.11496(a)(1)$, the number of batches operated each month, as specified in $63.11496(a)(3)$, and any updated emissions calculations, as specified in $63.11496(a)(3)$. Alternatively, keep records of the worst-case processes or organic HAP usage, as specified in $63.11496(a)(2)$ and (4), respectively.	
	(iv)	Records of all TRE calculations for continuous process vents as specified in §63.11496(b)(2).	
	(v)	Records of metal HAP emission calculations as specified in $63.11496(f)(1)$ and (2). If total uncontrolled metal HAP process vent emissions from a CMPU subject to this subpart are estimated to be less than 400 lb/yr, also keep records of either the number of batches per month or operating hours, as specified in $63.11496(f)(2)$.	

	(vi) Records identifying wastewater streams and the type of treatment they receive, as specified in Table 6 to this subpart.
	(vii) Records of the date, time, and duration of each malfunction of operation of process equipment, control devices, recovery devices, or continuous monitoring systems used to comply with this subpart that causes a failure to meet a standard. The record must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standard, and a description of the method used to estimate the emissions.
	(viii) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11495(d), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
63.11501(c)(2)	For batch process vents subject to Table 2 to this subpart and continuous process vents subject to Table 3 to this subpart, you must keep records specified in paragraphs $(c)(2)(i)$ or (ii) of this section, as applicable.
	(i) If you route emissions to a control device other than a flare, keep records of performance tests, if applicable, as specified in §63.998(a)(2)(ii) and (4), keep records of the monitoring system and the monitored parameters, as specified in §63.998(b) and (c), and keep records of the closed-vent system, as specified in §63.998(d)(1). If you use a recovery device to maintain the TRE above 1.0 for a continuous process vent, keep records of monitoring parameters during the TRE index value determination, as specified in §63.998(a)(3).
	 (ii) If you route emissions to a flare, keep records of the flare compliance assessment, as specified in §63.998(a)(1)(i), keep records of the pilot flame monitoring, as specified in §63.998(a)(1)(ii) and (iii), and keep records of the closed-vent system, as specified in §63.998(d)(1).
63.998(b)(1)	Continuous records. Where this subpart requires a continuous record, the owner or operator shall maintain a record as specified in paragraphs $(b)(1)(i)$ through (iv) of this section, as applicable:
	 (i) A record of values measured at least once every 15 minutes or each measured value for systems which measure more frequently than once every 15 minutes; or
	 (ii) A record of block average values for 15-minute or shorter periods calculated from all measured data values during each period or from at least one measured data value per minute if measured more frequently than once per minute.

	(iii) Where data is collected from an automated continuous parameter monitoring system, the owner or operator may calculate and retain block hourly average values from each 15-minute block average period or from at least one measured value per minute if measured more frequently than once per minute, and discard all but the most recent three valid hours of continuous (15-minute or shorter) records, if the hourly averages do not exclude periods of CPMS breakdown or malfunction. An automated CPMS records the measured data and calculates the hourly averages through the use of a computerized data acquisition system.			
	(iv) A record as required by an alternative approved under a referencing subpart.			
63.998(b)(2)	<i>Excluded data.</i> Monitoring data recorded during periods identified in paragraphs $(b)(2)(i)$ through (iii) of this section shall not be included in any average computed to determine compliance with an emission limit in a referencing subpart.			
	(i) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments;			
	 (ii) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; and 			
	 (iii) Startups, shutdowns, and malfunctions, if the owner or operator operates the source during such periods in accordance with §63.1111(a) and maintains the records specified in paragraph (d)(3) of this section. 			
63.998(b)(3)	Records of daily averages. In addition to the records specified in paragraph (a), owners or operators shall keep records as specified in paragraphs $(b)(3)(i)$ and (ii) of this section and submit reports as specified in §63.999(c), unless an alternative recordkeeping system has been requested and approved under a referencing subpart.			
	 (i) Except as specified in paragraph (b)(3)(ii) of this section, daily average values of each continuously monitored parameter shall be calculated from data meeting the specifications of paragraph (b)(2) of this section for each operating day and retained for five (5) years. 			

		(A) The daily average shall be calculated as the average of all values for a monitored parameter recorded during the operating day. The average shall cover a 24-hour period if operation is continuous, or the period of operation per operating day if operation is not continuous (e.g., for transfer racks the average shall cover periods of loading). If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the daily average instead of all measured values.
		(B) The operating day shall be the period defined in the operating permit or in the notification of compliance status. It may be from midnight to midnight or another daily period.
	(ii)	If all recorded values for a monitored parameter during an operating day are within the range established in the NOCS or in the operating permit, the owner or operator may record that all values were within the range and retain this record for five (5) years rather than calculating and recording a daily average for that operating day. In such cases, the owner or operator may not discard the recorded values as allowed in paragraph (b)(1)(iii) of this section.
63.998(c)(1)	Mor rack spec subp	<i>nitoring system records.</i> For process vents and high throughput transfer s, the owner or operator subject to this subpart shall keep the records ified in this paragraph, as well as records specified elsewhere in this part.
	(i)	For a CPMS used to comply with this part, a record of the procedure used for calibrating the CPMS.
	(ii)	For a CPMS used to comply with this subpart, records of the information specified in paragraphs $(c)(ii)(A)$ through (H) of this section, as indicated in a referencing subpart.
		(A) The date and time of completion of calibration and preventive maintenance of the CPMS.
		(B) The "as found" and "as left" CPMS readings, whenever an adjustment is made that affects the CPMS reading and a "no adjustment" statement otherwise.
		(C) The start time and duration or start and stop times of any periods when the CPMS is inoperative.
		(D) Records of the occurrence and duration of each start-up, shutdown, and malfunction of CPMS used to comply with this subpart during which excess emissions (as defined in a referencing subpart) occur.

		(E)	For each start-up, shutdown, and malfunction during which excess emissions as defined in a referencing subpart occur, records whether the procedures specified in the source's start-up, shutdown, and malfunction plan were followed, and documentation of actions taken that are not consistent with the plan. These records may take the form of a "checklist," or other form of recordkeeping that confirms conformance with the start- up, shutdown, and malfunction plan for the event.
		(F)	Records documenting each start-up, shutdown, and malfunction event.
		(G)	Records of CPMS start-up, shutdown, and malfunction event that specify that there were no excess emissions during the event, as applicable.
		(H)	Records of the total duration of operating time.
63.998(c)(2)	Com	busti	on control and halogen reduction device monitoring records.
	(i)	Each redu recon mon 63.9 mon refer	n owner or operator using a combustion control or halogen ction device to comply with this subpart shall keep the following rds up-to-date and readily accessible, as applicable. Continuous rds of the equipment operating parameters specified to be itored under §§63.988(c) (incinerator, boiler, and process heater itoring), 63.994(c) (halogen reduction device monitoring), and 95(c) (other combustion systems used as control device itoring) or approved by the Administrator in accordance with a rencing subpart.
	(ii)	Each of each deter of th the t the t record	h owner or operator shall keep records of the daily average value ach continuously monitored parameter for each operating day rmined according to the procedures specified in paragraph (b)(3)(i) his section. For catalytic incinerators, record the daily average of emperature upstream of the catalyst bed and the daily average of temperature differential across the bed. For halogen scrubbers rd the daily average pH and the liquid-to-gas ratio.
	(iii)	Each keep durin bour	a owner or operator subject to the provisions of this subpart shall o up-to-date, readily accessible records of periods of operation ng which the parameter boundaries are exceeded. The parameter adaries are established pursuant to $(63.996)(c)(6)$.

63.998(c)(3)	Monitoring records for recovery devices, absorbers, condensers, carbon adsorbers or other noncombustion systems used as control devices.				
	 (i) Each owner or operator using a recovery device to achieve and maintain a TRE index value greater than the control applicability level specified in the referencing subpart but less than 4.0 or using an absorber, condenser, carbon adsorber or other non-combustion system as a control device shall keep readily accessible, continuous records of the equipment operating parameters specified to be monitored under §§63.990(c) (absorber, condenser, and carbon adsorber monitoring), 63.993(c) (recovery device monitoring), or 63.995(c) (other noncombustion systems used as a control device monitoring) or as approved by the Administrator in accordance with a referencing subpart. For transfer racks, continuous records are required while the transfer vent stream is being vented. 				
	 (ii) Each owner or operator shall keep records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in paragraph (b)(3)(i) of this section. If carbon adsorber regeneration stream flow and carbon bed regeneration temperature are monitored, the records specified in paragraphs (c)(3)(ii)(A) and (B) of this section shall be kept instead of the daily averages. 				
	(A) Records of total regeneration stream mass or volumetric flow for each carbon-bed regeneration cycle.				
	(B) Records of the temperature of the carbon bed after each regeneration and within 15 minutes of completing any cooling cycle.				
	 (iii) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible records of periods of operation during which the parameter boundaries are exceeded. The parameter boundaries are established pursuant to §63.996(c)(6). 				
63.998(d)(1)	Closed vent system records. For closed vent systems the owner or operator shall record the information specified in paragraphs $(d)(1)(i)$ through (iv) of this section, as applicable.				
	 (i) For closed vent systems collecting regulated material from a regulated source, the owner or operator shall record the identification of all parts of the closed vent system, that are designated as unsafe or difficult to inspect, an explanation of why the equipment is unsafe or difficult to inspect, and the plan for inspecting the equipment required by §63.983(b)(2)(ii) or (iii) of this section. 				

(ii)	For a ver a ver own eithe	each closed vent system that contains bypass lines that could divert in stream away from the control device and to the atmosphere, the er or operator shall keep a record of the information specified in er paragraph (d)(1)(ii)(A) or (B) of this section, as applicable.
	(A)	Hourly records of whether the flow indicator specified under $(63.983(a)(3)(i))$ was operating and whether a diversion was detected at any time during the hour, as well as records of the times of all periods when the vent stream is diverted from the control device or the flow indicator is not operating.
	(B)	Where a seal mechanism is used to comply with §63.983(a)(3)(ii), hourly records of flow are not required. In such cases, the owner or operator shall record that the monthly visual inspection of the seals or closure mechanisms has been done, and shall record the occurrence of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has been broken.
(iii)	For a sour infor section	a closed vent system collecting regulated material from a regulated ce, when a leak is detected as specified in $(d)(1)(iii)(A)$ through (F) of this on shall be recorded and kept for five (5) years.
	(A)	The instrument and the equipment identification number and the operator name, initials, or identification number.
	(B)	The date the leak was detected and the date of the first attempt to repair the leak.
	(C)	The date of successful repair of the leak.
	(D)	The maximum instrument reading measured by the procedures in §63.983(c) after the leak is successfully repaired or determined to be nonrepairable.
	(E)	"Repair delayed" and the reason for the delay if a leak is not repaired within fifteen (15) days after discovery of the leak. The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
	(F)	Copies of the periodic reports as specified in §63.999(c), if records are not maintained on a computerized database capable of generating summary reports from the records.

	 (iv) For each instrumental or visual inspection conducted in accordance with §63.983(b)(1) for closed vent systems collecting regulated material from a regulated source during which no leaks are detected, the owner or operator shall record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. 			
63.11501(c)(5)	For each wastewater stream subject to Item 2 in Table 6 to this subpart, keep records of the wastewater stream identification and the disposition of the organic phase(s), as specified in Item 2 to Table 6 to this subpart.			
63.11501(c)(8)	For continuous process vents subject to Table 3 to this subpart, keep records of the occurrence and duration of each startup and shutdown of operation of process equipment, or of air pollution control and monitoring equipment.			
63.11501(d)	Semiannual Compliance Reports. You must submit semiannual compliance reports that contain the information specified in paragraphs (d)(1) through (7) of this section, as applicable. Reports are required only for semiannual periods during which you experienced any of the events described in paragraphs (d)(1) through (8) of this section.			
	(1) Deviations. You must clearly identify any deviation from the requirements of this subpart.			
	(2) Delay of repair for a large heat exchange system. You must include the information specified in §63.104(f)(2) each time you invoke the delay of repair provisions for a heat exchange system with a cooling water flow rate equal to or greater than 8,000 gal/min.			
	(3) Delay of leak repair. You must provide the following information for each delay of leak repair beyond 15 days for any process equipment, storage tank, surge control vessel, bottoms receiver, and each delay of leak repair beyond 45 days for any heat exchange system with a cooling water flow rate less than 8,000 gal/min: information on the date the leak was identified, the reason for the delay in repair, and the date the leak was repaired.			
	(4) Process change. You must report each process change that affects a compliance determination and submit a new certification of compliance with the applicable requirements in accordance with the procedures specified in paragraph (b) of this section.			
	(5) <i>Data for the alternative standard.</i> If you comply with the alternative standard, as specified in Table 2 to this subpart or Table 3 to this subpart, report the information required in §63.1258(b)(5).			
	(6) <i>Overlapping rule requirements.</i> Report any changes in the overlapping provisions with which you comply.			

(7)	<i>Reactive and resinous materials.</i> Report any transfer of liquids that are reactive or resinous materials, as defined in §63.11502(b), and not included in the NOCS.
(8)	<i>Malfunctions.</i> If a malfunction occurred during the reporting period, the report must include the number of instances of malfunctions that caused emissions in excess of a standard. For each malfunction that caused emissions in excess of a standard, the report must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standard, and a description of the method used to estimate the emissions. The report must also include a description of actions you took during a malfunction of an affected source to minimize emissions in accordance with §63.11495(d), including actions taken to correct a malfunction.

§4-41, Rule 16.5(c) (40 CFR 63.980–63.999; 63.1257; 63.2470; and 63.11494–63.11503)

EMISSION UNIT SPECIAL CONDITIONS

Emission Unit 014 – Plant Fugitive Emissions

- 1.0 A leak detection and repair (LDAR) program shall be complied with by the permittee for all applicable equipment components at the facility that contain or contact a process fluid that contains an organic hazardous air pollutant (HAP), such as 1,3-butadiene, styrene, or acrylic acid, that is in accordance with or at least as stringent as §63.11495(a)(3), (4), and (5) and §63.11502 of "National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources," Title 40 *Code of Federal Regulations* Part 63, Subpart VVVVV. Such equipment components may include connectors, valves, pumps, agitators, compressors, pressure relief devices, open-ended lines, and instrumentation systems. *§4-41, Rule 16.5(c) [40 CFR 63.11495(a)(3), (4), and (5) and 63.11502]; §4-57(c)(1)*
- 2.0 Each of Reactors #1, #5, #6, #7, #8, #9, #10, #11, and #12 is equipped with a rupture disk that is designed to break in the event of an unsafe pressure buildup, and the twelve rupture disks are vented to a containment tank. If volatile organic compound (VOC)/HAP emissions of 1,3-butadiene, styrene, or acrylic acid or emissions of any other air pollutant are released from any of the reactor rupture disks or from the containment tank, the owner or operator shall promptly notify the Bureau Director, within twenty-four hours of the onset of the release. $\S4-57(c)(1)$

Emission Unit 017 – Ten Flash Tanks, Latex Stripping Column, and Surge Tank

- 1.0 Volatile organic compound (VOC)/organic hazardous air pollutant (HAP) emissions from Flash Tanks #31, #32, #33, #34, #35, #36, #37, #38, #39, and #40 and the latex stripping column shall be vented to and controlled by three condensers (two of which are used in parallel) followed by a John Zink/McGill CVC-60 thermal oxidizer. These emissions from the ten flash tanks shall be controlled to at least 85% and these emissions from the latex stripping column shall be controlled to at least 95% (except that control to at least 85%) by weight is acceptable during periods of startup or shutdown). Only natural gas may be burned in the pilot flame of the thermal oxidizer. The three condensers and thermal oxidizer shall be operated in accordance with the permittee's standard operating procedures. Neither any of the ten flash tanks nor the latex stripping column shall be operated if the thermal oxidizer is not in operation. These requirements are in accordance with §63.11496(a) and Table 2, Item 1.a., (for the ten flash tanks) and §63.11496(b) and Table 3, Item 1.a., (for the latex stripping column) of "National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources," Title 40 Code of Federal Regulations Part 63, Subpart VVVVV. These requirements are also best available control technology (BACT), as determined by the Bureau Director, for the latex stripping column. *§4-41.* Rules 16.5(c) [40 CFR 63.11496(a) and (b)] and 25.3; §4-57(a)(1)
- 2.0 The operating temperature of the thermal oxidizer shall be maintained at **no less than 1.400** °F, based on 15-minute block average values, while the thermal oxidizer is required to be in use. [This operating temperature was determined through a design evaluation that was conducted in accordance with §63.1257(a)(1) "National Emission Standards for Pharmaceuticals Production," Title 40 Code of Federal Regulations Part 63, Subpart GGG, as stipulated by §63.11496(g)(2) of 40 CFR Part 63, Subpart VVVVV.] The operating temperature shall be continuously monitored and recorded while the thermal oxidizer is required to be in use in accordance with §63.988(c) and §63.998(b) and (c) of "National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process," Title 40 Code of Federal Regulations Part 63, Subpart SS, as stipulated by §63.11496(a) and (b) of Subpart VVVVVV, and in accordance with §63.2450(k)(1), (2), and (6) of "National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing," Title 40 Code of Federal Regulations Part 63, Subpart FFFF, as stipulated by §63.11496(g)(4) of Subpart VVVVV. The temperature control system for the thermal oxidizer shall be equipped with an alarm that will activate at any time that the temperature drops below 1,400 °F while VOC/organic HAP emissions are being vented to the thermal oxidizer from any of the ten flash tanks or from the latex stripping column. These requirements are BACT, as determined by the Bureau Director, for the latex stripping column. §4-41, Rules 16.5(c) $[40 \ CFR \ 63.980-63.999; \ 63.1257(a)(1); \ 63.2450(k); \ and \ 63.11496(a), \ (b), \ and \ (g)] \ and$ 25.3; §4-57(a)(1); §4-57(c)(1)
- 3.0 The maximum allowable VOC/HAP emissions of 1,3-butadiene from the ten flash tanks and latex stripping column combined are 0.50 pound/hour. This emission limitation is

BACT, as determined by the Bureau Director, for the latex stripping column. §4-41, Rule 25.3; §4-57(a)(1)

- 4.0 The maximum allowable VOC/HAP emissions of styrene from the ten flash tanks and latex stripping column combined are 0.10 pound/hour. This emission limitation is BACT, as determined by the Bureau Director, for the latex stripping column. §4-41, Rule 25.3; \$4-57(a)(1)
- 5.0 The maximum allowable emissions of total VOC (including HAP emissions of 1,3-butadiene, styrene, and ethylbenzene) from the ten flash tanks and latex stripping column combined are 0.80 pound/hour. This emission limitation is BACT, as determined by the Bureau Director, for the latex stripping column. \$4-41, Rule 25.3; \$4-57(a)(1)
- 6.0 The maximum allowable emissions of total VOC (including HAP emissions of 1,3-butadiene and styrene) from Surge Tank 2405 are 0.03 pound/hour. This emission limitation is BACT, as determined by the Bureau Director. §4-41, Rule 25.3
- 7.0 Testing of any of the ten flash tanks or the latex stripping column, as controlled by the thermal oxidizer, or testing of Surge Tank 2405 to determine the VOC/HAP emissions of 1,3-butadiene and styrene and to determine the emissions of total VOC may be required by the Bureau Director. If required, these tests shall consist of and be performed in accordance with test methods approved by the U.S. EPA and be performed in accordance with §4-3. §4-3; §4-8(c)(8); §4-57(c)(1)
- 8.0 The maximum allowable emissions of particulate matter (PM) from the thermal oxidizer are 0.20 pound/hour. This emission limitation is best available control technology (BACT), as determined by the Bureau Director. \$4-8(e)(2)
- 9.0 Visible emissions from the thermal oxidizer shall not exceed ten (10) percent opacity for an aggregate of more than five (5) minutes in any period of one hour or more than twenty (20) minutes in any period of twenty-four hours. This limitation is BACT, as determined by the Bureau Director. \$4-8(e)(2)
- 10.0 Testing of the thermal oxidizer to determine the emissions of PM, nitrogen oxides (NO_X), and carbon monoxide (CO) and to determine the opacity of the emissions may be required by the Bureau Director. If required, these tests shall consist of and be performed in accordance with test methods approved by the U.S. EPA and be performed in accordance with §4-3. §4-3; §4-8(c)(8); §4-57(c)(1)

Emission Unit 030 – Acrylic Acid and Methacrylic Acid Storage Tanks

- 1.0 A closed-loop vapor balance system shall be utilized to conduct any loading of the acrylic acid storage tank. This requirement is best available control technology (BACT), as determined by the Bureau Director. §4-41, Rule 25.3
- 2.0 Volatile organic compound (VOC) emissions of methacrylic acid from the methacrylic acid day tank shall be vented to and controlled by a carbon adsorption drum. The carbon drum shall be operated in accordance with the permittee's standard operating procedures. The tank shall not be loaded if the carbon drum is not in operation. §4-57(a)(1)
- 3.0 The maximum allowable VOC/hazardous air pollutant (HAP) emissions of acrylic acid from the acrylic acid storage tank are 0.005 pound/hour. This emission limitation is BACT, as determined by the Bureau Director. §4-41, Rule 25.3
- 4.0 The maximum allowable VOC emissions of methacrylic acid from the methacrylic acid day tank are 0.005 pound/hour. This emission limitation is BACT, as determined by the Bureau Director. §4-41, Rule 25.3
- 5.0 Appropriate methods and technology shall be utilized to reduce or control VOC/HAP emissions of acrylic acid from the acrylic acid storage tank and VOC emissions of methacrylic acid from the methacrylic acid day tank so as to prevent odors from these emissions from being detectable beyond the facility property boundaries. These requirements are BACT, as determined by the Bureau Director. *§4-41, Rule 25.3*
- 6.0 Testing of the acrylic acid storage tank to determine the VOC/HAP emissions of acrylic acid or testing of the methacrylic acid day tank, as controlled by the carbon adsorption drum, to determine the VOC emissions of methacrylic acid may be required by the Bureau Director. If required, these tests shall consist of and be performed in accordance with test methods approved by the U.S. EPA and be performed in accordance with §4-3. §4-3;§4-8(c)(8); §4-57(c)(1)

Emission Unit 032 – Wastewater Treatment Process

- 1.0 The wastewater treatment process shall be operated in accordance with the applicable requirements of §63.11498 of "National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources," Title 40 *Code of Federal Regulations* Part 63, Subpart VVVVV. §4-41, Rule 16.5(c) (40 CFR 63.11498)
- 2.0 The throughput of water for the wastewater air-stripping column shall not exceed 5,400 gallons/hour and 32,000,000 gallons during any period of twelve (12) consecutive calendar months. These limitations are best available control technology (BACT), as determined by the Bureau Director. §4-41, Rule 25.3
- 3.0 The maximum allowable emissions of total volatile organic compounds (VOC) [including hazardous air pollutant (HAP) emissions of styrene] from the wastewater air-stripping column are 1.35 pounds per 5,400 gallons of water throughput for the column. This emission limitation is BACT, as determined by the Bureau Director. This emission limitation, in combination with the water throughput limitations in the above Special Condition 2.0, results in maximum allowable total VOC emissions of 1.35 pounds/hour and 4.0 tons during any period of twelve (12) consecutive calendar months. §4-41, Rule 25.3
- 4.0 A log shall be maintained, on the premises, in which the **throughput of water** for the wastewater air-stripping column during each **calendar month** is recorded. §4-57(c)(1)
- 5.0 Appropriate methods and technology shall be utilized to reduce or control gaseous emissions from the collection sump, two white water tanks, four chemical-treatment tanks, dissolved air flotation (DAF) unit, two clear water tanks, filter press, and wastewater air-stripping column of the wastewater treatment process so as to prevent odors from these emissions from being detectable beyond the facility property boundaries. This requirement is reasonable and proper, as determined by the Bureau Director. §4-41, Rule 23
- 6.0 Analyses of samples of the water that is treated in the wastewater air-stripping column to determine the concentrations of styrene and total VOC may be required by the Bureau Director. If required, the samples shall be collected both at a point prior to where water enters the column and at a point following where water exits the column. The analyses shall be performed in accordance with methods approved by the U.S. EPA. $\S4-57(c)(1)$

Emission Unit 033 – Styrene Storage Tank

- 1.0 Volatile organic compound (VOC)/hazardous air pollutant (HAP) emissions of styrene from the styrene storage tank shall be vented to and controlled by a condenser. In addition, the VOC/HAP emissions of styrene from this tank shall be reduced by the use of a styrene cooling system. The condenser and cooling system shall be operated in accordance with the permittee's standard operating procedures. The tank shall not be loaded if the condenser is not in operation, and it shall not be used if the cooling system is not in operation. These requirements are best available control technology (BACT), as determined by the Bureau Director. §4-41, Rule 25.3
- 2.0 The maximum allowable VOC/HAP emissions of styrene from the styrene storage tank are 2.50 pounds/hour and 0.90 ton during any period of twelve (12) consecutive calendar months. These emission limitations are BACT, as determined by the Bureau Director. \$4-41, Rule 25.3
- 3.0 A log shall be maintained, on the premises, in which the **quantity of each load of styrene** that is delivered to the styrene storage tank is recorded. \$4-57(c)(1)
- 4.0 Testing of the styrene storage tank, as controlled by the condenser, to determine the VOC/HAP emissions of styrene may be required by the Bureau Director. If required, this test shall consist of and be performed in accordance with test methods approved by the U.S. EPA and be performed in accordance with §4-3. \$4-3; \$4-8(c)(8); \$4-57(c)(1)

Emission Unit 037 – Two tert-Dodecyl Mercaptan Storage Tanks

- 1.0 Volatile organic compound (VOC) emissions of tert-dodecyl mercaptan from each of the two tert-dodecyl mercaptan storage tanks shall be vented to and controlled by a carbon adsorption drum. VOC emissions of tert-dodecyl mercaptan that result from tank truck pressure-relief venting after unloading shall also be vented to and controlled by a carbon adsorption drum. The three carbon drums shall be operated in accordance with the permittee's standard operating procedures. For each of the two tanks, the tank shall not be loaded if its carbon drum is not in operation. Pressure relief venting of a tank truck shall not be performed if its carbon drum is not in operation. These requirements are best available control technology (BACT), as determined by the Bureau Director. §4-41, Rule 25.3
- 2.0 The maximum allowable VOC emissions of tert-dodecyl mercaptan from the initial tertdodecyl mercaptan storage tank, including VOC emissions of tert-dodecyl mercaptan that result from tank truck pressure-relief venting after the storage tank has been loaded, are 0.50 pound/day and 6.0 pounds during any period of twelve (12) consecutive calendar months. These emission limitations are BACT, as determined by the Bureau Director. §4-41, Rule 25.3
- 3.0 The maximum allowable VOC emissions of tert-dodecyl mercaptan from the tert-dodecyl mercaptan day tank are 0.50 pound/day and 6.0 pounds during any period of twelve (12) consecutive calendar months. These emission limitations are BACT, as determined by the Bureau Director. §4-41, Rule 25.3
- 4.0 Appropriate methods and technology shall be utilized to reduce or control VOC emissions of tert-dodecyl mercaptan from the two tert-dodecyl mercaptan storage tanks so as to prevent odors from these emissions from being detectable beyond the facility property boundaries. This requirement is BACT, as determined by the Bureau Director. §4-41, *Rule 25.3*
- 5.0 Testing of either of the two tert-dodecyl mercaptan storage tanks, as controlled by a carbon adsorption drum, to determine the VOC emissions of tert-dodecyl mercaptan may be required by the Bureau Director. If required, this test shall consist of and be performed in accordance with test methods approved by the U.S. EPA and be performed in accordance with §4-3. §4-3; §4-8(c)(8); §4-57(c)(1)

Emission Unit 039 – Additives Makeup System

- 1.0 The maximum allowable emissions of particulate matter (PM) from the five additives makeup tanks, weigh scale, and loading hopper combined of the additives makeup system are 0.25 grain per standard cubic foot (gr/scf), which is equivalent to 3.21 pounds/hour for the reported exhaust flow rate of 1,500 standard cubic feet per minute (scfm). §4-41, Rule 10.7
- 2.0 Visible emissions from the five additives makeup tanks, weigh scale, and loading hopper of the additives makeup system shall not exceed twenty (20) percent opacity for an aggregate of more than five (5) minutes in any period of one hour or more than twenty (20) minutes in any period of twenty-four hours. §4-41, Rule 3
- 3.0 Testing of any of the five additives makeup tanks, the weigh scale, or the loading hopper of the additives makeup system to determine the emissions of PM and to determine the opacity of the emissions may be required by the Bureau Director. If required, these tests shall consist of and be performed in accordance with test methods approved by the U.S. EPA and be performed in accordance with §4-3. §4-3; §4-8(c)(8); §4-57(c)(1)
- 4.0 Testing of any of the five additives makeup tanks or nine additives storage tanks of the additives makeup system to determine the volatile organic compound (VOC)/hazardous air pollutant (HAP) emissions of acrylic acid may be required by the Bureau Director. If required, this test shall consist of and be performed in accordance with test methods approved by the U.S. EPA and be performed in accordance with §4-3. §4-3; §4-8(c)(8); §4-57(c)(1)

Emission Unit 040 – Hurst Boilers #1 and #2

- 1.0 Only natural gas may be burned in Hurst Boilers #1 and #2. (Each of these two boilers has a heat input capacity of 25.2×10^6 Btu/hour). §4-57(a)(1)
- 2.0 Preventative maintenance on Boilers #1 and #2 shall be performed at regular intervals in accordance with the permittee's maintenance procedures. \$4-57(a)(1)
- 3.0 Boilers #1 and #2 are subject to and the permittee shall comply with "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," Title 40 *Code of Federal Regulations* Part 60, Subpart Dc. In accordance with this subpart, a log shall be maintained, on the premises, in which the **quantity of natural gas** that is burned in Boilers #1 and #2 during each **calendar month** is recorded. §4-41, Rule 15.1 (40 CFR 60.40c-60.48c)
- 4.0 The maximum allowable emissions of particulate matter (PM) from each of Boilers #1 and #2 are 0.25 pound/hour. These emission limitations are reasonable and proper, as determined by the Bureau Director. §4-41, Rule 27.3
- 5.0 Visible emissions from Boilers #1 and #2 shall not exceed ten (10) percent opacity for an aggregate of more than five (5) minutes in any period of one hour or more than twenty (20) minutes in any period of twenty-four hours. This limitation is reasonable and proper, as determined by the Bureau Director. *§4-41, Rule 27.3*
- 6.0 Testing of either Boiler #1 or #2 to determine the emissions of PM, nitrogen oxides (NO_X), and carbon monoxide (CO) and to determine the opacity of the emissions may be required by the Bureau Director. If required, these tests shall consist of and be performed in accordance with test methods approved by the U.S. EPA and be performed in accordance with §4-3. §4-3; §4-8(c)(8); §4-57(c)(1)

Emission Unit 041 – Butyl Acrylate Storage Tank

- 1.0 A closed-loop vapor balance system shall be utilized to conduct any loading of the butyl acrylate storage tank. This requirement is best available control technology (BACT), as determined by the Bureau Director. §4-41, Rule 25.3
- 2.0 Volatile organic compound (VOC) emissions of butyl acrylate from the butyl acrylate storage tank shall be reduced by the use of a butyl acrylate cooling system as needed during times of sufficiently warm ambient temperature. The cooling system shall be operated in accordance with the permittee's standard operating procedures. These requirements are BACT, as determined by the Bureau Director. \$4-41, Rule 25.3
- 3.0 The maximum allowable VOC emissions of butyl acrylate from the butyl acrylate storage tank are 0.08 pound/hour and 0.03 ton during any period of twelve (12) consecutive calendar months. These emission limitations are BACT, as determined by the Bureau Director. §4-41, Rule 25.3
- 4.0 A log shall be maintained, on the premises, in which the **quantity of each load of butyl acrylate** that is delivered to the butyl acrylate storage tank is recorded. \$4-57(c)(1)
- 5.0 Appropriate methods and technology shall be utilized to reduce or control VOC emissions of butyl acrylate from the butyl acrylate storage tank so as to prevent odors from these emissions from being detectable beyond the facility property boundaries. This requirement is BACT, as determined by the Bureau Director. §4-41, Rule 25.3
- 6.0 Testing of the butyl acrylate storage tank to determine the VOC emissions of butyl acrylate may be required by the Bureau Director. If required, this test shall consist of and be performed in accordance with test methods approved by the U.S. EPA and be performed in accordance with §4-3. \$4-3; \$4-8(c)(8); \$4-57(c)(1)

Emission Unit 042 – Cummins Emergency Generator Engine

- 1.0 Only diesel fuel (No. 2 fuel oil) may be burned in the Cummins emergency generator engine. [This engine has an approximate heat input capacity of 1.19×10^6 Btu/hour and a maximum power output of 162 horsepower (120.8 kilowatts).] §4-57(a)(1)
- 2.0 The emergency generator engine is subject to and the permittee shall comply with "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines," Title 40 *Code of Federal Regulations* Part 63, Subpart ZZZZ. Full compliance with Subpart ZZZZ shall be demonstrated by meeting all applicable requirements of "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines," Title 40 *Code of Federal Regulations* Part 60, Subpart IIII. *§4-41, Rules 15.1 (40 CFR 60.4201–60.4219) and 16.5(c) [40 CFR 63.6590(c)(1)]*
- 3.0 The emergency generator engine shall be operated and maintained according to the manufacturer's emission-related instructions. §4-41, Rule 15.1 [40 CFR 60.4211(a)(1)]
- 4.0 The emergency generator engine shall be operated for no more than 100 hours per calendar year for testing and other specified purposes. There is no time limit on its use in emergency situations. §4-41, Rule 15.1 [40 CFR 60.4211(f)]
- 5.0 A log shall be maintained, on the premises, in which the date, elapsed time, and purpose (e.g., testing or emergency use) of each operation of the emergency generator engine are recorded. The cumulative time of operation shall be indicated by a **non-resettable hour meter**. \$4-41, Rule 15.1 [40 CFR 60.4209(a) and 60.4214(b)]; \\$4-57(c)(1)
- 6.0 The sulfur content of the diesel fuel that is burned in the emergency generator engine shall not exceed **15 parts per million (0.0015 percent)** by weight. §4-41, Rule 15.1 [40 CFR 60.4207(b)]; 40 CFR 1090.305(b)
- 7.0 The maximum allowable emissions of particulate matter (PM) from the emergency generator engine are 0.05 pound/hour. This emission limitation is reasonable and proper, as determined by the Bureau Director. §4-41, Rule 27.3
- 8.0 Allowable emissions of nitrogen oxides (NO_X) and volatile organic compounds (VOC) combined from the emergency generator engine are a weighted cycle average of 4.0 grams per kilowatt-hour. §4-41, Rule 15.1 [40 CFR 60.4202(a)(2) and 60.4205(b)]; 40 CFR 1039 Appendix I
- 9.0 Allowable emissions of carbon monoxide (CO) from the emergency generator engine are a weighted cycle average of 5.0 grams per kilowatt-hour. §4-41, Rule 15.1 [40 CFR 60.4202(a)(2) and 60.4205(b)]; 40 CFR 1039 Appendix I

- 10.0 Visible emissions from the emergency generator engine shall not exceed fifteen (15) percent opacity for an aggregate of more than five (5) minutes in any period of one hour or more than twenty (20) minutes in any period of twenty-four hours. This limitation is reasonable and proper, as determined by the Bureau Director. §4-41, Rule 27.3
- 11.0 Visible emissions from the emergency generator engine shall not exceed twenty (20) percent opacity for more than sixty (60) consecutive seconds. This limitation is reasonable and proper, as determined by the Bureau Director. §4-41, Rules 9.2 and 27.3
- 12.0 Testing of the emergency generator engine to determine the emissions of PM, NO_X, CO, and VOC and to determine the opacity of the emissions may be required by the Bureau Director. If required, these tests shall consist of and be performed in accordance with test methods approved by the U.S. Environmental Protection Agency and be performed in accordance with §4-3. §4-3; §4-8(c)(8); §4-57(c)(1)

PERMIT SHIELD

At the request of the responsible official who signed and certified to the Part 70 permit application, compliance with the conditions of this permit shall be deemed compliance with any "applicable requirements," as defined in §4-53, as of the date of permit issuance that (1) are included and specifically identified in this permit, or (2) have been determined in writing in this permit not to be applicable to this permittee as specifically identified. This permit shield does not alter or affect the following:

- 1.0 The provisions of Title 42 U.S.C. §7603 (emergency orders), including the authority of the Administrator of the U.S. EPA, the Board, or the Bureau Director thereunder; \$4-57(f)(3)(i)
- 2.0 The liability of a permittee of a source for any violation of applicable requirements prior to or at the time of permit issuance; \$4-57(f)(3)(ii)
- 3.0 The applicable requirements of the acid rain program promulgated under Title IV of the Clean Air Act consistent with Title 42 U.S.C. \$7651g(a); \$4-57(f)(3)(iii)
- 4.0 The ability of the U.S. EPA to obtain information from a source pursuant to Title 42 U.S.C. §7414, or of the Board or the Bureau Director to obtain information from a source pursuant to the Chattanooga Air Pollution Control Ordinance or any other provision of local, state, or federal law; and §4-57(f)(3)(iv)
- 5.0 The right of any person to damages or other relief on account of injury to persons or property and to maintain any action or other appropriate proceeding therefor; nor does it abridge, limit, impair, create, enlarge, or otherwise affect substantively or procedurally this right. §4-5(1)

§4-57(f)