

Commonwealth of Kentucky  
Division for Air Quality  
***STATEMENT OF BASIS / SUMMARY***

Conditional Major, Operating  
Permit: F-25-043

Keystone Foods, LLC – Albany Processing  
2292 Highway 90 W  
Albany, KY 42602

October 10, 2022  
Ossama Ateyeh, Reviewer

SOURCE ID: 21-053-00018  
AGENCY INTEREST: 856  
ACTIVITY: APE20250001

**Table of Contents**

**SECTION 1 – SOURCE DESCRIPTION ..... 2**  
**SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM..... 3**  
**SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS ..... 5**  
**SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS ..... 16**  
**SECTION 5 – PERMITTING HISTORY ..... 17**  
**SECTION 6 – PERMIT APPLICATION HISTORY..... 17**  
**APPENDIX A – ABBREVIATIONS AND ACRONYMS ..... 18**  
**APPENDIX B – INDIRECT HEAT EXCHANGER EMISSIONS LIMITATIONS ..... 19**

## SECTION 1 – SOURCE DESCRIPTION

SIC Code and description: 2015, Poultry Slaughtering and Processing

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: Clinton

Nonattainment Area  N/A  PM<sub>10</sub>  PM<sub>2.5</sub>  CO  NO<sub>x</sub>  SO<sub>2</sub>  Ozone  Lead

PTE\* greater than 100 tpy for any criteria air pollutant  Yes  No

If yes, for what pollutant(s)?

PM<sub>10</sub>  PM<sub>2.5</sub>  CO  NO<sub>x</sub>  SO<sub>2</sub>  VOC

PTE\* greater than 250 tpy for any criteria air pollutant  Yes  No

If yes, for what pollutant(s)?

PM<sub>10</sub>  PM<sub>2.5</sub>  CO  NO<sub>x</sub>  SO<sub>2</sub>  VOC

PTE\* greater than 10 tpy for any single hazardous air pollutant (HAP)  Yes  No

PTE\* greater than 25 tpy for combined HAP  Yes  No

\*PTE does not include self-imposed emission limitations.

### Description of Facility:

The source operates a poultry processing facility, with two natural gas fired boilers, used for process heat; two (2) hot water heaters, one (1) emergency engine, one flare, haul roads, conveyors and silos for grain loading and unloading, coop dump area and hanging room conveyor for poultry processing. Other natural gas/ propane-fired small space heaters/ HVAC/MAU units, provide adequate heat, and make up air for various needed operational tasks and office areas; Other operational activities such as acid dip tanks used for bacteria interventions, Chemical storage used for facility disinfections, and several Cooling Condensers to control the temperature in the heat or Chemical process. The permittee has elected to take a voluntary limit of 90 tons of PM<sub>10</sub> per twelve month rolling period to remain below the major source threshold.

**SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM**

Permit Number: F-25-043

Activity: APE20250001

Application Received: September 29, 2025      Application Complete Date: November 18, 2025

Permit Action:  Initial    Renewal    Significant Rev    Minor Rev    Administrative

Construction/Modification Requested?    Yes    No

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

**Description of Action:**

- Added two Cleaner/Sanitizer Chemical tanks (2,500 and 660 gal) to the Insignificant Activities list in Section C of the permit.
- Added two Peracetic Acid (PAA) solution tanks (5000 and 550 gal) to the Insignificant Activities list in Section C of the permit.
- Updated/added five diesel tanks (12,000; 10,000; 5,000, 1,500; and 174 gal) to the Insignificant Activities list in Section C of the permit.
- The emission calculations for PAA intervention is updated and moved from the Insignificant Activities list in Section C to Section B of the permit.
- The emission calculations for EU 22A/B live hang Operation have been updated using emission factors developed at similar facility using CAS system which is the Controlled Atmosphere System for the killing of poultry. This change in emission calculations reduced the potential to emit and the activity is now considered an Insignificant Activity and has been moved to the Insignificant Activities list in Section C of the permit.

F-24-043 Emission Summary				
Pollutant	2024 Actual (tpy)	Previous PTE F-20-001 R1 (tpy)	Change (tpy)	Revised PTE F-25-043 (tpy)
CO	6.6	23.2	18.69	41.89
NO <sub>x</sub>	13.0	45.5	45.54	77.84
PT	13.71	564	-6.8	557.2
PM <sub>10</sub>	13.71	263	-7.4	255.6
PM <sub>2.5</sub>	4.92	50.4	0	50.4
SO <sub>2</sub>	1.38	7.65	3.75	11.4
VOC	4.38	13.1	2.0	15.1
Lead	0.0000002	0.0002	0	0.0002
Greenhouse Gases (GHGs)				
Carbon Dioxide	13,918	88,085	31.1	119,199
Methane	0.616	2.1	0.5	2.60
Nitrous Oxide	0.838	2.71	2.24	4.95
CO <sub>2</sub> Equivalent (CO <sub>2</sub> e)	0	88,945	31.8	120,740
Hazardous Air Pollutants (HAPs)				
Acetaldehyde	0.00064	0.00016	0	0.00016
Ammonia	0.0002	0.0891	0.011	0.197
Benzene	0.0009	004	0	0.0043
Formaldehyde	0.007	0.044	0.016	0.060

F-24-043 Emission Summary				
Pollutant	2024 Actual (tpy)	Previous PTE F-20-001 R1 (tpy)	Change (tpy)	Revised PTE F-25-043 (tpy)
Hexane; N-Hexane	0.0005	0.488	0.398	0.886
Methanol	0.00002	0.000007	0.066	0.0657
Toluene	0.0003	0.0024	0.0007	0.0031
Xylenes (Total)	0.00016	0.00057	0	0.00057
Combined HAPs:		0.54	0.42	0.960

**SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS**

<b>Emission Unit #EU24 Natural Gas Fired Boiler Indirect Heat Exchanger Operations</b>				
<b>Pollutant</b>	<b>Emission Limit or Standard</b>	<b>Regulatory Basis for Emission Limit or Standard</b>	<b>Emission Factor Used and Basis</b>	<b>Compliance Method</b>
PM	0.43 lb/MMBtu	401 KAR 59:015, Section 4(1)(c)	AP-42 Chapter 1.4	Assumed based upon gaseous fuel (Anaerobic Lagoon, natural gas or propane) combustion
	20% opacity	401 KAR 59:015, Section 4(2)	N/A	
SO <sub>2</sub>	1.93 lbs/MMBtu	401 KAR 59:015, Section 5(1)(c)2.b.	AP-42 Chapter 1.4	

**Initial Construction Date:** 06/2010

**Process Description:**

EU24 is Boiler #3: Kewanee H3S-500-G02; Rated Capacity: 16.7 MMBtu/hr;  
 Primary Fuel: Anaerobic Lagoon Gas; Secondary Fuel: Natural Gas; Tertiary Fuel: Propane.

**Applicable Regulation:**

401 KAR 59:015, New indirect heat exchangers, is applicable to indirect heat exchangers having a heat input capacity greater than 1 MMBtu/hr commenced on or after April 9, 1972.

401 KAR 60:005, Section 2.(2)(d), 40 C.F.R. 60.40c through 60.48c (Subpart Dc), Standards of performance for Small Industrial-Commercial-Institutional Steam Generating Units, is applicable since construction commenced after June 9, 1989.

**Comments:**

Emissions shall not exceed twenty (20) percent opacity based on a six-minute average, except for a maximum of forty (40) percent opacity shall be permissible for not more than six (6) consecutive minutes in any sixty (60) consecutive minutes during cleaning the fire box or blowing soot and emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

Emission factors from AP-42 Table 1.4-1,2,3.

Particulate matter and sulfur dioxide emission limits were set by 401KAR 59:015, Section 4(1)(c) and Section 5(1)(c)2.b, respectively. The total heat input capacity for the facility 29.26 MMBtu/hr.

Particulate emissions from the stack shall not exceed 0.43 lb/MMBtu.

Sulfur dioxide emissions shall not exceed 1.93 lb/MMBtu.

$$0.43 = 0.9634 * (29.26)^{-0.2356}$$

$$1.93 = 7.7223 * (29.26)^{-0.4106}$$

The unit is assumed to be in compliance with PM, SO<sub>2</sub> and opacity standards while burning lagoon gas, natural gas and propane. The facility must monitor, maintain and compile records of the amount of anaerobic lagoon gas, natural gas and propane burned on a monthly basis.

**Emission Unit #EU25 Natural Gas Fired Boiler Indirect Heat Exchanger Operations**

<b>Pollutant</b>	<b>Emission Limit or Standard</b>	<b>Regulatory Basis for Emission Limit or Standard</b>	<b>Emission Factor Used and Basis</b>	<b>Compliance Method</b>
<b>PM</b> Combusting (gaseous fuel) <b>OR</b> (fuel oil)	0.41 lb/MMBtu	401 KAR 59:015, Section 4(1)(c)	AP-42 Chapter 1.5 (propane) AP-42 Chapter 1.4 (natural gas) AP-42 Chapter 1.3 (fuel oil)	Assumed based upon gaseous fuel (Natural gas or propane or fuel oil) combustion
	20% Opacity (gaseous fuel)	401 KAR 59:015, Section 4(2)	N/A	Assumed based on gaseous fuel combustion
	20% Opacity (fuel oil)			Visual observation weekly
SO <sub>2</sub> Combusting (gaseous fuel)	1.74 lbs/MMBtu	401 KAR 59:015, Section 5(1)(c)2.b.	AP-42 Chapter 1.5 (propane) AP-42 Chapter 1.4 (natural gas) AP-42 Chapter 1.3 (fuel oil)	Assumed based on gaseous fuel combustion
SO <sub>2</sub> (fuel oil)	0.5lb/MMBtu <b>OR</b> not combust oil that contains greater than <b>0.5</b> weight percent sulfur	40 CFR 60.42c(d)		Fuel supplier certification

**Initial Construction Date:** 01/2017

**Process Description:**

EU25 is Boiler #4: Victory Energy Model: F-3-DB-500-S150-M  
 Heat Input Capacity: 20.925 MMBtu/hr  
 Primary Fuel: Propane; Secondary Fuel: Natural Gas Tertiary Fuel: No.2 Fuel Oil

**Applicable Regulation:**

401 KAR 59:015, New indirect heat exchangers, is applicable to indirect heat exchangers having a heat input capacity greater than 1 MMBtu/hr commenced on or after April 9, 1972.

401 KAR 60:005, Section 2.(2)(d), 40 C.F.R. 60.40c through 60.48c (Subpart Dc), Standards of performance for Small Industrial-Commercial-Institutional Steam Generating Units, is applicable because construction commenced after June 9, 1989.

**Precluded Regulation:**

401 KAR 63:002, Section 2(4)(jjjjj), 40 C.F.R. 63.11193 through 63.11237, Tables 1 through 8 (Subpart JJJJJ), National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.

**Comments:**

To preclude the requirements of 40 CFR 63, Subpart JJJJJJ, #2 fuel oil combustion, for the boiler, is limited to periods of gas curtailment, gas supply interruption, startups, or periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training of liquid fuel shall not exceed a combined total of forty-eight (48) hours during any calendar year. Compliance is demonstrated by

**Emission Unit #EU25 Natural Gas Fired Boiler Indirect Heat Exchanger Operations**

maintaining records of the hours and reason for #2 fuel oil use. For startups on liquid fuel, compliance is demonstrated by recording which 40 CFR 63, Subpart JJJJJ definition of “startup” is being used, and the time startup begins, fuel is switched, and useful energy is supplied.

The unit is subject to PM, opacity, and SO<sub>2</sub> emission limitations under either 401 KAR 59:015 and 40 CFR 60, Subpart Dc depending on the fuel combusted.

Emission factors from AP-42 Chapter 1.3, Chapter 1.4, and Chapter 1.5.

Particulate matter and sulfur dioxide emission limits were set by 401KAR 59:015, Section (4)(c) and Section (5(1)1.b. & 2.b, respectively. The total heat input capacity for the facility 37.63 MMBtu/hr.

$$0.41=0.9634*(37.63)^{-0.2356}$$

$$1.74= 7.7223*(37.63)^{-0.4106}$$

The unit is assumed to be in compliance with all emission limitations while combusting propane or natural gas. While combusting #2 Fuel Oil, the unit is assumed to be in compliance with PM emission limit based upon the AP-42 emission factor, compliance with the SO<sub>2</sub> emission limit is demonstrated through fuel supplier certification, and compliance with the opacity standard is demonstrated by qualitative visual observation followed by U.S. EPA Reference Method 9 reading readings if emissions observed The facility is required to monitor and maintain records of the tons of ingredients processed on a monthly basis.

The facility shall monitor and maintain records of the amount of each fuel combusted on a monthly basis.

<b>Emission Unit # EU03 &amp; EU04 Hot Water Heaters</b>				
<b>Pollutant</b>	<b>Emission Limit or Standard</b>	<b>Regulatory Basis for Emission Limit or Standard</b>	<b>Emission Factor Used and Basis</b>	<b>Compliance Method</b>
PM	2.34 lbs/hr	401 KAR 59:010, Section 3(2)	AP-42 Chapter 1.4.	Assumed based upon natural gas and propane combustion
	20% opacity	401 KAR 59:010, Section 3(1)(a)	N/A	
<b>Initial Construction Date:</b> 07/1998				
<b>Process Description:</b>				
Hot Water Heater: Heater #1 (EU03)		Hot Water Heater: Heater #2 (EU04)		
Model: Kemco Systems 25189		Model: Kemco Systems 20898		
Capacity: 11 MMBtu/hr		Capacity: 11 MMBtu/hr		
Primary Fuel: Propane (90.5 MMBtu/Mgal)		Primary Fuel: Propane (90.5 MMBtu/Mgal)		
Secondary Fuel: Natural Gas		Secondary Fuel: Natural Gas		
<b>Applicable Regulation:</b>				
401 KAR 59:010, New process operations, applicable 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.				
401 KAR 63:020 Potentially hazardous matter or toxic substances.				
<b>Comments:</b>				
These units are direct-fired and therefore not subject to 40 CFR 60, Subpart Dc (see U.S. EPA ADI Control Number: 9700033) or 401 KAR 59:015.				
The facility must monitor and maintain records of the amount of natural gas and propane burned on a source-wide monthly basis.				

<b>Emission Unit #EU08 Flare</b>				
<b>Pollutant</b>	<b>Emission Limit or Standard</b>	<b>Regulatory Basis for Emission Limit or Standard</b>	<b>Emission Factor Used and Basis</b>	<b>Compliance Method</b>
Opacity	20%	401 KAR 63:015, Section 3	N/A	Monthly Visible observations & recordkeeping
<p><b>Initial Construction Date:</b> 07/1998</p> <p><b>Process Description:</b>                      Flare used for the disposal of waste gas streams generated from the anaerobic lagoon biogas.                      Model: Groth Corp. 8391                      Capacity: 24,000 cubic feet/hr @ 750 Btu/cubic ft. anaerobic lagoon biogas                      Fuel: Anaerobic Lagoon Biogas (600 – 800 MMBtu/MMscf)</p> <p><b>Applicable Regulation:</b>                      401 KAR 63:015, Flares, applies to each affected facility which means a device at the tip of a stack or other opening used for the disposal of waste gas streams by combustion.</p> <p><b>Comments:</b>                      The facility shall not cause, suffer, or allow the emission into the open air of particulate matter from the flare which is greater than twenty (20%) percent opacity for more than three (3) minutes in any one (1) day.                       The facility is required to monitor and maintain records of the gas burned and visual operations on a monthly basis. Compliance with the opacity limit is demonstrated through the combustion of natural gas with the digester’s vapors. The facility must monitor and maintain records for source wide monthly biogas usage.                       The facility must conduct visual observations of the flare on a monthly basis. If visible emissions are observed, the facility must perform a U.S. EPA Reference Method 9 test and maintain records of the results.                       The facility must maintain records of all routine and non-routine maintenance activities performed at the flare.</p>				

**Emission Unit #EU07 Emergency Diesel Fire Pump Engine**

**Initial Construction Date:** 07/1998

**Process Description:**

Emergency Diesel fired fire pump 120 hp engine  
Manufacturer: Clarke Detroit Diesel – Allison Inc  
Model: PDFP-06YT 2505F  
Serial #: U677821

**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 Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

**Comments:**

This unit has operation limits, and monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 63, Subpart ZZZZ. Pursuant to 40 CFR 63.6640(a), the permittee must operate and maintain the stationary RICE according to the manufacturer's emission-related operating and maintenance instructions or develop and follow your own maintenance plan which must provide, to the extent practicable, for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Emissions calculated using AP-42, Chapter 3.3 and an assumption of 500 hours/year to account for emergency operation.

**Emission Unit (EU09 To EU20) Grain Particulate Emissions**

<b>Pollutant</b>	<b>Emission Limit or Standard</b>	<b>Regulatory Basis for Emission Limit or Standard</b>	<b>Emission Factor Used and Basis</b>	<b>Compliance Method</b>
PM	2.34 lbs/hr for P < 0.5 E = 3.59P <sup>0.62</sup> for 0.5 < P < 30 E = 17.31*P <sup>0.16</sup> for P > 30	401 KAR 59:010, Section 3(2)	AP 42 Chapter 9.9-1	Assumed to be in compliance based on emission factor in application
	20 % Opacity	401 KAR 59:010, Section 3(1)(a)	N/A	Weekly visual observation and Method 9 if emissions observed

**Initial Construction Date:** 2003

**Process Description:**

<b>Unit</b>	<b>Description</b>	<b>Rated Capacity</b>
EU09	Truck Unloading	175 tons/hr
EU10	Auger Conveyor to Silo	
EU11	Silo Transfer Conveyor	
EU12	Silo #1	125 tons/hr
EU13	Silo #2	
EU14	Silo #3	
EU15	Silo #4	
EU16	Auger Conveyor from Silo #1	175 tons/hr
EU17	Auger Conveyor from Silo #2	
EU18	Auger Conveyor from Silo #3	
EU19	Auger Conveyor from Silo #4	175 tons/hr
EU20	Truck Loadout (with enclosure)	

**Applicable Regulation:**

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.

**Comments:**

To preclude the applicability of 401 KAR 52:020, the facility has taken a voluntary process limit of 900,000 tons per year for these units.

**Emission Unit (EU09 To EU20) Grain Particulate Emissions**

The facility must monitor and maintain records of the tons of ingredients processed and hours of operation on a monthly basis.

The facility must perform a qualitative visual observation on opacity for each unit every seven days while the affected facility is operating and maintain a log of the observations. If visible emissions are seen, the facility must determine the opacity by U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions.

**Emission Unit #21 Plant Roadways (EU21)**

**Initial Construction Date:** July 2003

**Process Description:**

Plant roadways

**Applicable Regulation:**

401 KAR 63:010, Fugitive emissions

**Comments:**

A person shall not cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished; or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne.

The permittee shall monitor the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis.

**Emission Unit #EU23 Peracetic Acid Dip Tanks (PAA) Intervention**

**Initial Construction Date:** September 2026

**Process Description:**

PAA is a solution for microbial intervention

Maximum Input: 594 Mgal/yr.

Control: Room Enclosure

**Applicable Regulation:**

N/A

**Comments:**

The facility is required to monitor and maintain records of the VOC content and maintain records of monthly usage of PAA.

**Testing Requirements/Results:**

The source, at the time of this permit (F-25-043) has not been required to conduct any performance testing.

**SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS**

**Table A - Group Requirements:**

<b>Emission and Operating Limit</b>	<b>Regulation</b>	<b>Emission Unit</b>
90 tpy of PM <sub>10</sub> emissions based on a consecutive twelve-month rolling total.	To preclude the applicability of 401 KAR 52:020; Title V Permits	Source-wide

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

<b>Applicable Regulations</b>	<b>Emission Unit</b>
401 KAR 59:010. New process operations	EU03, EU04 and E09-EU20
401 KAR 59:015 New indirect heat exchangers	EU24 & EU25
401 KAR 63:010 Fugitive emissions	EU21
401 KAR 63:015 Flares	EU08
401 KAR 60:005 Section 2(2)(d) 40 C.F.R. 60.40c through 60.48c (Subpart Dc) Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	EU03, EU04, EU 24, EU25
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 Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	EU07
401 KAR 63:020, <i>Potentially hazardous matter or toxic substances</i>	EU03, EU04

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

<b>Precluded Regulations</b>	<b>Emission Unit</b>
401 KAR 63:002 Section 2(4.) (jjjjj), 40 C.F.R. 63.11193 through 63.11237, Tables 1 through 8 (Subpart JJJJJ), National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources	EU25

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

N/A

**Air Toxic Analysis**

N/A

**Single Source Determination**

N/A

**SECTION 5 – PERMITTING HISTORY**

<b>Permit</b>	<b>Permit Type</b>	<b>Activity #</b>	<b>Complete Date</b>	<b>Issuance Date</b>	<b>Summary of Action</b>	<b>PSD/Syn Minor</b>
F-10-022	Initial	APE20100001	5/12/2010	10/12/2010	Initial Construction Permit	N/A
F-15-010	Renewal	APE20150001	3/24/2015	12/1/2015	Renewal Incorporating Dust Collector Replacement	N/A
F-15-010 R1	Minor Revision	APE20160002	12/12/2016	4/24/2017	Added EU 25	N/A
F-20-001	Renewal	APE20220002	9/9/2020	4/4/2021	Renewal	N/A
F-20-001 R1	Revision	APE20220001	10/10/2022	1/3/2023	Addition of three peracetic acid tanks	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 <sub>x</sub>	– Nitrogen Oxides
NSR	– New Source Review
PM	– Particulate Matter
PM <sub>10</sub>	– Particulate Matter equal to or smaller than 10 micrometers
PM <sub>2.5</sub>	– Particulate Matter equal to or smaller than 2.5 micrometers
PSD	– Prevention of Significant Deterioration
PTE	– Potential to Emit
SO <sub>2</sub>	– Sulfur Dioxide
TF	– Total Fluoride (Particulate & Gaseous)
VOC	– Volatile Organic Compounds

**APPENDIX B - INDIRECT HEAT EXCHANGER EMISSIONS LIMITATIONS**

Summary of All Affected Facilities Used to Determine 401 KAR 59:015 Emission Limits								
EU	Fuel(s)	Capacity (MMBtu/hr)	Constructed	Basis for PM Limit	Total Heat Input Capacity for PM Limit (MMBtu/hr)	Basis for SO <sub>2</sub> Limit	Total Heat Input Capacity for SO <sub>2</sub> Limit (MMBtu/hr)	Notes
01	Natural Gas	6.28	1998	401 KAR 59:015 Section 4(1)(c)	12.56	401 KAR 59:015, Section 5(1)(c)2.b	12.56	EU 01 and EU 02: Removed 2017
02		6.28	1998		12.56		12.56	
24		16.70	2010		29.26		29.26	
25		20.93	2017		37.63		37.63	

PM limit  $E_P = 0.9634 (T^{-0.2356})$  where T is the total heat input capacity.

SO<sub>2</sub> limit  $E_S = 7.7223 (T^{-0.4106})$  where T is the total heat input capacity.