**Division for Air Quality**

# *STATEMENT OF BASIS / SUMMARY*

Title V, Operating
Permit: V-25-019
Akebono Brake Corporation Glasgow Plant
1765 Cleveland Ave
Glasgow, KY 42141

October 14, 2025
Vahid Bakhtiari, Reviewer

| | |
|---|---|
| SOURCE ID: | 21-009-00067 |
| AGENCY INTEREST: | 15685 |
| ACTIVITY: | APE20250001 |

## Table of Contents

## SECTION 1 – SOURCE DESCRIPTION

SIC Code and description: 3714, Motor Vehicle Parts and Accessories
Single Source Det. ☐ Yes ☒ No If Yes, Affiliated Source AI:

Source-wide Limit ☒ Yes ☐ No If Yes, See Section 4, Table A

28 Source Category ☐ Yes ☒ No If Yes, Category:

County: Barren
Nonattainment Area ☒ N/A ☐ $PM_{10}$ ☐ $PM_{2.5}$ ☐ CO ☐ $NO_X$ ☐ $SO_2$ ☐ Ozone ☐ Lead
If yes, list Classification:

PTE* greater than 100 tpy for any criteria air pollutant ☒ Yes ☐ No
If yes, for what pollutant(s)?
☐ $PM_{10}$ ☐ $PM_{2.5}$ ☐ CO ☒ $NO_X$ ☐ $SO_2$ ☒ VOC

PTE* greater than 250 tpy for any criteria air pollutant ☐ Yes ☒ No
If yes, for what pollutant(s)?
☐ $PM_{10}$ ☐ $PM_{2.5}$ ☐ CO ☐ $NO_X$ ☐ $SO_2$ ☐ VOC

PTE* greater than 10 tpy for any single hazardous air pollutant (HAP) ☐ Yes ☒ No
If yes, list which pollutant(s):

PTE* greater than 25 tpy for combined HAP ☐ Yes ☒ No

*PTE does not include self-imposed emission limitations.

Description of Facility:
Akebono Brake Corporation Glasgow Plant (Akebono) consists of two manufacturing departments: the Friction Department (OE and Aftermarket) and the Caliper Department.

1. Friction Department: The Friction Department produces disc brake pads and consists of the following processes:
   a. Mixing/Blending: Akebono uses a variety of solid, dry friction products for the friction material that is adhered to the pressure plates. Each type or model of pad has its own unique recipe of friction material. Friction material is placed into a bucket manually by an operator. The bucket is then conveyed automatically into the mixer. Each recipe has unique mixing requirements regarding mixer speed and mixing time. Once the friction material batch is mixed, the mixer automatically dispenses the mixed material into small cans or buckets. These mixed containers are transferred to the Hot Press process.

   b. Pressure Plate Surface Treatment: Akebono is supplied most of the stamped metal backing plates for the different models of pads from outside vendors. Some of the pressure plates are manufactured inside the plant by feeding rolls of steel into a fine blanking unit.

      For the two liquid surface treatment lines (ST 11 and 21), the pressure plate surface treatment process consists of a water/phosphate washer, primer booth and adhesive booth.

First, the metal backing plates are placed on trays. The trays are automatically conveyed through the surface treatment machine. The washer section of the machine removes any dirt/oil from the plates and then adds an iron phosphate rust inhibitor to the plates. The tray moves into the primer booth section of the machine where primer (E014) is added. The primer is added to the plate in preparation for the plate receiving the Adhesive. After the primer is automatically sprayed onto the plates the tray moves into a drying oven. The tray then moves into the adhesive booth section where the two (2) part adhesive (E015, E016) is automatically sprayed onto the plates. The adhesive air dries and the pressure plates are removed from the tray and placed in small material handling totes (approx. 32 plates/tote). The plates are transferred to the Hot Press process.

For the three powder surface treatment lines (ST 31, 41 and 51), the process is the same, except that powder adhesive (Sumiliteresin) is applied to the plates instead of the adhesive (E015, E016). After application, the plates are transferred to the Hot Press process.

c. Hot Press: The prepared pressure plates and mixed friction material are conveyed by cart to the hot press process. The friction material can/bucket is placed into the machine. The machine automatically dumps the can/bucket and dispenses the material evenly into molds/dies. Each individual pressure plate is then manually placed into the hot press die. The machine automatically places the preformed material pucks together with the pressure plates and the machine molds them together under heat and pressure. The uncured pad is then removed from the hot press dies and placed in a material handling tote. The uncured pad is then conveyed to the cure oven.

d. Cure Oven: The cure oven process consists of curing the pads at a designated temperature and time. The uncured pads are placed into a tray which is loaded into a carrier. Once the carrier is full of uncured pads, the carrier in automatically conveyed into the oven. The pads are then cured at a designated temperature and designated time. The carrier is then removed from the oven and the cured pads are unloaded and placed into material handling totes. The cured pads are then conveyed to finishing.

e. Finishing: Finishing consist of three processes. The first process is the slitter/grinder. The pads are individually placed into the slitter/grinder where the pads are surfaced to the correct thickness and if required a slit or groove is cut into the pad. The pads are then fed through the scorcher, which reduces the noise of the pad during braking. The last process is the marking/painting machine. The pads are conveyed through a powder paint booth and oven. The pads are then placed in totes and prepared for shipping.

2. Caliper Department:
The Caliper Department produces assembled brake calipers and consists of the following processes:
   a. Machining: Akebono receives foundry castings from outside vendors. The castings are placed into the machining operations where they are machined in order to accept all other components of the caliper. Once the castings are machined they are placed into totes and conveyed to the plater.

   b. Plating: The machined castings are loaded onto a plating rack. This rack is conveyed through a series of plating baths. The sequence of baths is alkaline cleaner, acid emulsion,

zinc, nitric rinse, and chromate. The plated castings are then unloaded from the racks and placed into totes and conveyed to the final process of assembly.

c. Assembly: All other small parts such as brake pads, pins, clips, bleeder screws, bleeder caps, tread protectors, pistons, piston boots, piston seals and various bolts are all supplied by outside vendors. The plated/machined castings are loaded into the assembly machines and the various small parts are assembled to them. Once the castings are machined, plated and assembled they become completed calipers. The calipers are inspected, packaged into totes and prepared for shipping.

## SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM

Permit Number: V-25-019 Activities: APE20250001

Received: February 14, 2025 Application Complete Date: May 1, 2025

Permit Action: ☐ Initial ☒ Renewal ☐ Significant Rev ☐ Minor Rev ☐ Administrative

Construction/Modification Requested? ☐Yes ☒No NSR Applicable? ☐Yes ☒No

Previous 502(b)(10) or Off-Permit Changes incorporated with this permit action ☒Yes ☐No

- APE20230003: Removal of AM 1 from EP #30 and re-routing it to EP #46.
- APE20250002: Addition of Side Paint Re-work Process as an insignificant activity (EP #56).
- APE20250003: Replaced boiler 1 (EP #21) with a new boiler with higher capacity.

**Description of Action:**
Akebono submitted an application on February 14, 2025, to renew their Title V permit V-14-023 R1. With this permit renewal V-25-019, the following changes have been made to the permit. No other changes have been requested by Akebono.

- On August 30, 2024, updates to 40 CFR 60, Subparts IIII and 40 CFR 63, Subpart ZZZZ were published in the federal register. Accordingly, the regulatory language in the draft permit has been updated to reflect the published changes.
- During the review process, the permittee submitted updated information indicating that corrections were necessary to remove equipment from the permit that had already been decommissioned and removed from the facility. Additionally, the permittee updated the identifier for the control device (dust collector) to which certain equipment was routed. As a result, the following changes were made:
  - Removed EP #4, EP #13, EP #16, and EP #13-15. These units have been decommissioned and scrapped. Therefore, they were removed from SECTION B of the permit.
  - Added mixer numbers and assigned the correct control equipment to EP #06; removed one of the mixers (mixer 21).
  - Assigned the correct control equipment to EP #27.
  - Added mixer numbers and correct control equipment to EP #29.
  - Assigned the correct control equipment to EP #38.
  - Removed the following insignificant activities: EP #01, EP #07, EP #10, EP #12, EP #15a/15b, EP #17, EP #28, EP #35, EP #53, EP #54, hot processing operations (HP11-1 4, HP21-24, HP41-44), and pressure plate blanking. These units have been decommissioned and scrapped. Therefore, they were removed from SECTION C of the permit.
- Updated and made formatting changes throughout the permit to be consistent and clear.

| V-25-019 Emission Summary | | |
|---|---|---|
| Pollutant | (1) 2024 Actual (tpy) | (2) PTE V-25-019 (tpy) |
| CO | 21.58 | 68.57 |
| $NO_X$ | 25.73 | 84.63 |
| PT | 3.24 | 10.49 |
| $PM_{10}$ | 3.24 | 15.09 |

| V-25-019 Emission Summary | | |
|---|---|---|
| Pollutant | (1) 2024 Actual (tpy) | (2) PTE V-25-019 (tpy) |
| $PM_{2.5}$ | 2.71 | 11.57 |
| $SO_2$ | 0.16 | 0.75 |
| VOC | 12.14 | 56.06 |
| Lead | 0.0001 | 0.0004 |
| Greenhouse Gases (GHGs) | | |
| Carbon Dioxide | 30,642 | 96,325 |
| Methane | 0.58 | 1.8 |
| Nitrous Oxide | 0.058 | 0.18 |
| CO2 Equivalent (CO2e) | | 96,425 |
| Hazardous Air Pollutants (HAPs) | | |
| Arsenic (and Compounds) | --- | 0.0002 |
| Benzene | 0.0005 | 0.003 |
| Chromium Compounds | 0 | 0.0011 |
| Formaldehyde | 0.07 | 0.2372 |
| Hexane; N-Hexane | 0.46 | 1.45 |
| Nickel (and Compounds) | --- | 0.002 |
| Toluene | 0.17 | 1.04 |
| Xylenes (Total) | --- | 0.0003 |
| Combined HAPs | 0.73 | 2.80 |

(1) Based on 2024 KYEIS repot.
(2) Includes controlled emissions based on federally enforceable control devices.

## SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS

| Emission Group 1 – New Process Operations | | | | |
|---|---|---|---|---|
| **Pollutant** | **Emission Limit or Standard** | **Regulatory Basis for Emission Limit or Standard** | **Emission Factor Used and Basis** | **Compliance Method** |
| Opacity | 20% opacity | 401 KAR 59:010, Section 3(1)(a) | N/A | Weekly qualitative observations, monitoring, recordkeeping |
| PM | For process weight rates:<br>• 0.50 ton/hr or less: 2.34 lb/hr<br>• up to 30.00 tons/hr: $E = 3.59 * P^{0.62}$ | 401 KAR 59:010, Section 3(2) | Material Balance | Monthly emission calculations, monitoring, recordkeeping |

**Initial Construction and/or Modification Date:**
EP #06: 1/1/1995, 10/1/1996, 6/1/2007; EP #27: 5/1/2007; EP #29: 1/1/2005, 10/1/2017; EP #30: 9/1/2008, modified 2024; EP #38: 10/1/2011; EP #39: 6/5/2011; EP #46: 4/1/2015, modified 2024; EP #52: 2/1/2017

**Process Description:**
**EP #06: Four (4) Mixing and Blending Systems (11, 31, 41, 51)**
Max. Friction Material Usage: 1.918 tons per hour, total
Control Equipment: For Mixer 11: Baghouse (Dust Collector 2)
For Mixers 31 & 41: Baghouse (Dust Collector 3)
For Mixer 51: Baghouse (Dust Collector 5)
Control efficiency: 99.9%

**EP #27: One (1) Slitter and Grinder (51)**
Max. Processing Rate: 2,400 parts per hour
Control Equipment: Baghouse (Dust Collector 7)
Control efficiency: 99.9%

**EP #29: Two (2) Mixing and Blending Systems (61, 71)**
Max. Friction Material Usage: 0.477 tons per hour, total
Control Equipment: For Mixer 61: Baghouse (Dust Collector 5)
For Mixer 71: Baghouse (Dust Collector 3)
Control efficiency: 99.9%

**EP #30: Aftermarket Line 2 Grinding (AM2)**
Max. Processing Rate: 2,400 parts per hour
Control Equipment: Baghouse (Dust Collector 6)
Control efficiency: 99.9%

**EP #38: Module 7 Grinding Operations (71 Comec)**
Processing Rate: 2,400 parts per hour
Control Equipment: Baghouse (Dust Collector 8)
Control efficiency: 99.9%

**Emission Group 1 – New Process Operations**

**EP #39: Module 6 Grinding Operations (61 Comec)**
Max. Processing Rate: 2,400 parts per hour
Control Equipment: Baghouse (Dust Collector 6)
Control efficiency: 99.9%

**EP #46: Grinding (81)**
Max. Processing Rate: 2,400 parts per hour
Control Equipment: Baghouse (Dust Collector 8)
Control efficiency: 99.9%

**EP #52: Aftermarket Line 3 Grinding**
Max. Processing Rate: 720 parts per hour
Control Equipment: Baghouse (Dust Collector 8)
Control efficiency: 99.9%

**Applicable Regulations:**
**401 KAR 59:010,** *New process operations*. This regulation is applicable to each affected facility, associated with a process operation, which is not subject to another emission standard with respect to particulates, commenced on or after July 2, 1975.
**40 CFR 64,** *Compliance Assurance Monitoring*

**Comments:**
Emissions are calculated using emission factors derived from mass balance.

**Emission Group 2 – Spray Booths**

| Pollutant | Emission Limit or Standard | Regulatory Basis for Emission Limit or Standard | Emission Factor Used and Basis | Compliance Method |
|---|---|---|---|---|
| Opacity | 20% opacity | 401 KAR 59:010, Section 3(1)(a) | N/A | Weekly qualitative observations, monitoring, recordkeeping |
| PM | 2.34 lb/hr | 401 KAR 59:010, Section 3(2) | MSDS | Monthly emission calculations, monitoring, recordkeeping |
| VOC | < 15% by weight | 401 KAR 59:225, Section 3 | MSDS | Material balance, testing, monitoring, recordkeeping |

**Initial Construction Date:**
EP #02: 1/1/95; EP #03: 1/1/95

**Process Description:**
**EP #02: 2 Primer Spray Booths (05, 06)**
Max. Primer usage rate: 0.0225 tons per hour
Control equipment: Dry Filter with 90% control efficiency, Thermal Oxidizer with 85% control efficiency

**EP #03: 2 Adhesive Spray Booths (07, 08)**
Max. Adhesive chemical usage rate: 0.0097 tons per hour.
Control equipment: Dry Filter with 90% control efficiency, Thermal Oxidizer with 85% control efficiency

**Emission Group 2 – Spray Booths**

**Applicable Regulations:**
**401 KAR 59:010,** *New process operations.* This regulation is applicable to each affected facility, associated with a process operation, which is not subject to another emission standard with respect to particulates, commenced on or after July 2, 1975.
**401 KAR 59:225,** *New miscellaneous metal parts and products surface coating operations.* This regulation is applicable to coating lines which apply coatings on metal substrates at major sources in counties designated attainment for ozone commenced on or after February 4, 1981.

**State-Origin Requirement:**
**401 KAR 63:020,** *Potentially hazardous matter or toxic substances.* This regulation is applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances, applies to emissions of Toluene.

**Comments:**
Emission factors are from the SDS. The potential to emit emissions were calculated based on the maximum material usage rates listed above.

**Emission Group 3: Natural Gas Fired Indirect Heat Exchangers**

| Pollutant | Emission Limit or Standard | | Regulatory Basis for Emission Limit or Standard | Emission Factor Used and Basis | Compliance Method |
|---|---|---|---|---|---|
| PM | EP | Limit (lb/MMBtu) | 401 KAR 59:015, Section 4(1) | AP-42 Chapter 1.4 | Assumed when burning natural gas |
| | 21 | 0.51 | | | |
| | 33 | 0.52 | | | |
| | 34 | 0.52 | | | |
| Opacity | 20% opacity | | 401 KAR 59:015, Section 4(2) | N/A | Assumed when burning natural gas |
| $SO_2$ | EP | Limit (lb/MMBtu) | 401 KAR 59:015, Section 5(1) | AP-42 Chapter 1.4 | Assumed when burning natural gas |
| | 21 | 2.58 | | | |
| | 33 | 2.65 | | | |
| | 34 | 2.65 | | | |

**Initial Construction Dates:**
EP #21: 4/1/1997, replaced in 2025; EP #33: 9/1/2008; EP #34: 9/1/2008

**Process Description:**
These units all use natural gas as fuel.
Maximum Capacity: For boiler #21: 5.5 MMBtu/hr;
For boilers #33 & #34: 4.5 MMBtu/hr each
Control Equipment: None

**Applicable Regulation:**
**401 KAR 59:015,** *New indirect heat exchangers*. This regulation is applicable to indirect heat exchangers having a heat input capacity greater than one (1) million Btu per hour (MMBtu/hr) commenced on or after April 9, 1972 (401 KAR 59:015, Section 2(1)).

## Emission Group 3: Natural Gas Fired Indirect Heat Exchangers

**State-Origin Requirement:**
**401 KAR 63:020,** *Potentially hazardous matter or toxic substances.* This regulation is applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.

**Comments:**
Allowable emissions for the units are calculated using 401 KAR 59:015, Section 4(1)(c) and Section 5(1)(c)(1)(b) using the total rated heat input capacity of all affected facilities at the source as shown in summary table below.

| Summary of All Affected Facilities Used to Determine 401 KAR 59:015 Emission Limits | | | | | | |
|---|---|---|---|---|---|---|
| Emission Point # | Capacity (MMBtu/hr) | Date Constructed | Basis for PM Limit | Total Heat Input Capacity for PM Limit (MMBtu/hr) | Basis for $SO_2$ Limit | Total Heat Input Capacity for $SO_2$ Limit (MMBtu/hr) |
| 21 | 5.5 | 1997, replaced in 2025 | Section 4(1)(c) | 14.5 | Section 5(1)(c) | 14.5 |
| 33 & 34 | 9.0 | 2008 | Section 4(1)(c) | 13.5 | Section 5(1)(c) | 13.5 |

## EP #23: Emergency Generator

**Initial Construction Date:** 9/1/2003

**Process Description:**

| | |
|---|---|
| Model: | Caterpillar 3406C |
| Rating: | 459 HP |
| Displacement: | 14.5 L |
| Fuel: | Diesel |
| Model year: | 2000 |

**Applicable Regulation:**
**401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (Subpart ZZZZ),** *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines,* applies to each stationary RICE located at a major or area source of HAP emissions.

**Comments:**
Emissions are calculated using emission factors from AP42- Tables 3.3-1, 3.3-2, and 40 CFR 98 Tables C-1 and C-2, and an assumption of 500 hrs/yr to be conservative and account for emergency operation.

**EP #49: Emergency Generator**

**Initial Construction Date:** 2013

**Process Description:**

| | |
|---|---|
| Model: | Kohler 30REOZJB |
| Rating: | 64 HP |
| Displacement: | 2.9 L |
| Fuel: | Diesel |

**Applicable Regulations:**

**401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (Subpart ZZZZ),** *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines,* applies to each stationary RICE located at a major or area source of HAP emissions.

**401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 through 60.4219, Tables 1 through 8 (Subpart IIII),** *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines,* applies to stationary compression ignition (CI) internal combustion engines (ICE) that commence construction after June 12, 2006.

**Comments:**

Emissions are calculated using emission factors from AP42- Tables 3.3-1, 3.3-2, and 40 CFR 98 Tables C-1 and C-2, and an assumption of 500 hrs/yr to be conservative and account for emergency operation.

## SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS (CONTINUED)

**Testing Requirements\Results**

| Emission Point(s) | Control Device | Parameter | Regulatory Basis | Frequency | Test Method | Permit Limit | Test Result | Thruput and Operating Parameter(s) Established During Test | Activity Graybar | Date of last Compliance Testing |
|---|---|---|---|---|---|---|---|---|---|---|
| 02 & 03 | Thermal Oxidizer | VOC Capture & Destruction Efficiency | 401 KAR 59:225, Section 3 | Initial and every 5 years | Method 25A | 85% | 89% | TO Temp = 300°C, Static pressure = 2.0 in. $H_2O$ | CMN20150001 | 4/23/2015 |
| | | Permanent Total Enclosure (PTE) | | | Method 204 | 100% | 100% | N/A | | |
| | | VOC Capture & Destruction Efficiency | | Every 5 years | Method 25A | 85% | 97.3% | TO Temp = 302°C, Static pressure = 2.1 in. $H_2O$ | CMN20200001 | 12/19/2019 |
| | | Permanent Total Enclosure (PTE) | | | Method 204 | 100% | 100% | N/A | | |
| | | VOC Capture & Destruction Efficiency | | Every 5 years | Method 25A | 85% | 93.4% | TO Temp = 300°C, Static pressure = 2.1 in. $H_2O$ | CMN20250001 | 2/20/2025 |
| | | Permanent Total Enclosure (PTE) | | | Method 204 | 100% | 100% | N/A | | |

| Emission Point(s) | Control Device | Parameter | Regulatory Basis | Frequency | Test Method | Permit Limit | Test Result | Thruput and Operating Parameter(s) Established During Test | Activity Graybar | Date of last Compliance Testing |
|---|---|---|---|---|---|---|---|---|---|---|
| *EP15b (Oven 41) | None | Formaldehyde emissions | Determine emission factors | Initial | Method 323 | N/A | 0.004 lb/hr | 1170 parts/hr | CMN20160001 | 7/19/2016 & 11/4/2016 |
| *EP37 (Oven 61) | | | | | | | 0.001 lb/hr | 150 parts/hr | | |

**Footnotes:**
*Ovens 41 & 61 run the highest values of formaldehyde containing resins.

## SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS

**Table A - Group Requirements:**

N/A

**Table B - Summary of Applicable Regulations:**

| Applicable Regulations | Emission Point |
|---|---|
| **401 KAR 59:010,** *New process operations*, applies to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulates in 401 KAR Chapter 59, commenced on or after July 2, 1975. | 06, 27, 29, 30, 38, 39, 46, 52, 02, & 03 |
| **401 KAR 59:015,** *New indirect heat exchangers,* applies to indirect heat exchangers having a heat input capacity greater than one (1) million Btu per hour (MMBtu/hr) commenced on or after April 9, 1972. | 21, 33 & 34 |
| **401 KAR 59:225,** *New miscellaneous metal parts and products surface coating operations,* applies to coating lines which apply coatings on metal substrates at major sources in counties designated attainment for ozone commenced on or after February 4, 1981. | 02 & 03 |
| **401 KAR 63:020,** *Potentially hazardous matter or toxic substances,* applies to each affected facility which emits or may emit potentially hazardous matter or toxic substances, provided such emissions are not elsewhere subject to provisions of an administrative regulation of the Division for Air Quality. This regulation applies to emissions of Benzene, HCl, Phenol, Toluene, and Fluoride. | 02, 03, 13, 21, 33, & 34 |
| **40 CFR 64,** *Compliance assurance monitoring (CAM),* applies to each pollutant-specific emission unit (PSEU) that is subject to an emission limitation, uses a control device to achieve compliance, and has pre-control emissions that exceed a major source threshold. | 06, 27, 29, 30, 38, 39, 46, & 52 |
| **401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (Subpart ZZZZ),** *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines,* applies to stationary RICE located at a major or area source of HAP emissions. | 23 & 49 |
| **401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 through 60.4219, Tables 1 through 8 (Subpart IIII),** *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines,* applies to stationary compression ignition (CI) internal combustion engines (ICE) that commence construction after June 12, 2006. | 49 |

**Table C - Summary of Precluded Regulations:**

N/A

**Table D - Summary of Non Applicable Regulations:**

N/A

## Air Toxic Analysis

**401 KAR 63:020**, *Potentially Hazardous Matter or Toxic Substances*
The Division for Air Quality (Division) has performed SCREEN View on 3/29/2016 and 8/9/2016, and AERMOD on 11/7/2016 of potentially hazardous matter or toxic substances (Benzene, Hydrochloric Acid, Fluoride, Phenol, Toluene, and Formaldehyde) that may be emitted by the facility based upon the process rates, material formulations, stack heights and other pertinent information provided by the applicant. Based upon this information, the Division has determined that the conditions outlined in this permit will assure compliance with the requirements of 401 KAR 63:020.

## Single Source Determination

N/A

## SECTION 5 – PERMITTING HISTORY

| Permit | Permit type | Activity# | Complete Date | Issuance Date | Summary of Action | PSD/Syn Minor |
|---|---|---|---|---|---|---|
| F-06-008 | Initial | APE20060001 | 1/20/2006 | 5/15/2006 | Initial Conditional Major Permit | N/A |
| F-06-008 R1 | Minor Revision | APE20070002 | 7/30/2007 | 8/7/2007 | Addition of new equipment. Emission limits are still taken. | N/A |
| F-06-008 R2 | Significant Revision | APE20080001 | 4/9/2008 | 6/18/2008 | Addition of new equipment and transfer of existing equipment from F-06-027 permit. Also addition of a regulation. | N/A |
| F-06-008 R3 | Minor Revision | APE20110002 | 1/31/2011 | 5/6/2011 | Addition of two new grinding operation. | N/A |
| V-14-023 | Initial | APE20140002 | 11/24/2014 | 4/16/2015 | Initial Title V Permit | N/A |
| V-14-023 R1 | Minor Revision | APE20160002 | 11/09/2016 | 3/22/2017 | Addition of EPs 49, 51, 52, 53, 54 and Hot Press, increase rates of production, move boilers to Section B. | N/A |
| V-20-010 | Renewal | APE20190002 | 1/24/2020 | 8/16/2020 | Renewal Permit, removal of 2 grinders in EP #16 and 2 scorchers in EP #17. | N/A |

## SECTION 6 – PERMIT APPLICATION HISTORY

N/A

## APPENDIX A – ABBREVIATIONS AND ACRONYMS

AAQS – Ambient Air Quality Standards
BACT – Best Available Control Technology
Btu – British thermal unit
CAM – Compliance Assurance Monitoring
CO – Carbon Monoxide
Division – Kentucky Division for Air Quality
ESP – Electrostatic Precipitator
GHG – Greenhouse Gas
HAP – Hazardous Air Pollutant
HF – Hydrogen Fluoride (Gaseous)
MSDS – Material Safety Data Sheets
mmHg – Millimeter of mercury column height
NAAQS – National Ambient Air Quality Standards
NESHAP – National Emissions Standards for Hazardous Air Pollutants
$NO_x$ – Nitrogen Oxides
NSR – New Source Review
PM – Particulate Matter
$PM_{10}$ – Particulate Matter equal to or smaller than 10 micrometers
$PM_{2.5}$ – Particulate Matter equal to or smaller than 2.5 micrometers
PSD – Prevention of Significant Deterioration
PTE – Potential to Emit
$SO_2$ – Sulfur Dioxide
TF – Total Fluoride (Particulate & Gaseous)
VOC – Volatile Organic Compounds