

***DRAFT* Part 70 Permit  
No. 47-065-0122**

This Permit Shall Remain in Full Force and Effect  
From December xx, 2023, through September 21, 2027

Issued to:

**ASTEC INDUSTRIES, INC.  
4101 JEROME AVENUE  
CHATTANOOGA, TENNESSEE 37407-2915**

Designated Representative:

Brennon Gray  
EHS Specialist  
Telephone: 423.827.1860

Responsible Official:

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Stephen Dunlevy  
General Manager

*An Application for Renewal Must Be Submitted to the Director of  
the Chattanooga-Hamilton County Air Pollution Control Bureau  
No Later Than March 21, 2027*

**CHATTANOOGA-HAMILTON COUNTY  
AIR POLLUTION CONTROL BUREAU**

CBL Center II  
2034 Hamilton Place Blvd., Suite 300  
Chattanooga, Tennessee 37421-6061  
Telephone: 423.643.5970

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Ronald Drumeller  
Executive Director

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**EMISSION UNIT SUMMARY**

The emission units regulated by this permit are the following:

Emission Unit No.	Description
001	Blast Cleaning Technologies Shot Blasting Machine
002	Surface Coating Operations
003	Production Burner Testing
004	Seven Plasma Cutting Tables
005	Stainless Steel Welding Operations
006	Laguna Rubber Cutting Table
007	Cummins Emergency Generator Engine

## CONDITIONS OF GENERAL APPLICABILITY

This permittee, Astec Industries, Inc., 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, Astec Industries 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 elided. §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 **September 21** 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 37421-6061

And to:

U.S. EPA Region 4  
Air Permits Section  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street SW, Suite 9T25  
Atlanta, GA 30303-8960

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. Environmental Protection Agency (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)”; or
  - 15.5.6 Case-by-case determinations made pursuant to §4-41, Rule 27 (Particulate Matter Controls for New Sources and New Modifications After August 29, 1995).

§4-50

16.0 **Off-Permit Changes.**

- 16.1 An off-permit change is one that:
- 16.1.1 Is not addressed or prohibited by the permit;
  - 16.1.2 is not a modification under Title I of the Clean Air Act;
  - 16.1.3 is not subject to any requirements under Title IV of the Clean Air Act;
  - 16.1.4 Meets all applicable requirements, as described in this permit; and
  - 16.1.5 Does not violate, or cause or contribute to a violation of, any existing permit term or condition.
- 16.2 A contemporaneous notification shall be submitted to the Bureau Director and to the U.S. EPA except for changes that qualify as insignificant under §4-56(c)(11) and (12).

16.3 The permittee shall keep a record describing off-permit changes made at the Part 70 source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those off-permit changes.

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

*§4-58(f)*

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 **March 21** and **September 21** 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 37421-6061

Each such compliance monitoring report shall include the following information:

- 1.1 The annual **quantity of each coating** that was used in all surface coating operations combined (**Emission Unit 002**), the resulting total annual **emissions of volatile organic compound (VOCs)**, the resulting total annual **emissions of each hazardous air pollutant (HAP)**, and the resulting total annual **emissions of all HAPs combined** during the preceding **twelve (12) calendar months** (ending on the last day of the reporting period);
- 1.2 The **emissions of organic HAPs per gallon of coating solids used** from all surface coating operations combined (**Emission Unit 002**) for the six (6) **rolling twelve (12)-calendar month periods** that each end on a separate calendar month of the six (6)-month reporting period; *§4-41, Rule 16.5(c) [40 CFR 63.3920(a)(3)(v)]*
- 1.3 The annual **quantities of natural gas, liquefied petroleum gas, No. 2 fuel oil, recycled fuel oil, biomass, and coal** that were burned in production burner testing (**Emission Unit 003**) during the preceding **twelve (12) calendar months** (ending on the last day of the reporting period);
- 1.4 The annual **quantity of chromium-containing electrode material** that was consumed in all stainless steel welding operations combined (**Emission Unit 005**) 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 (**Emission Unit 007**) was operated during the preceding **twelve (12) calendar months** (ending on the last day of the reporting period); and
- 1.6 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

either not in operation or bypassed (by way of a pressure relief valve, blown rupture disk, blown gasket, etc.). For each such incident, the nature and cause of the incident, affected equipment, calendar date, beginning time, and elapsed time 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 March 21 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 September 21 shall be from **January 1 through June 30** of the current year. §4-57(a)(3)(iii)(A)

- 2.0 **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 hazardous air pollutants, 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)
- 3.0 **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 nine baghouses (Emission Units 001, 004, and 006) and five sets of filters (Emission Unit 002). §4-57(a)(1)

## EMISSION UNIT SPECIAL CONDITIONS

### Emission Unit 001 – Blast Cleaning Technologies Shot Blasting Machine

- 1.0 Particulate matter emissions from the Blast Cleaning Technologies shot blasting machine table shall be vented to and controlled by an Astec baghouse. The baghouse shall be operated in accordance with the permittee's standard operating procedures. The shot blasting machine shall not be operated if the baghouse is not in operation. These requirements are best available control technology (BACT), as determined by the Bureau Director. *§4-41, Rule 27.1*
- 2.0 The maximum allowable emissions of particulate matter from the shot blasting machine are 0.50 pound/hour. This emission limitation is BACT, as determined by the Bureau Director. *§4-41, Rule 27.1*
- 3.0 Visible emissions from the shot blasting machine shall not exceed ten (10) percent opacity for an aggregate of more than five (5) minutes in any period of one hour or more than twenty (20) minutes in any period of twenty-four hours. This limitation is BACT, as determined by the Bureau Director. *§4-41, Rule 27.1*
- 4.0 Testing of the shot blasting machine, as controlled by the baghouse, to determine the emissions of particulate matter 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 002 – Surface Coating Operations

- 1.0 Emissions of volatile organic compounds (VOCs) from all surface coating operations combined shall not exceed **90.0 tons during any period of twelve (12) consecutive calendar months**. The surface coating operations at this plant are four DeVilbiss paint spray booths and one Burner Group paint spray booth. This emission limitation is best available control technology (BACT), as determined by the Bureau Director. *§4-41, Rule 25.3*
- 2.0 The maximum allowable VOC content of the coatings that are used in the surface coating operations is **3.5 pounds/gallon**, excluding water, as determined for each paint spray booth on a **twenty-four-hour weighted average** basis. *Agreed Order Docket #582.01*
- 3.0 Emissions of all hazardous air pollutants (HAPs) combined from all surface coating operations combined shall not exceed **30.0 tons during any period of twelve (12) consecutive calendar months**. This emission limitation is both reasonable and proper and BACT, as determined by the Bureau Director. *§4-41, Rules 23 and 25.3*
- 4.0 The surface coating operations are subject to and the permittee shall comply with “National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products,” Title 40 *Code of Federal Regulations* Part 63, Subpart M. Semiannual compliance reporting requirements are given in §63.3920(a) of this subpart and are incorporated into the semiannual compliance monitoring reports required by this permit in Items 1.2 and 1.6 of the Conditions Applicable to the Entire Facility, as provided for by §63.3920(a)(2). *§4-41, Rule 16.5(c) (40 CFR 63.3880–63.3981)*
- 5.0 Emissions of organic HAPs from all surface coating operations combined shall not exceed **2.6 pound per gallon of coating solids used during any period of twelve (12) consecutive calendar months**. *§4-41, Rule 16.5(c) [40 CFR 63.3890(b)(1) and 63.3891(b)]*
- 6.0 The VOC content, mass fraction of individual HAPs, volume fraction of solids, and density for each coating, thinner, additive, and cleaning material that is used in the surface coating operations shall be documented by a current safety data sheet, environmental data sheet, or written certification from the supplier. Each such data sheet or certification shall be maintained on the premises. *§4-41, Rule 16.5(c) [40 CFR 63.3930(d), (e), (f), and (g)]; §4-57(c)(1)*
- 7.0 A log shall be maintained, on the premises, in which the following information is recorded that pertains to the coatings, thinners, additives, and cleaning materials that are used in all surface coating operations combined:
  - 7.1 Volume, in units of gallons, of each coating, thinner, additive, and cleaning material that is used during each **calendar month**;



- 7.2 Calculated emissions of VOCs for each **calendar month**;
- 7.3 Calculated emissions of each HAP for each **calendar month**;
- 7.4 Calculated emissions of all HAPs combined for each **calendar month**;
- 7.5 Calculated emissions of combined organic HAPs for each **calendar month**;
- 7.6 Calculated volume of coating solids used for each **calendar month**;
- 7.7 Calculated annual emissions of VOCs for each **rolling twelve (12)-calendar month period**;
- 7.8 Calculated annual emissions of each HAP for each **rolling twelve (12)-calendar month period**;
- 7.9 Calculated annual emissions of all HAPs combined for each **rolling twelve (12)-calendar month period**; and
- 7.10 Calculated annual emissions of organic HAPs per gallon of coating solids used for each **rolling twelve (12)-calendar month period**.

*§4-41, Rule 16.5(c) [40 CFR 63.3930(c)(3) and (d)]; §4-57(c)(1)*

- 8.0 A high volume, low pressure (HVLP) spray gun or other coating application device that has an equivalent or greater coating transfer efficiency shall be used to apply all coatings in the surface coating operations. These requirements are BACT, as determined by the Bureau Director. *§4-41, Rule 25.3*
- 9.0 Cleaning with solvent, other than water, of any spray gun that has been used in the surface coating operations shall be accomplished by using either a sealed spray-gun cleaning system or a spray-gun cleaning system that utilizes closed-loop solvent recycling. Furthermore, each container of coating or solvent shall be sealed except for when material is being transferred to or from it. These requirements are BACT, as determined by the Bureau Director. *§4-41, Rule 25.3*
- 10.0 Particulate matter emissions from the each of the five paint spray booths shall be vented to and controlled by a filter system that serves to completely cover the exhaust intake of the spray booth. Furthermore, the differential pressure across each filter system shall be maintained within the manufacturer's acceptable operating range. For each spray booth, the spray booth shall not be used if its filter system is not in use or if the differential pressure of the filter system falls outside of the acceptable range. These requirements are reasonable and proper, as determined by the Bureau Director. *§4-41, Rule 27.3*

- 11.0 The maximum allowable emissions of particulate matter from each of the five paint spray booths are 0.09 pound/hour. These emission limitations are reasonable and proper, as determined by the Bureau Director. *§4-41, Rule 27.3*
- 12.0 Visible emissions from the surface coating operations shall not exceed ten (10) percent opacity for an aggregate of more than five (5) minutes in any period of one hour or more than twenty (20) minutes in any period of twenty-four hours. This limitation is reasonable and proper, as determined by the Bureau Director. *§4-41, Rule 27.3*
- 13.0 Only natural gas may be burned in the burners of the four DeVilbiss paint spray booths. (Three of the DeVilbiss spray booths have three burners each and the remaining DeVilbiss spray booth has a single burner. Each of the ten burners has a heat input capacity of  $1.0 \times 10^6$  Btu/hour.) *permit application*

**Emission Unit 003 – Production Burner Testing**

1.0 Fuel usages for production burner testing shall not exceed the following amounts **during any period of twelve (12) consecutive calendar months**:

- 1.1 **12.5 × 10<sup>6</sup> cubic feet** of natural gas;
- 1.2 **6,000 gallons** of liquefied petroleum gas (LPG) (propane and/or butane);
- 1.3 **18,000 gallons** of No. 2 fuel oil (or diesel fuel);
- 1.4 **4,400 gallons** of recycled fuel oil; and
- 1.5 **34.0 tons** of pulverized biomass (e.g., wood chips, wood pellets, and wood flour) and pulverized coal combined.

*permit application; §4-57(a)(1)*

2.0 A log shall be maintained, on the premises, in which the **quantities of each fuel** that are used for burner testing during each **calendar month** are recorded. *§4-57(c)(1)*

3.0 Sulfur contents of fuels that are used for burner testing shall not exceed the following:

- 3.1 **15 parts per million (0.0015 percent)** by weight for No. 2 fuel oil;
- 3.2 **0.50 percent** by weight for recycled fuel oil; and
- 3.3 **1.07 percent** by weight for coal.

*§4-57(a)(1)*

4.0 The ash content of coal that is used for burner testing shall not exceed **9.0 percent** by weight. *§4-57(a)(1)*

5.0 The sulfur content of each shipment of No. 2 fuel oil or recycled fuel oil that is received at the plant for use in burner testing and both the sulfur content and ash content of each shipment of coal that is received at the plant for use in burner testing shall be documented by a certification from the supplier. Each such certification shall be maintained on the premises. *§4-57(c)(1)*

6.0 In accordance with “Standards for the Management of Used Oil,” Title 40 *Code of Federal Regulations* Part 279 and “Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions,” Title 40 *Code of Federal Regulations*

Part 761, recycled fuel oil that is used for burner testing must meet the following specifications:

- 6.1 Arsenic content not to exceed **5 parts per million (ppm)** by weight;
- 6.2 Cadmium content not to exceed **2 ppm** by weight;
- 6.3 Chromium content not to exceed **10 ppm** by weight;
- 6.4 Lead content not to exceed **100 ppm** by weight;
- 6.5 Total halogens content not to exceed **1,000 ppm** by weight;
- 6.6 Flash point of at least **100 °F**; and
- 6.7 Polychlorinated biphenyls (PCBs) content of less than the quantifiable level (**2 ppm** by weight).

*§4-57(a)(1); 40 CFR 279.11 and 761.20(e)*

- 7.0 Analyses of each shipment of recycled fuel oil that is received at the plant for burner testing shall be conducted to demonstrate compliance with the specifications given in the preceding Items 6.1 through 6.7. The recorded results of these analyses shall be maintained on the premises. *§4-57(c)(1)*
- 8.0 Emissions of particulate matter from burner testing shall not exceed 2.0 tons during any period of twelve (12) consecutive calendar months. This emission limitation is reasonable and proper, as determined by the Bureau Director. *§4-41, Rule 27.3*
- 9.0 Emissions of volatile organic compounds (VOCs) from burner testing shall not exceed 1.0 ton during any period of twelve (12) consecutive calendar months. This emission limitation is best available control technology (BACT), as determined by the Bureau Director. *§4-41, Rule 25.3*
- 10.0 When using a fuel mixture that does not include coal, visible emissions from burner testing shall not exceed ten (10) percent opacity for an aggregate of more than five (5) minutes in any period of one hour or more than twenty (20) minutes in any period of twenty-four hours. This limitation is reasonable and proper, as determined by the Bureau Director. *§4-41, Rule 27.3*
- 11.0 When using a fuel mixture that includes coal, visible emissions from burner testing 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. This limitation is reasonable and proper, as determined by the Bureau Director.  
*§4-41, Rule 27.3*

- 12.0 Upon the initiation of burner testing when using a fuel mixture that includes coal, the opacity of the emissions shall be **read by a certified visible emissions evaluator**, and a record of these readings shall be maintained on the premises. If the opacity of the emissions exceeds twenty (20) percent, burner testing shall be terminated within five (5) minutes and shall not be resumed for at least sixty (60) minutes.
- 13.0 Testing of the burner testing operation to determine the emissions of particulate matter, nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), carbon monoxide (CO), and VOCs 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 – Seven Plasma Cutting Tables**

- 1.0 Particulate matter emissions from each of seven plasma cutting tables (PythonX SPG, Messer MMXCEL 10 Global, Messer PMR10-17-6328, Messer Titan 12-4, Messer TMC4500, Whitney 661 ATC, and Messer MMXCEL 6238) shall be vented to and controlled by a baghouse. The seven baghouses shall be operated in accordance with the permittee's standard operating procedures. For each plasma cutting table, the cutting table shall not be operated if its baghouse is not in operation. These requirements are reasonable and proper, as determined by the Bureau Director. §4-41, Rule 27.3
- 2.0 The maximum allowable emissions of particulate matter from the PythonX SPG plasma cutting table are 0.04 pound/hour. This emission limitation is reasonable and proper, as determined by the Bureau Director. §4-41, Rule 27.3
- 3.0 The maximum allowable emissions of particulate matter from the Messer MMXCEL 10 Global plasma cutting table are 0.10 pound/hour. This emission limitation is reasonable and proper, as determined by the Bureau Director. §4-41, Rule 27.3
- 4.0 The maximum allowable emissions of particulate matter from the Messer PMR10-17-6328 plasma cutting table are 0.06 pound/hour. This emission limitation is reasonable and proper, as determined by the Bureau Director. §4-41, Rule 27.3
- 5.0 The maximum allowable emissions of particulate matter from the Messer Titan 12-4 plasma cutting table are 0.06 pound/hour. This emission limitation is reasonable and proper, as determined by the Bureau Director. §4-41, Rule 27.3
- 6.0 The maximum allowable emissions of particulate matter from the Messer TMC4500 plasma cutting table are 0.04 pound/hour. This emission limitation is reasonable and proper, as determined by the Bureau Director. §4-41, Rule 27.3
- 7.0 The maximum allowable emissions of particulate matter from the Whitney 661 ATC plasma cutting table are 0.06 pound/hour. This emission limitation is reasonable and proper, as determined by the Bureau Director. §4-41, Rule 27.3
- 8.0 The maximum allowable emissions of particulate matter from the Messer MMXCEL 6238 plasma cutting table are 0.06 pound/hour. This emission limitation is reasonable and proper, as determined by the Bureau Director. §4-41, Rule 27.3
- 9.0 Visible emissions from each of the seven plasma cutting tables shall not exceed ten (10) percent opacity for an aggregate of more than five (5) minutes in any period of one hour or more than twenty (20) minutes in any period of twenty-four hours. These limitations are reasonable and proper, as determined by the Bureau Director. §4-41, Rule 27.3

- 10.0 Testing of any of the seven plasma cutting tables, as controlled by a baghouse, to determine the emissions of particulate matter 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 005 – Stainless Steel Welding Operations

- 1.0 The maximum allowable emissions of particulate matter from all stainless steel welding operations combined are 0.30 pound/hour. This emission limitation is reasonable and proper, as determined by the Bureau Director. §4-41, Rule 27.3
- 2.0 The maximum allowable particulate emissions of hexavalent chromium (chromium VI) compounds from all stainless steel welding operations combined are 0.06 pound/hour. This emission limitation is reasonable and proper, as determined by the Bureau Director. §4-41, Rule 27.3
- 3.0 A log shall be maintained, on the premises, in which the **quantity of chromium-containing electrode material** that is consumed in all stainless steel welding operations combined during each **calendar month** is recorded. §4-57(c)(1)
- 4.0 Visible emissions from any door, exhaust fan, or other opening in the building in which the stainless steel welding operations are performed shall not exceed five (5) 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
- 5.0 Testing of the stainless steel welding operations to determine the opacity of the emissions from any door, exhaust fan, or other opening in the building in which they are performed 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 006 – Laguna Rubber Cutting Table

- 1.0 Particulate matter emissions from the Laguna rubber cutting table shall be vented to and controlled by a baghouse. The baghouse shall be operated in accordance with the permittee's standard operating procedures. The rubber cutting table shall not be operated if the baghouse is not in operation. These requirements are reasonable and proper, as determined by the Bureau Director. *§4-41, Rule 27.3*
- 2.0 The maximum allowable emissions of particulate matter from the rubber cutting table are 0.01 pound/hour. This emission limitation is reasonable and proper, as determined by the Bureau Director. *§4-41, Rule 27.3*
- 3.0 Visible emissions from the rubber cutting table shall not exceed ten (10) percent opacity for an aggregate of more than five (5) minutes in any period of one hour or more than twenty (20) minutes in any period of twenty-four hours. This limitation is reasonable and proper, as determined by the Bureau Director. *§4-41, Rule 27.3*
- 4.0 Testing of the rubber cutting table, as controlled by the baghouse, to determine the emissions of particulate matter 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 007 – Cummins Emergency Generator Engine

- 1.0 Only diesel fuel (No. 2 fuel oil) may be burned in the Cummins emergency generator engine. [This engine has a heat input capacity of  $0.644 \times 10^6$  Btu/hour and a maximum power output of 99 horsepower (73.8 kilowatts).] *permit application*
- 2.0 The emergency generator engine is subject to and the permittee shall comply with “National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines,” Title 40 *Code of Federal Regulations* Part 63, Subpart ZZZZ. Full compliance with Subpart ZZZZ shall be demonstrated by meeting all applicable requirements of “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines,” Title 40 *Code of Federal Regulations* Part 60, Subpart IIII. §4-41, *Rules 15.1 (40 CFR 60.4201–60.4219) and 16.5(c) [40 CFR 63.6590(c)(1)]*
- 3.0 The emergency generator engine shall be operated and maintained according to the manufacturer’s emission-related instructions. §4-41, *Rule 15.1 [40 CFR 60.4211(a)(1)]*
- 4.0 **The emergency generator engine shall be operated for no more than 100 hours per calendar year for testing and other specified purposes. There is no time limit on its use in emergency situations.** §4-41, *Rule 15.1 [40 CFR 60.4211(f)]*
- 5.0 A log shall be maintained, on the premises, in which the date, elapsed time, and purpose (e.g., testing or emergency use) of each operation of the emergency generator engine are recorded. The time of operation shall be read from a **non-resettable hour meter**. §4-41, *Rule 15.1 [40 CFR 60.4209(a)]; §4-57(c)(1)*
- 6.0 The sulfur content of the diesel fuel that is burned in the emergency generator engine shall not exceed **15 parts per million (0.0015 percent)** by weight. §4-41, *Rule 15.1 [40 CFR 60.4207(b)]; 40 CFR 1090.305(b)*
- 7.0 The maximum allowable emissions of particulate matter from the emergency generator engine are 0.30 pound/hour. This emission limitation is reasonable and proper, as determined by the Bureau Director. §4-41, *Rule 27.3*
- 8.0 The maximum allowable emissions of nitrogen oxides (NO<sub>x</sub>) from the emergency generator engine are 9.2 grams per kilowatt-hour. §4-41, *Rule 15.1 [40 CFR 60.4205(a)]*
- 9.0 Visible emissions from the emergency generator engine shall not exceed fifteen (15) percent opacity for an aggregate of more than five (5) minutes in any period of one hour or more than twenty (20) minutes in any period of twenty-four hours. This limitation is reasonable and proper, as determined by the Bureau Director. §4-41, *Rule 27.3*
- 10.0 Testing of the emergency generator engine to determine the emissions of particulate matter, NO<sub>x</sub>, carbon monoxide (CO), and volatile organic compounds (VOCs) 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)

## 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)