

***DRAFT* Part 70 Permit  
No. 47-065-3100**

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

Issued to:

**BASF CORPORATION (PLANT #1)  
32 LOST MOUND DRIVE  
CHATTANOOGA, TENNESSEE 37406-1029**

Designated Representative:

Bradley Siegan  
Senior EHS Specialist  
Telephone: 423.838.0411

Responsible Official:

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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

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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
001	3100-30188801-01C	Emergency Flare and Plant Fugitive Emissions
003	3100-30102613-03C*	1,3-Butadiene Recovery System
004	3100-10200602-04C	Babcock & Wilcox Boilers A and B
008	3100-40703613-08C	Two Styrene Storage Tanks
009	n/a	Two Emergency Generator Engines and Two Emergency Fire-Suppression Pump Engines

\*Federally Enforceable Certificate

## **CONDITIONS OF GENERAL APPLICABILITY**

This permittee, BASF Corporation (Plant #1), 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 **Severability.** 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 **Compliance.**
  - 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 Annual compliance certifications 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; §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; §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 **Property Rights.** This permit does not convey any property rights of any sort or any exclusive privilege. This permit is not assignable except as provided in §4-58(d)(1)(iv). §4-57(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 Bureau Director. An independent determination regarding confidentiality would be made by the Administrator of the U.S. EPA for information submitted directly to the Administrator. §4-57(a)(6)(v)

6.0 **Fees.** 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 **Changes Provided for by Permit.** 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 **Reasonably Anticipated Operating Scenarios.** 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)

9.0 **Acid Precipitation Requirements.** 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 §4-52(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. §4-57(a)(1)(ii)

10.0 **Federal Enforceability.** 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 **Recordkeeping and Reporting.**

- 12.1 **Record Retention Requirements.** 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 **Reporting of Emission Limitation Exceedances.** 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. §4-57(a)(3)(iii)(B); §4-57(c)(1)

Any excess emissions that create an **imminent hazard requiring immediate action to protect health or safety** 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 **Emergency Provision.** 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 **Certification.** 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 **Modifications.**

15.1 Administrative amendments 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 Minor permit modifications 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 Significant permit modifications to this permit shall be requested and may be granted in accordance with §4-58(e)(3). §4-58(e)(3)

15.4 Operational flexibility 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 Installation permit 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)”;
- 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 **Permit Reopening.** This permit shall be reopened and revised under any of the following circumstances, as set forth at §4-58(f)(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 **Rules Applicable to All Permittee Activities.** The following conditions apply to all activities of this permittee, including insignificant activities:

- 18.1 Nitrogen Oxides. The permittee shall comply with §4-41, Rules 2.4, 2.5, and 2.7, regarding emissions of nitrogen oxides.
- 18.2 Visible Emissions. 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 Certain Fuels. 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 Prohibition of Hand-Fired Fuel-Burning Equipment. 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 Open Burning. The permittee is prohibited from conducting open burning except in accordance with §4-41, Rule 6.
- 18.6 Fuel-Burning Equipment. The permittee shall comply with §4-41, Rule 8, regarding particulate matter emissions from fuel-burning equipment.
- 18.7 Process Emissions. The permittee shall comply with §4-41, Rule 10, regarding process particulate matter emissions.
- 18.8 Odors in Ambient Air. The permittee shall comply with §4-41, Rule 12, regarding emissions of objectionable odors. (*Local rule only*)
- 18.9 Sulfur Oxides. The permittee shall comply with §4-41, Rule 13, regarding emissions of sulfur oxides.
- 18.10 Nuisances. 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 Hazardous Air Pollutants. 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 Asbestos – Demolition or Renovation. 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 Stack Heights. The permittee shall comply with §4-41, Rule 22, regarding good engineering practice stack heights.
- 18.14 Particulate Matter Controls for New Sources and New Modifications. 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 Stratospheric Ozone and Climate Protection. 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 Dismantled Equipment. 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 Monitoring. All monitoring and related reporting shall be conducted in compliance with §4-57(a)(3). §4-57(a)(3)
- 22.0 Applicable Requirements. 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 Basis of Permit. 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 001**) 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 **quantity of natural gas** that was burned in Babcock & Wilcox Boilers A and B (**Emission Unit 004**) combined 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 initial styrene storage tank (**Emission Unit 008**) during the preceding **twelve (12) calendar months** (ending on the last day of the reporting period);

- 1.4 The annual **number of hours** that the Cummins Emergency Generator Engine #1 (**Emission Unit 009**) was operated during the preceding **twelve (12) calendar months** (ending on the last day of the reporting period);
- 1.5 The annual **number of hours** that the Cummins Emergency Generator Engine #2 (**Emission Unit 009**) was operated 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 Detroit Diesel Emergency Fire-Suppression Pump Engine #1 (**Emission Unit 009**) was operated during the preceding **twelve (12) calendar months** (ending on the last day of the reporting period);
- 1.7 The annual **number of hours** that the Clarke Emergency Fire-Suppression Pump Engine #2 (**Emission Unit 009**) was operated during the preceding **twelve (12) calendar months** (ending on the last day of the reporting period);
- 1.8 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 VVVVVV, as applicable; and §4-41, Rule 16.5(c) [40 CFR 63.11501(d)]
- 1.9 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. §4-57(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 **Air Pollution Control Equipment Replacement.** 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. §4-58(i)
- 4.0 **Air Pollution Control Equipment Maintenance.** 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 an emergency flare (Emission Unit 001), enclosed flare (Emission Unit 003), condenser (Emission Unit 008), and two cooling systems (Emission Unit 008). §4-57(a)(1)

## **FACILITY-WIDE FEDERAL STANDARD**

- 1.0 BASF Corporation (Plant #1) 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 VVVVVV*. 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 Management Practices and Other Requirements	
63.11495(a)	<b>Management practices.</b> 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)	<p>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.</p> <ul style="list-style-type: none"><li>(i) Use submerged loading or bottom loading.</li><li>(ii) Route emissions to a fuel gas system or process in accordance with §63.982(d) of Subpart SS.</li><li>(iii) Vapor balance back to the storage tank or another storage tank connected by a common header.</li><li>(iv) Vent through a closed-vent system to a control device.</li></ul>



63.11495(a)(3)	<p>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.</p> <ul style="list-style-type: none"> <li>(i) Inspections must be conducted at least quarterly.</li> <li>(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.</li> <li>(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.</li> <li>(iv) Inspections must be conducted while the subject CMPU is operating.</li> <li>(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.</li> </ul>
63.11495(a)(4)	<p>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.</p> <ul style="list-style-type: none"> <li>(i) The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or</li> <li>(ii) No bubbles are observed at potential leak sites during a leak check using soap solution, or</li> </ul>

	(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)	<b>Small heat exchange systems.</b> 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)	<b>Startup, shutdown and malfunction.</b> 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)	<b>General duty.</b> 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(b)	<b>Organic HAP emissions from continuous process vents.</b> 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 VVVVVV	For each continuous process vent with a TRE $\leq 1.0$ , you must reduce emissions of total organic HAP by $\geq 95$ percent by weight ( $\geq 85$ percent by weight for periods of startup or shutdown) or to $\leq 20$ 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 total organic carbon (TOC) and as specified in §63.11496(g).
63.982(c)	<p><b>Closed vent system and nonflare control device.</b> Owners or operators who control emissions through a closed vent system to a nonflare control device shall meet the requirements in §63.983 for closed vent systems, the applicable recordkeeping and reporting requirements of §§63.998 and 63.999, and the applicable requirements listed in paragraphs (c)(1) through (3) of this section.</p> <p>(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).</p>

	<p>(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.</p> <p>(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.</p>
63.11496(g)	<b><i>Exceptions and alternatives to 40 CFR Part 63, Subpart SS.</i></b> 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)(4)	<p><b><i>Continuous parameter monitoring.</i></b> 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.</p> <p>(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.</p> <p>(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).</p>
63.11496(g)(5)	<b><i>Startup, shutdown, malfunction.</i></b> 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.

63.11496(g)(6)	<b>Excused excursions.</b> Excused excursions, as defined in Subpart SS of this Part 63, are not allowed.
63.11496(g)(9)	<b>Parameter monitoring averaging periods.</b> 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.
63.11496(h)	<b>Surge control vessels and bottoms receivers.</b> 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)	<b>Startup, shutdown, and malfunction.</b> 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.
<b>Storage Tank Requirements</b>	
63.11497(a)	You must comply with the emission limits and other requirements in Table 5 to this subpart and in paragraph (b) of this section for organic HAP emissions from each of your storage tanks that meet the applicability criteria in Table 5 to this subpart.
Table 5, Item 3.a., of 40 CFR 63, Subpart VVVVVV	For each storage tank with a design capacity $\geq 20,000$ gallons, storing liquid that contains organic HAP listed in Table 1 to this subpart, and for which the maximum true vapor pressure (MTVP) of total organic HAP at the storage temperature is $\geq 76.6$ kPa, you must comply with option b., c., d., or e. in Item 1 of this table, except the information specified in the third column of this table for Items 1.b., 1.c., 1.d., and 1.e., as applicable.
Table 5, Item 1.d., of 40 CFR 63, Subpart VVVVVV	<p>For each Storage tank with a design capacity <math>\geq 40,000</math> gallons, storing liquid that contains organic HAP listed in Table 1 to this subpart, and for which the MTVP of total organic HAP at the storage temperature is <math>\geq 5.2</math> kPa and <math>&lt; 76.6</math> kPa, you must vapor balance in accordance with §63.2470(e), except to comply with §63.1253(f)(6)(i), the owner or operator of an offsite cleaning or reloading facility must comply with §63.11494 and §63.11502 instead of complying with §63.1253(f)(7)(ii), except as specified in the following Items 1.d.ii. and 1.d.iii.</p> <ul style="list-style-type: none"> <li>ii. The reporting requirements in §63.11501 do not apply to the owner or operator of the offsite cleaning or reloading facility.</li> <li>iii. As an alternative to complying with the monitoring, recordkeeping, and reporting provisions in §§63.11494 through 63.11502, the owner or operator of an offsite cleaning or reloading facility may comply as specified in §63.11500 with any other subpart of this Part 63 which has monitoring, recordkeeping, and reporting provisions as specified in §63.11500.</li> </ul>

63.11497(b)	<p><b><i>Planned routine maintenance for a control device.</i></b> Operate in accordance with paragraphs (b)(1) through (3) of this section for periods of planned routine maintenance of a control device for storage tanks.</p> <p>(1) Add no material to the storage tank during periods of planned routine maintenance.</p> <p>(2) Limit periods of planned routine maintenance for each control device (or series of control devices) to no more than 240 hours per year (hr/yr), or submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr. The application must explain why the extension is needed and it must be submitted at least 60 days before the 240-hour limit will be exceeded.</p> <p>(3) Keep records of the day and time at which planned routine maintenance periods begin and end, and keep a record of the type of maintenance performed.</p>
63.2470(e)	<p><b><i>Vapor balancing alternative.</i></b> As an alternative to the emission limits specified in Table 4 to this subpart, you may elect to implement vapor balancing in accordance with §63.1253(f), except as specified in paragraphs (e)(1) through (3) of this section.</p>
63.2470(e)(1)	<p>When §63.1253(f)(6)(i) refers to a 90 percent reduction, 95 percent applies for the purposes of this subpart.</p>
63.2470(e)(2)	<p>To comply with §63.1253(f)(6)(i), the owner or operator of an offsite cleaning or reloading facility must comply with §§63.2445 through 63.2550 instead of complying with §63.1253(f)(7)(ii), except as specified in paragraph (e)(2)(i) or (ii) of this section.</p> <p>(i) The reporting requirements in §63.2520 do not apply to the owner or operator of the offsite cleaning or reloading facility.</p> <p>(ii) As an alternative to complying with the monitoring, recordkeeping, and reporting provisions in §§63.2445 through 63.2550, the owner or operator of an offsite cleaning or reloading facility may comply as specified in §63.2535(a)(2) with any other subpart of this Part 63 which has monitoring, recordkeeping, and reporting provisions as specified in §63.2535(a)(2).</p>
63.2470(e)(3)	<p>You may elect to set a pressure relief device to a value less than the 2.5 pounds per square inch gauge (psig) required in §63.1253(f)(5) if you provide rationale in your notification of compliance status report explaining why the alternative value is sufficient to prevent breathing losses at all times.</p>

Wastewater Requirements	
63.11498(a)	<p>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.</p> <ol style="list-style-type: none"> <li>(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.</li> <li>(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.</li> <li>(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.</li> </ol>
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 VVVVVV	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., of 40 CFR 63, Subpart VVVVVV	<p>For each wastewater stream containing partially soluble HAP at a concentration <math>\geq 10,000</math> ppmw and separate organic and water phases, you must either</p> <ol style="list-style-type: none"> <li>a. Use a decanter, steam stripper, thin film evaporator, or distillation unit to separate the water phase from the organic phase(s) <ol style="list-style-type: none"> <li>i. For the water phase, comply with the requirements in Item 1 of this table,</li> <li>ii. For the organic phase(s), recycle to a process, use as fuel, or dispose as hazardous waste either onsite or offsite, and</li> </ol> </li> </ol>

	<p>iii. Keep records of the wastewater streams subject to this requirement and the disposition of the organic phase(s).</p> <p>or</p> <p>b. Hard pipe the entire wastewater stream to onsite treatment as a hazardous waste, or hard pipe the entire wastewater stream to a point of transfer to onsite or offsite hazardous waste treatment and keep records of the wastewater streams subject to this requirement and the disposition of the wastewater streams.</p>
<b>Notification, Recordkeeping, and Reporting Requirements</b>	
63.11501(a)	<p><b>General provisions.</b> You must meet the requirements of the general provisions in 40 CFR Part 63, Subpart A, as shown in Table 9 to this subpart. The general provisions in other parts do not apply except when a requirement in an overlapping standard, which you determined is at least as stringent as subpart VVVVVV and with which you have opted to comply, requires compliance with general provisions in another part.</p>
63.11501(b)	<p><b>Notification of compliance status.</b> Your NOCS required by §63.9(h) must include the following additional information as applicable:</p> <ol style="list-style-type: none"> <li>(1) This certification of compliance, signed by a responsible official: <ol style="list-style-type: none"> <li>(i) “This facility complies with the management practices in §63.11495.”</li> <li>(i) “This facility complies with the requirements in §63.11496 for HAP emissions from process vents.”</li> <li>(iii) “This facility complies with the requirements in §63.11496 and §63.11497 for surge control vessels, bottoms receivers, and storage tanks.”</li> <li>(iv) “This facility complies with the requirements in §63.11498 to treat wastewater streams.”</li> <li>(v) “This facility complies with the requirements in §63.11499 for heat exchange systems.”</li> </ol> </li> <li>(2) If you comply with the alternative standard as specified in Table 2 to this subpart or Table 3 to this subpart, include the information specified in §63.1258(b)(5), as applicable.</li> <li>(3) If you establish an operating limit for a parameter that will not be monitored continuously in accordance with §§63.11496(g)(4) and 63.2450(k)(6), provide the information as specified in §§63.11496(g)(4) and 63.2450(k)(6).</li> <li>(4) A list of all transferred liquids that are reactive or resinous materials, as defined in §63.11502(b).</li> </ol>



	(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)	<b>Recordkeeping.</b> 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 §63.10(b)(1). If you are subject, you must comply with the recordkeeping and reporting requirements of §63.10(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)	<p>For each CMPU subject to this subpart, you must keep the records specified in paragraphs (c)(1)(i) through (viii) of this section.</p> <ul style="list-style-type: none"> <li>(i) Records of management practice inspections, repairs, and reasons for any delay of repair, as specified in §63.11495(a)(5).</li> <li>(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).</li> <li>(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.</li> <li>(iv) Records of all TRE calculations for continuous process vents as specified in §63.11496(b)(2).</li> <li>(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).</li> <li>(vi) Records identifying wastewater streams and the type of treatment they receive, as specified in Table 6 to this subpart.</li> </ul>

	<p>(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.</p> <p>(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.</p>
63.11501(c)(2)	<p>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.</p> <p>(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).</p> <p>(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).</p>
63.998(b)(1)	<p><b>Continuous records.</b> 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:</p> <p>(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</p> <p>(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.</p>

	<p>(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.</p> <p>(iv) A record as required by an alternative approved under a referencing subpart.</p>
63.998(b)(2)	<p><b>Excluded data.</b> 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.</p> <p>(i) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments;</p> <p>(ii) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; and</p> <p>(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.</p>
63.998(b)(3)	<p><b>Records of daily averages.</b> 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.</p> <p>(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.</p>

	<p>(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.</p> <p>(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.</p> <p>(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.</p>
63.998(c)(1)	<p><b>Monitoring system records.</b> For process vents and high throughput transfer racks, the owner or operator subject to this subpart shall keep the records specified in this paragraph, as well as records specified elsewhere in this subpart.</p> <p>(i) For a CPMS used to comply with this part, a record of the procedure used for calibrating the CPMS.</p> <p>(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.</p> <p>(A) The date and time of completion of calibration and preventive maintenance of the CPMS.</p> <p>(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.</p> <p>(C) The start time and duration or start and stop times of any periods when the CPMS is inoperative.</p> <p>(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.</p>

	<p>(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.</p> <p>(F) Records documenting each start-up, shutdown, and malfunction event.</p> <p>(G) Records of CPMS start-up, shutdown, and malfunction event that specify that there were no excess emissions during the event, as applicable.</p> <p>(H) Records of the total duration of operating time.</p>
63.998(c)(2)	<p><b><i>Combustion control and halogen reduction device monitoring records.</i></b></p> <p>(i) Each owner or operator using a combustion control or halogen reduction device to comply with this subpart shall keep the following records up-to-date and readily accessible, as applicable. Continuous records of the equipment operating parameters specified to be monitored under §§63.988(c) (incinerator, boiler, and process heater monitoring), 63.994(c) (halogen reduction device monitoring), and 63.995(c) (other combustion systems used as control device monitoring) or approved by the Administrator in accordance with a referencing subpart.</p> <p>(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. For catalytic incinerators, record the daily average of the temperature upstream of the catalyst bed and the daily average of the temperature differential across the bed. For halogen scrubbers record the daily average pH and the liquid-to-gas ratio.</p> <p>(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).</p>

63.998(c)(3)	<p><b><i>Monitoring records for recovery devices, absorbers, condensers, carbon adsorbers or other noncombustion systems used as control devices.</i></b></p> <p>(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.</p> <p>(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.</p> <p>(A) Records of total regeneration stream mass or volumetric flow for each carbon-bed regeneration cycle.</p> <p>(B) Records of the temperature of the carbon bed after each regeneration and within 15 minutes of completing any cooling cycle.</p> <p>(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).</p>
63.998(d)(1)	<p><b><i>Closed vent system records.</i></b> 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.</p> <p>(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.</p>

	<p>(ii) For each closed vent system that contains bypass lines that could divert a vent stream away from the control device and to the atmosphere, the owner or operator shall keep a record of the information specified in either paragraph (d)(1)(ii)(A) or (B) of this section, as applicable.</p> <p>(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.</p> <p>(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.</p> <p>(iii) For a closed vent system collecting regulated material from a regulated source, when a leak is detected as specified in §63.983(d)(2), the information specified in paragraphs (d)(1)(iii)(A) through (F) of this section shall be recorded and kept for five (5) years.</p> <p>(A) The instrument and the equipment identification number and the operator name, initials, or identification number.</p> <p>(B) The date the leak was detected and the date of the first attempt to repair the leak.</p> <p>(C) The date of successful repair of the leak.</p> <p>(D) The maximum instrument reading measured by the procedures in §63.983(c) after the leak is successfully repaired or determined to be nonrepairable.</p> <p>(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.</p> <p>(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.</p>
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	(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)(4)	For each storage tank subject to Table 5 to this subpart, you must keep records specified in paragraphs (c)(4)(i) through (vi) of this section, as applicable.
63.11501(c)(4)(i)	Keep records of the vessel dimensions, capacity, and liquid stored, as specified in §63.1065(a).
63.11501(c)(4)(iv)	If you vent emissions to a control device other than a flare, keep records of the operating plan and measured parameter values, as specified in §§63.985(c) and 63.998(d)(2).
63.985(c)	<p><b><i>Nonflare control device monitoring requirements.</i></b></p> <p>(1) The owner or operator shall submit with the NOCS, a monitoring plan containing the information specified in §63.999(b)(2)(i) and (ii) to identify the parameters that will be monitored to assure proper operation of the control device.</p> <p>(2) The owner or operator shall monitor the parameters specified in the NOCS or in the operating permit application or amendment. Records shall be generated as specified in §63.998(d)(2)(i).</p>
63.998(d)(2)	<p><b><i>Storage vessel and transfer rack records.</i></b> An owner or operator shall keep readily accessible records of the information specified in paragraphs (d)(2)(i) and (ii) of this section, as applicable.</p> <p>(i) A record of the measured values of the parameters monitored in accordance with §63.985(c) or §63.987(c).</p> <p>(ii) A record of the planned routine maintenance performed on the control system during which the control system does not meet the applicable specifications of §63.983(a), §63.985(a), or §63.987(a), as applicable, due to the planned routine maintenance. Such a record shall include the information specified in paragraphs (d)(2)(ii)(A) through (C) of this section. This information shall be submitted in the periodic reports as specified in §63.999(c)(4).</p> <p>(A) The first time of day and date the requirements of §63.983(a), §63.985(a), or §63.987(a), as applicable, were not met at the beginning of the planned routine maintenance, and</p> <p>(B) The first time of day and date the requirements of §63.983(a), §63.985(a), or §63.987(a), as applicable, were met at the conclusion of the planned routine maintenance.</p>



	(C) A description of the type of maintenance performed.
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)	<p><b><i>Semiannual Compliance Reports.</i></b> 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.</p> <p>(1) <b><i>Deviations.</i></b> You must clearly identify any deviation from the requirements of this subpart.</p> <p>(2) <b><i>Delay of repair for a large heat exchange system.</i></b> 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.</p> <p>(3) <b><i>Delay of leak repair.</i></b> 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.</p> <p>(4) <b><i>Process change.</i></b> 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.</p> <p>(5) <b><i>Data for the alternative standard.</i></b> 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).</p> <p>(6) <b><i>Overlapping rule requirements.</i></b> Report any changes in the overlapping provisions with which you comply.</p> <p>(7) <b><i>Reactive and resinous materials.</i></b> Report any transfer of liquids that are reactive or resinous materials, as defined in §63.11502(b), and not included in the NOCS.</p>

	<p>(8) <b><i>Malfunctions.</i></b> 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.</p>
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*§4-41, Rule 16.5(c) (40 CFR 63.980–63.999; 63.2470; and 63.11494–63.11503)*

## EMISSION UNIT SPECIAL CONDITIONS

### Emission Unit 001 – Emergency Flare and Plant Fugitive Emissions

- 1.0 Any volatile organic compound (VOC)/hazardous air pollutant (HAP) emissions of 1,3-butadiene or styrene or any emissions of ammonia or any other gaseous air pollutant that occur from rupture disks or pressure-relief valves of the nine reactors, the six 1,3-butadiene compressors that serve the two flash drums, and the ammonia receiver vessel shall be vented to and controlled by an emergency flare. Only natural gas may be burned in the pilot flame of the flare. §4-57(a)(1)
- 2.0 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 HAP, such as 1,3-butadiene or styrene, 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 VVVVVV. 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)
- 3.0 The wastewater treatment system shall be operated in accordance with the applicable requirements of §63.11498 of 40 CFR Part 63, Subpart VVVVVV. §4-41, Rule 16.5(c) (40 CFR 63.11498)
- 4.0 Visible emissions from the emergency flare 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
- 5.0 If any VOC/HAP emissions of 1,3-butadiene or styrene or any emissions of ammonia or any other gaseous air pollutant are vented to the emergency flare, with the exception of routine 1,3-butadiene emissions of short duration that occur during plant startup from any of the six 1,3-butadiene compressors that serve the two flash drums and negligible emissions that may occur during plant startup from any of the nine reactors when air is purged from them, the owner or operator shall promptly notify the Bureau Director **within twenty-four hours** of the onset of the venting. §4-57(c)(1)

### Emission Unit 003 – 1,3-Butadiene Recovery System

- 1.0 The 1,3-butadiene recovery system consists of Uninhibited 1,3-Butadiene Storage Tank D1102, 1,3-Butadiene Receiver D1408, and Recovered 1,3-Butadiene Storage Tank D1101. Volatile organic compound (VOC)/hazardous air pollutant (HAP) emissions of 1,3-butadiene from the recovery system shall be vented to and controlled by a John Zink enclosed flare to **at least 95%** by weight (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 enclosed flare. The enclosed flare shall be operated in accordance with the permittee's standard operating procedures. Neither Tank D1102, nor Receiver D1408, nor Tank D1101 shall be loaded if the enclosed flare is not in operation. These requirements are in accordance with §63.11496(b) and Table 3, Item 1.a., of "National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources," Title 40 *Code of Federal Regulations* Part 63, Subpart VVVVVV. §4-41, Rule 16.5(c) [40 CFR 63.11496(b)]; §4-57(a)(1)
- 2.0 The operating temperature of the enclosed flare shall be maintained at **no less than 1,250 °F**, based on 15-minute block average values, while the flare is required to be in use. The operating temperature shall be continuously monitored and recorded while the enclosed flare 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(b) of 40 CFR Part 63, 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 VVVVVV. The temperature control system for the enclosed flare shall be equipped with an alarm that will activate at any time that the operating temperature drops below 1,250 °F while VOC/HAP emissions of 1,3-butadiene are being vented to the enclosed flare from any equipment of the 1,3-butadiene recovery system. §4-41, Rule 16.5(c) [40 CFR 63.980–63.999; 63.2450(k); and 63.11496(b) and (g)(4)]; §4-57(a)(1); §4-57(c)(1)
- 3.0 The maximum allowable VOC/HAP emissions of 1,3-butadiene from the 1,3-butadiene recovery system to the ambient air are 0.10 pound/hour. §4-57(a)(1)
- 4.0 Testing of the 1,3-butadiene recovery system, as controlled by the enclosed flare, to determine the VOC/HAP emissions of 1,3-butadiene 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)

- 5.0 Visible emissions from enclosed flare 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
- 6.0 Testing of the enclosed flare to determine the emissions of particulate matter (PM), nitrogen oxides (NO<sub>x</sub>), 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 004 – Babcock & Wilcox Boilers A and B**

- 1.0 Only natural gas may be burned in Babcock & Wilcox Boilers A and B. (Each of these boilers has a heat input capacity of  $37.5 \times 10^6$  Btu/hour.) §4-57(a)(1)
- 2.0 Preventative maintenance on Boilers A and B shall be performed at regular intervals in accordance with the permittee's maintenance procedures. §4-57(a)(1)
- 3.0 A log shall be maintained, on the premises, in which the **quantity of natural gas** that is burned in Boilers A and B during each **calendar month** is recorded. §4-57(c)(1)
- 4.0 Visible emissions from Boilers A and B 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
- 5.0 Testing of either Boiler A or B to determine the emissions of particulate matter (PM), nitrogen oxides (NO<sub>x</sub>), 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 008 – Two Styrene Storage Tanks**

- 1.0 Volatile organic compound (VOC)/hazardous air pollutant (HAP) emissions of styrene from both the initial styrene storage tank and the recovered styrene storage tank shall be vented to and controlled by a condenser. In addition, for each of the two tanks, the VOC/HAP emissions of styrene from the tank shall be reduced by the use of a styrene cooling system. The condenser and two cooling systems shall be operated in accordance with the permittee's standard operating procedures. Neither of the two tanks shall be loaded if the condenser is not in operation, and for each tank, the tank shall not be used if its cooling system is not in operation. §4-57(a)(1)
- 2.0 A log shall be maintained, on the premises, in which the **quantity of each load of styrene** that is delivered to the initial styrene storage tank is recorded. §4-57(c)(1)
- 3.0 Testing of either the initial styrene storage tank or the recovered 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 009 – Two Emergency Generator Engines and Two Emergency Fire-Suppression Pump Engines**

- 1.0 Only diesel fuel (No. 2 fuel oil) may be burned in Cummins Emergency Generator Engine #1, Cummins Emergency Generator Engine #2, Detroit Diesel Emergency Fire-Suppression Pump Engine #1, and Clarke Emergency Fire-Suppression Pump Engine #2.
- 1.1 Approximate heat input capacities are:
- 1.22 × 10<sup>6</sup> Btu/hour for Generator Engine #1,  
1.34 × 10<sup>6</sup> Btu/hour for Generator Engine #2,  
1.01 × 10<sup>6</sup> Btu/hour for Pump Engine #1, and  
0.63 × 10<sup>6</sup> Btu/hour for Pump Engine #2.
- 1.2 Maximum power outputs are:
- 176 horsepower (131.2 kilowatts) for Generator Engine #1,  
200.9 horsepower (149.8 kilowatts) for Generator Engine #2,  
135 horsepower (100.7 kilowatts) for Pump Engine #1, and  
73.8 horsepower (55.0 kilowatts) for Pump Engine #2.
- §4-57(a)(1)
- 2.0 Emergency Generator Engines #1 and #2 and Emergency Pump Engines #1 and #2 are 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. §4-41, Rule 16.5(c) [40 CFR 63.6580–63.6675]
- 3.0 For Emergency Generator Engines #1 and #2 and Emergency Pump Engine #2, full compliance with 40 CFR Part 63, 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)]
- 4.0 Emergency Generator Engines #1 and #2 and Emergency Pump Engines #1 and #2 shall be operated and maintained according to the applicable manufacturer’s emission-related instructions (or equivalent maintenance plan for Pump Engine #1). Furthermore, for Pump Engine #1, oil and filter changes and inspections of the air cleaner, hoses, and belts shall be performed in accordance with the schedule given in Table 2d, Item 4, of 40 CFR Part 63, Subpart ZZZZ. §4-41, Rules 15.1 [40 CFR 60.4211(a)(1)] (for Generator Engines #1 and #2 and Pump Engine #2) and 16.5(c) [40 CFR 63.6640(a) and 63.6625(e)(3)] (for Pump Engine #1)



- 5.0 **Each of Emergency Generator Engines #1 and #2 and Emergency Pump Engines #1 and #2 shall be operated for no more than 100 hours per calendar year for testing and other specified purposes. There is no time limit on their use in emergency situations.** *§4-41, Rules 15.1 [40 CFR 60.4211(f)] (for Generator Engines #1 and #2 and Pump Engine #2) and 16.5(c) [40 CFR 63.6640(f)] (for Pump Engine #1)*
- 6.0 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 each of Emergency Generator Engines #1 and #2 and Emergency Pump Engines #1 and #2 are recorded. For each of the four engines, the cumulative time of operation shall be indicated by a **non-resettable hour meter**. *§4-41, Rules 15.1 [40 CFR 60.4209(a) and 60.4214(b)] (for Generator Engines #1 and #2 and Pump Engine #2) and 16.5(c) [40 CFR 63.6625(f) and 63.6655(f)] (for Pump Engine #1); §4-57(c)(1)*
- 7.0 The sulfur content of the diesel fuel that is burned in Emergency Generator Engines #1 and #2 and Emergency Pump Engines #1 and #2 shall not exceed **15 parts per million (0.0015 percent)** by weight. *§4-41, Rules 15.1 [40 CFR 60.4207(b)] (for Generator Engines #1 and #2 and Pump Engine #2) and 16.5(c) [40 CFR 63.6604(b)] (for Pump Engine #1); 40 CFR 1090.305(b)*
- 8.0 The maximum allowable emissions of particulate matter (PM) from each of Emergency Generator Engines #1 and #2 are 0.05 pound/hour. These emission limitations are reasonable and proper, as determined by the Bureau Director. *§4-41, Rule 27.3*
- 9.0 The maximum allowable emissions of PM from Emergency Pump Engine #1 are 0.37 pound/hour. *§4-41, Rule 10.3*
- 10.0 The maximum allowable emissions of PM from Emergency Pump Engine #2 are 0.40 gram per kilowatt-hour, which is equivalent to 0.049 pound/hour for the operation of the engine at its maximum power output. This emission limitation is reasonable and proper, as determined by the Bureau Director. *§4-41, Rules 15.1 [40 CFR 60.4205(c)] and 27.3*
- 11.0 Allowable emissions of nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC) combined from each of Emergency Generators Engines #1 and #2 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*
- 12.0 The maximum allowable emissions of NO<sub>x</sub> and VOC combined from Emergency Pump Engine #2 are 4.7 grams per kilowatt-hour, which is equivalent to 0.57 pound/hour for the operation of the engine at its maximum power output. *§4-41, Rule 15.1 [40 CFR 60.4205(c)]*

- 13.0 Allowable emissions of carbon monoxide (CO) from each of Emergency Generator Engines #1 and #2 are a weighted cycle average of 3.5 grams per kilowatt-hour. §4-41, Rule 15.1 [40 CFR 60.4202(a)(2) and 60.4205(b)]; 40 CFR 1039 Appendix I
- 14.0 The maximum allowable emissions of CO from Emergency Pump Engine #2 are 5.0 grams per kilowatt-hour, which is equivalent to 0.61 pound/hour for the operation of the engine at its maximum power output. §4-41, Rule 15.1 [40 CFR 60.4205(c)]
- 15.0 Visible emissions from Emergency Generator Engines #1 and #2 and Emergency Pump Engine #2 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
- 16.0 Visible emissions from Emergency Generator Engines #1 and #2 and Emergency Pump Engine #2 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
- 17.0 Visible emissions from Emergency Pump Engine #1 shall not exceed twenty (20) percent opacity for more than sixty (60) consecutive seconds. §4-41, Rule 9.2
- 18.0 Testing of Emergency Generator Engine #1 or #2 or Emergency Pump Engine #1 or #2 to determine the emissions of PM, NO<sub>x</sub>, 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)