

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

Conditional Major, Operating  
Permit: F-24-037

Felker Brothers Corporation  
125 Beaver Trail Road  
Glasgow, KY 42141

July 15, 2024  
Vahid Bakhtiar, Reviewer

SOURCE ID: 21-009-00064  
AGENCY INTEREST: 71  
ACTIVITY: APE20240001

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## SECTION 1 – SOURCE DESCRIPTION

SIC Code: 3317, Stainless Steel Pipe and Tube Manufacturing

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<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

If yes, list which pollutant(s): HF

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

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

### Description of Facility:

Felker Brothers Corporation (Felker) manufactures stainless steel pipe and tube in Glasgow, Kentucky. The facility consists of five (5) tube mills and a pickling operation. Each tube mill consists of tube forming by rolling from flat stock, welding and a cut off saw. The tube mills process flat stainless steel stock into stainless steel pipe by forming the stock into a pipe form and welding the seam. The pipe is cut to length with a cutoff saw and then sent to the pickling operation.

## SECTION 2 – CURRENT APPLICATION

Permit Number: F-24-037

Activities: APE20240001

Received: January 17,2024

Application Complete Date: March 15, 2024

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

- *APE20210002 – Off Permit Change: Replacement of the acid pickling tank (EP 01 T-2, T-3)*
- *APE20220001 – Off Permit Change: Replacement of the Scanacon SA70 Acid Manager System with a Luova AC2000 Acid Controller*
- *APE20240002 – Off Permit Change: Replacement of Acid Purification System*
- *APE20240003 – Off Permit Change: Replacement of two acid recirculation pumps and one acid heating loop pump*

### Description of Action:

On January 17, 2024, the Division received a permit renewal application from Felker to renew their existing Conditional Major permit F-19-016. With this permit renewal F-24-037, the following changes have been made to the permit. No other changes have been requested by Felker.

- Revised Hydrofluoric Acid (HF) emission factors based on the compliance testing of the scrubbers performed on May 5, 2020. The Division updated emissions calculations for Acid Pickling Tank (EP 01) using the revised emission factors obtained during the 2020 stack testing. The Division did not revise the operating limit established to ensure compliance with the source-wide emission limit.
- Revised approach to estimating emissions for the Saw Cutting (EP 03). There are total 5 cut-off saws for EP 03 and all 5 saws have been considered as standard/traditional saws. However, Mill 98 is a saw cut line that uses plasma cutting instead of traditional saw cutting. The Division separated 4 standard saws and one plasma cutter under EP 03 and revised PTE calculations for the plasma cutter. This revised approach does not impact the permitting status of the facility, however it represents emissions more accurately from 98 Mill which uses a plasma cutting saw instead of standard saw.
- Added a 7,200 gallon clean rinse tank under the description of Acid Pickling Tank (EP 01). Acid pickling line has always included a 7,200 gallon clean rinse tank (in addition to the 6,000 gallon rinse tank), but it has never been listed in the air permit. Very few, if any, emissions are expected from this tank, but it is vented to the scrubber and therefore, any emissions have been included in the periodic emission tests.
- The Division updated and made formatting changes throughout the permit to be consistent and clear.

F-24-037 Emission Summary			
Pollutant	<sup>(1)</sup> 2023 Actual (tpy)	<sup>(2)</sup> PTE F-24-037 (tpy)	PTE Allowable
CO	0.48	3.50	
NO <sub>x</sub>	0.52	3.74	
PT	1.38	25.17	< 90 tpy <sup>(3)</sup>
PM <sub>10</sub>	1.38	25.17	< 90 tpy <sup>(3)</sup>
PM <sub>2.5</sub>	0.23	3.85	
SO <sub>2</sub>	0.003	0.02	
VOC	0.03	0.23	
Lead	0.000003	0.00002	
Greenhouse Gases (GHGs)			
Carbon Dioxide	689	4969	
Methane	0.01	0.76	
Nitrous Oxide	0.01	0.076	
CO <sub>2</sub> Equivalent (CO <sub>2</sub> e)	0	5012	
Hazardous Air Pollutants (HAPs)			
Chromium IV	7.2E-06	5.43E-05	< 0.582 lb/hr <sup>(4)</sup>
Hydroflouric Acid	0.1	1.86	< 0.7 tpy <sup>(5)</sup>
Manganese	0.000072	0.001	
Nickel (and Compounds)	0.0009	0.011	
Combined HAPs	0.1	2.01	

- (1) Based on 2023 KYEIS report.
- (2) This includes control devices as required by the permit.
- (3) Source-wide limits of 90 tpy or less for PM/PM<sub>10</sub> to remain a conditional major source.
- (4) Source-wide limit to comply with 401 KAR 63:020.
- (5) Source-wide limit to comply with 401 KAR 53:010.

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

**Emission Unit #01 (T-2, T-3): Acid Pickling Tank, Immersion Rinse Tanks**

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	Qualitative monthly observations, monitoring, & recordkeeping
PM	<ul style="list-style-type: none"> <li>• <math>P \leq 0.5 \text{ ton/hr} = 2.34 \text{ lb/hr}</math></li> <li>• <math>0.5 &lt; P \leq 30 \text{ ton/hr} = 3.59 \times P^{0.62} \text{ lb/hr}</math></li> <li>• <math>P &gt; 30 \text{ ton/hr} = 17.31 \times P^{0.16} \text{ lb/hr}</math></li> </ul>	401 KAR 59:010, Section 3(2)	Engineering Estimate	Monthly emission calculations; monitoring, & recordkeeping

**Initial Construction and/or Modification Date:** 12/1/1993; replaced acid pickling tank in 2021

**Process Description:**

This emission point consists of one 12,193 gallons HF/HNO<sub>3</sub> heated pickling tank, one 6,000 gallons immersion cold rinse tank, and one 7,200 gallons clean rinse tank. Emissions of pickling tank are controlled by the newer C&E Custom scrubber. Emissions of the rinse tanks are controlled by the old ESCO plate scrubber that also acts as a back-up control for the main pickling tank in the event the C&E Custom scrubber fails. Each scrubber has 94.90% control efficiency for HF.

Maximum Capacity: 14.5 tons/hr of steel tube/pipe processed

Control Equipment: ESCO Plate Scrubber built in 2000

C&E Custom Scrubber built in 2006

**Applicable Regulations:**

**401 KAR 53:010**, *Ambient air quality standards*, applicable to HF emissions.

**401 KAR 59:010**, *New process operations*, 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:**

The facility has an operating limit of 23,808.31 tons of pipe and tube produced per year. This limit was established based on back calculating from the HF emission limit of 0.7 tpy to get the maximum throughput to maintain compliance with 401 KAR 53:010. The equation used is:

$$Emissions \left( \frac{lb}{hr} \right) = Throughput \left( \frac{tons}{hr} \right) \times EF \left( \frac{lb}{ton} \right) \times (1 - \%Control)$$

The potential emission factor for HF was determined from stack testing performed in 2007 to be 1.153 lb/ton of throughput (pipe). The maximum allowable emission rate determined under 401 KAR 53:010 for HF is 0.7 tpy (0.16 lb/hr). The control efficiency for HF is 94.4% based on stack testing performed in 2007. Substituting these values into equation above:

**Emission Unit #01 (T-2, T-3): Acid Pickling Tank, Immersion Rinse Tanks**

$$Max\ throughput = \frac{0.7 \left(\frac{ton}{yr}\right)}{1.153\left(\frac{lb}{ton}\right) \times (1 - 94.9\%)} \times 2000\left(\frac{lb}{ton}\right) = 23,808.31\ tpy$$

Actual emissions are now calculated using emission factors from stack tests performed on March 9, 2007 and May 5, 2020 as described below.

Pickling tank:

The uncontrolled HF emission factor of 0.5512 lb/ton of throughput (pipe) for pickling tank is based on the stack test performed on May 5, 2020. The following equation is used to back calculate HF emission factor.

$$12.45 \left(\frac{tons}{hr}\right) \times Emission\ Factor_{HF} \left(\frac{lb}{ton}\right) \times (1 - 94.9\%) = 0.35 \left(\frac{lb}{hr}\right)$$

Where:

0.35 lb/hr = the HF emission rate measured during 2020 stack test;

12.45 tons/hr = the average throughput during 2020 stack test.

The uncontrolled HNO<sub>3</sub> emission factor of 2.538 lb/ton of throughput (pipe) for pickling tank is based on the stack test performed on March 8, 2007, and back calculating from the tested emission rate of 1.92 lb/hr. Average throughput during the test was 1.3605 tons/hr. The control efficiency for HNO<sub>3</sub> was assumed to be 44.40%.

Rinse tank:

The uncontrolled HF emission factor of 0.0253 lb/ton of throughput (pipe) for rinse tank is based on the stack test performed on May 5, 2020, and back calculating from the tested emission rate of 0.016 lb/hr.

Uncontrolled HNO<sub>3</sub> emission factor of 0.12692 lb/ton of throughput (pipe) for rinse tank is based on the stack test performed on March 8, 2007, and back calculating from the tested emission rate of 1.92 lb/hr.

To account for lower concentration and lower temperature in rinse tank, it was assumed that emissions from rinse tank are 5% of emissions from pickling tank.

**Emission Unit #03 (05): Sawing (Five Cut-off Saws)**

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	Qualitative observations on a monthly basis

<b>Emission Unit #03 (05): Sawing (Five Cut-off Saws)</b>				
PM	<ul style="list-style-type: none"> <li>• <math>P \leq 0.5</math> ton/hr = 2.34 lb/hr</li> <li>• <math>0.5 &lt; P \leq 30</math> ton/hr = <math>3.59 \times P^{0.62}</math> lb/hr</li> </ul>	401 KAR 59:010, Section 3(2)	Mass Balance & Swedish Study	Monthly emission calculations; monitoring, & recordkeeping
<b>Initial Construction Date:</b> 6/4/1996				
<p><b>Process Description:</b>                  There are five (5) individual abrasive cut-off saws: 35 mill cut-off, 36 mill cut-off, 45 mill cut-off, 75 mill cut-off, and 98 mill cut-off. 35 mill, 36 mill, 45 mill, and 75 mill are traditional cut-off saws. 98 mill is a plasma cutter. Each saw cuts the stainless steel pipes to desired length. Each cutting saw has an associated dust collector attached to it.</p> <p>Total Maximum Capacity: 4.33 tons of stainless steel pipe per hr (0.52 ton/hr for 35 mill cut-off, 0.55 ton/hr for 36 mill cut-off, 0.81 ton/hr for 45 mill cut-off, 0.91 ton/hr for 75 mill cut-off, 1.55 tons/hr for 98 mill cut-off)</p> <p>Control efficiency: Overall 97% (90% control efficiency for dust collectors and 70% enclosure)</p> <p><b>Applicable Regulation:</b>  <b>401 KAR 59:010</b>, <i>New process operations</i>, 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.</p> <p><b>State-Origin Requirement:</b>  <b>401 KAR 63:020</b>, <i>Potentially hazardous matter or toxic substances</i>, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances. Applies to Chromium VI, Manganese, and Nickel emissions.</p> <p><b>Comments:</b>                  For 4 traditional cut-off saws: PM emission factor of 0.927 lb/ton and other emission factors including HAPs emission factors determined from sampling data submitted by the applicant on December 8, 2011. Based on average of three (3) sampling data, Chromium VI is 0.0072% of total Chromium.</p> <p>For plasma cutter: PM and HAP emissions are used based on the Swedish Institute of Production Engineering Research, March 1994 and "Related Emission Factor Documents" in AP-42 Chapter 12 Metallurgical Industry. The weight of steel cut emitted as fumes for dry steel and 8mm thickness is assumed to be 7%. Mill Line 98 cuts 304L steel and 316L steel. The worst case of the both steel metal types have been used for HAP emissions calculations (Chromium 20%, Manganese 2%, Nickel 14%). Based on IH study for the plasma cutting at the facility conducted on 4/20/22, Chromium VI is assumed to be 0.02321% of PM. Aluminum emissions have been traditionally listed for the saw cut lines. 304L steel and 316L steel do not contain aluminum, therefore, emission factors for aluminum have not been included for 98 mill.</p>				

<b>Emission Unit #04 (05): Pipe Mill Welding 1-5</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% opacity	401 KAR 59:010, Section 3(1)(a)	N/A	Qualitative observations on a monthly basis
PM	<ul style="list-style-type: none"> <li>• <math>P \leq 0.5</math> ton/hr = 2.34 lb/hr</li> <li>• <math>0.5 &lt; P \leq 30</math> ton/hr = <math>3.59 \times P^{0.62}</math> lb/hr</li> </ul>	401 KAR 59:010, Section 3(2)	Mass Balance	Monthly emission calculations; monitoring, & recordkeeping
<p><b>Initial Construction Date:</b> 6/4/1996</p> <p><b>Process Description:</b>                      There are five (5) individual welding lines: 35 mill welding, 36 mill welding, 45 mill welding, 75 mill welding, and 98 welding. Each line produces a different pipe, but all use GTAW welding. There are no controls and emissions are vented outside through four (4) passive roof vents.</p> <p>Total Maximum Capacity: 4.33 tons of stainless steel pipe per hr (0.52 ton/hr for 35 mill welding, 0.36 ton/hr for 36 mill welding, 0.81 ton/hr for 45 mill welding, 0.91 ton/hr for 75 mill welding, 1.55 tons/hr for 98 mill welding.                      Control Equipment: Enclosure (70% control efficiency)</p> <p><b>Applicable Regulation:</b>  <b>401 KAR 59:010</b>, <i>New process operations</i>, 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.</p> <p><b>State-Origin Requirement:</b>  <b>401 KAR 63:020</b>, <i>Potentially hazardous matter or toxic substances</i>, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances. Applies to Chromium VI emissions.</p> <p><b>Comments:</b>                      Emissions are calculated using historic emission factors from KYEIS.</p>				

<b>Emission Unit #02: Titan Air Rotation Units I &amp; II</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	0.56 lb/MMBtu	401 KAR 59:015, Section 4(1)(a)	AP-42 Chapter 1.4	Assumed based on natural gas combustion
SO <sub>2</sub>	3.0 lb/MMBtu	401 KAR 59:015, Section 5(1)(a)(1)	AP-42 Chapter 1.4	Assumed based on natural gas combustion
Opacity	20% opacity	401 KAR 59:015, Section 4(2)	N/A	Assumed based on natural gas combustion
<p><b>Initial Construction Date:</b>                      Air rotation units: 12/6/1993</p> <p><b>Process Description:</b>                      The units burn natural gas and have no control.</p> <p>Maximum Capacity: 4.356 MMBtu/hr for air rotation unit I                      3.344 MMBtu/hr for air rotation unit II</p> <p>Control Equipment: None</p> <p><b>Applicable Regulation:</b>  <b>401 KAR 59:015</b>, <i>New indirect heat exchangers</i>, 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)).</p> <p><b>State-Origin Requirement:</b>  <b>401 KAR 63:020</b>, <i>Potentially hazardous matter or toxic substances</i>, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.</p> <p><b>Comments:</b>                      Emissions are calculated using emission factors from AP-42, Tables 1.4-1, 1.4-2, 1.4-3, and 40 CFR 98 Tables C-1 and C-2. The high heating value (HHV) for natural gas is assumed to be 1020 Btu/MMscf.</p>				

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

**Testing Requirements/Results**

Emission Unit(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	
01	C&E Custom Scrubber	HF	401 KAR 53:010	Initial	Method 26A	---	0.08 lb/hr	1.36 tons/hr processed; 0.0588 lb/ton	---	3/8/2007*	
	ESCO Plate Scrubber						0.004 lb/hr				
01	C&E Custom Scrubber	HF (lbs/ton of pipe or tube processed)	401 KAR 53:010	Every 5 years	Method 26A	0.7 tpy	0.06 lb/hr; 0.00785 lb of HF/ton	63,793 lbs steel pipe processed in 4.68 hr or 13,621.28 lb/hr	Total 71,557 lbs in 4.68 hr or 15,279.07 lbs/hr; 7.64 tons/hr; 0.01178 lb of HF/ton	CMN20150001	11/4/2015
	ESCO Plate Scrubber						0.03 lb/hr; 0.00393 lb of HF/ton				

Emission Unit(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
01	C&E Custom Scrubber	HF (lbs/ton of pipe or tube processed)	401 KAR 53:010	Every 5 years	Method 26A	0.7 tpy	0.35 lb/hr; 0.02811 lb of HF/ton	103,749 lbs steel pipe processed in 4.17 hr or 24,899.76 lb/hr	Total 103,749 lbs in 4.17 hr or 24,899.76 lbs/hr; 12.45 tons/hr; 0.0294 lb of HF/ton; avg. HF 3.38%	CMN20200001	5/5/2020
	ESCO Plate Scrubber						0.016 lb/hr; 0.00129 lb of HF/ton	No stainless steel tube			

\* No other information is available for this 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 tons/yr of PM/PM <sub>10</sub> emissions	To preclude 401 KAR 52:020, <i>Title V permits</i>	Source-wide
9.0 tons/yr of HF emissions	To preclude major source status for HAP	Source-wide
0.7 ton/yr of HF emissions	401 KAR 53:010, <i>Ambient air quality standards</i> , applicable to HF emissions	Source-wide
23,808.31 tons of pipe and tube produced per year	401 KAR 53:010, <i>Ambient air quality standards</i> , applicable to HF emissions	Source-wide

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

<b>Applicable Regulations</b>	<b>Emission Unit</b>
<b>401 KAR 53:010, <i>Ambient Air Quality Standards</i></b> , applicable to HF emissions.	EP01
<b>401 KAR 59:010, <i>New process operations</i></b> , 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.	EP01, EP03, EP04
<b>401 KAR 59:015, <i>New indirect heat exchangers</i></b> , 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.	EP02
<b>401 KAR 63:020, <i>Potentially hazardous matter or toxic substances</i></b> , 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 chromium VI, manganese, and nickel.	EP02, EP03, EP04

**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 a refined air dispersion model using AERMOD on July 12, 2024 of potentially hazardous matter or toxic substances (Chromium VI, Manganese, and Nickel) 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.

**401 KAR 53:010, *Ambient Air Quality Standards***

The Division has performed air dispersion model using AERMOD on August 6, 2013 of potentially hazardous substances for HF emissions based upon the process rates, emission factors, control efficiencies, stack height, and other pertinent information provided in the application and supplemental information submitted by the source. Based upon this information, the Division has determined that the conditions outlined in this permit will assure compliance with the requirements of 401 KAR 53:010.

**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>
S-96-173 R3	Revision 3	APE20070001	3/2/2007	3/16/2007	Addition of new scrubber, increase pickling tank capacity	No
S-11-064	Renewal	APE20110001	12/29/2011	1/30/2012	Permit Renewal	No
S-11-064 R1	Revision 1	APE20120001	9/6/2012	9/10/2012	Calculation Corrections	No
S-11-064 R2	Revision 2	APE20120002	11/5/2012	1/10/2013	Removal of Boiler, Addition of Water Heaters	No
F-13-048	Initial	APE20130004	10/2/2013	4/18/2014	Initial Conditional Major Permit	No
F-19-016	Renewal	APE20180002	2/14/2019	8/18/2019	Permit Renewal	No

## **SECTION 6 – PERMIT APPLICATION HISTORY**

None

## **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
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