

Missouri Department of dnr.mo.gov

# NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

SEP 23 2019

Mr. Bryon Bootman  
Senior Project Manager  
Pioneer Hi-Bred International, Inc.  
11426 US HWY 61 N  
New Madrid, MO 63869

RE: New Source Review Permit - Project Number: 2019-06-055

Dear Mr. Bootman:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: [www.oa.mo.gov/ahc](http://www.oa.mo.gov/ahc).



Recycled paper

If you have any questions regarding this permit, please do not hesitate to contact Jared Rhodes, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



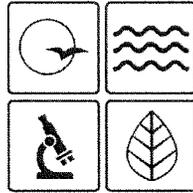
Susan Heckenkamp  
New Source Review Unit Chief

SH:rjj

Enclosures

c: Southeast Regional Office  
PAMS File: 2019-06-055

Permit Number: **092019-008**



**MISSOURI**  
DEPARTMENT OF  
NATURAL RESOURCES

**MISSOURI AIR CONSERVATION COMMISSION**

**PERMIT TO CONSTRUCT**

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **092019-008**

Project Number: 2019-06-055  
Installation Number: 143-0080

Parent Company: Pioneer Hi-Bred International, Inc.

Parent Company Address: 6900 NW 62nd Ave, Johnston, IA 50131

Installation Name: Pioneer Hi-Bred International, Inc.

Installation Address: 11426 US HWY 61 N, New Madrid, MO 63869

Location Information: New Madrid County, S9, T23N, R14E

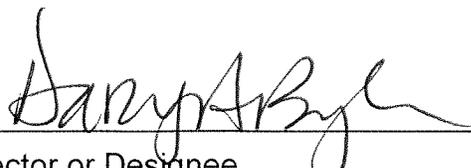
Application for Authority to Construct was made for:

Pioneer Hi-Bred International, Inc. is dismantling and removing the belt sorter, installing eight new Vision Sorters with a new dust collector, and relocating the re-run gravity table within Line B of their New Madrid facility. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

---

Standard Conditions (on reverse) are applicable to this permit.

Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

  
\_\_\_\_\_  
Director or Designee  
Department of Natural Resources

**SEP 23 2019**

---

Effective Date

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Enforcement and Compliance Section of the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Enforcement and Compliance Section of the Department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department's regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit using the contact information below.

Contact Information:  
Missouri Department of Natural Resources  
Air Pollution Control Program  
P.O. Box 176  
Jefferson City, MO 65102-0176  
(573) 751-4817

The regional office information can be found at the following website:  
<http://dnr.mo.gov/regions/>

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

*The special conditions listed in this permit were included based on the authority granted to the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (3)(E). "Conditions required by permitting authority."*

Pioneer Hi-Bred International, Inc.  
New Madrid County, S9, T23N, R14E

1. Superseding Condition
  - A. The conditions of this permit supersedes Special Condition 2.A. found in construction permit amendment 072011-003B issued by the Air Pollution Control Program.
  
2. Control Device Requirement-Baghouses
  - A. Pioneer Hi-Bred International, Inc. shall control emissions from the equipment in Table 1 using baghouses as specified in the permit applications.

Table 1: Equipment Controlled by Baghouses

Designation	Description
EU-01	Commercial Receiving Pit
EU-02	Internal Handling
EU-03	Precleaner
EU-05	Air Screen Cleaners (2)
EU-06	Spiral Cabinets (8)
EU-07	Gravity Separators (6)
EU-09a	Line A Rerun Gravity Table
EU-09b	Line B Rerun Gravity Table
EU-10	Destoners (2)
EU-12	Rework Aspirator
EU-14	Bag Splitter
EU-15	Bagging Scale Surge Bin
EU-16	Jumbo Bag Fill Station
EU-17	Jumbo Bag Surge Bins (2)
EU-18	Probox Fill Station
EU-19	Probox Fill Surge Bins (2)
EU-20	50lb Bag Packaging
EU-45a	Line A Vision Sorters (3)
EU-45b	Line B Vision Sorters (8)

- B. The baghouses shall be operated and maintained in accordance with the manufacturer's specifications.

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

- C. The baghouses shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them.
  - D. Replacement filters for the baghouses shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
  - E. Pioneer Hi-Bred International, Inc. shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
  - F. Pioneer Hi-Bred International, Inc. shall maintain a copy of the baghouses manufacturer's performance warranty on site.
  - G. Pioneer Hi-Bred International, Inc. shall maintain an operating and maintenance log for the baghouses which shall include the following:
    - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
    - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
3. Equipment Dismantle
- A. Pioneer Hi-Bred International, Inc. shall render belt sorter (EU-08) inoperable before the date the new equipment being added under this permit begins operations. This belt sorter (EU-08) may not be operated after the startup of the new equipment without first obtaining a New Source Review permit from the Air Pollution Control Program.
  - B. Pioneer Hi-Bred International, Inc. shall notify the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or by email at [AirComplianceReporting@dnr.mo.gov](mailto:AirComplianceReporting@dnr.mo.gov) no later than 15 days after the following events occur:
    - 1) The date of initial start-up of the new equipment added under this amendment, and
    - 2) The date the existing equipment as indicated in Special Condition Number 3.A. was rendered inoperable.
4. Record Keeping and Reporting Requirements
- A. Pioneer Hi-Bred International, Inc. shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.

Project No. 2019-06-055

Permit No.

092019-008

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

- B. Pioneer Hi-Bred International, Inc. shall report to the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or by email at [AirComplianceReporting@dnr.mo.gov](mailto:AirComplianceReporting@dnr.mo.gov), no later than 10 days after the end of the month during which any record required by this permit shows an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (5) REVIEW

Project Number: 2019-06-055  
Installation ID Number: 143-0080  
Permit Number: 092019-008

Installation Address:

Pioneer Hi-Bred International, Inc.  
11426 US HWY 61 N  
New Madrid, MO 63869

Parent Company:

Pioneer Hi-Bred International, Inc.  
6900 NW 62nd Ave  
Johnston, IA 50131

New Madrid County, S9, T23N, R14E

REVIEW SUMMARY

- Pioneer Hi-Bred International, Inc. has applied for authority to make equipment changes to conditioning Line B. These changes include dismantling and removing the belt sorter, installing eight new Vision Sorters with a new dust collector, and relocating the re-run gravity table to the original location of the belt sorter.
- The application was deemed complete on June 26, 2019.
- HAP emissions are not expected from the proposed equipment.
- None of the New Source Performance Standards (NSPS) apply to the installation. Total storage capacity is 172,000 bushels thus meeting neither the definition of a grain terminal elevator or a grain storage elevator as defined in 40 CFR 60 Subpart DD.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- Baghouses are being used to control the PM, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from the equipment in this permit.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of all pollutants are below de minimis levels.
- This installation is located in New Madrid County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.

- This installation underwent a PM<sub>10</sub> ambient air quality impact analysis (AAQIA) in permit amendment 072011-003A and the changes of this project affect the PM<sub>10</sub> potential emissions and release parameters, however a revised AAQIA is not required since the potential to emit of the installation has decreased as a result of the new seed sorting equipment and associated control device and the removal of the belt sorter.
- Emissions testing is not required for the equipment as a part of this permit. Testing may be required as part of other state, federal or applicable rules.
- No Operating Permit is required for this installation. PM<sub>10</sub> potential emissions are below 100 tons per year.
- Approval of this permit is recommended with special conditions.

### INSTALLATION DESCRIPTION

Pioneer Hi-Bred International, Inc. operates a minor source, soybean seed conditioning installation north of New Madrid, Missouri. The installation receives, cleans, packages, and ships soybean seed. The seed may be treated with fungicides, insecticides, inoculants, and identifying colorants. The New Madrid facility currently operates under the New Source Review permits listed in Table 2 issued by the Air Pollution Control Program. This facility does not require an operating permit.

Table 2: Permit History

Permit Number	Description
072011-003	Section 6 Permit – Original Construction Permit for New Madrid Facility
072011-003A	Permit Amendment – Changes to Seed Treatment System and Response to Capture Efficiency Testing Results
072011-003B	Permit Amendment – Equipment Changes to Conditioning Line A

The New Madrid facility will operate the emission units listed in Table 3. Seed beans destined for commercial distribution are received from hopper bottom semis and straight trucks. This seed is processed through two conditioning lines consisting of cleaners, separators, and sorters. Discard seed is stored in two discard bins and spec seed is conveyed to surge bins for packaging.

Parent seed is seed designated to be planted to grow more seed beans, not seed to be planted to directly grow beans for animal or human consumption. Parent seed is stored on site in twenty 1,300 bushel bins.

Table 3: Installation Summary

Designation	Description	MHDR – Hourly Modeling Basis (tons per hour)	MHDR – Potential to Emit Annual Basis (tons per hour)
EU-01	Commercial Receiving Pit	150	150
EU-02	Internal Handling	150	150
EU-03	Precleaner	150	150
EU-04	Bulk Storage Bins (10)	150	150
EU-05	Air Screen Cleaners (2)	60	60
EU-06	Spiral Cabinets (8)	54.6	54.6
EU-07	Gravity Separators (6)	53.781	53.781
EU-09a	Re-Run Gravity Table	10.98	10.98
EU-09b	Re-Run Gravity Table	10.98	10.98
EU-10	Destoners (2)	2.69	2.69
EU-11	Discard Bins (2)	36	12
EU-12	Rework Aspirator	39	1.2
EU-13	Rework Dump	39	1.2
EU-14	Bag Splitter	39	1.2
EU-15	Bagging Scale Surge Bin	30	14.4
EU-16	Jumbo Bag Fill Station	62.5	16.8
EU-17	Jumbo Bag Surge Bins (2)	62.5	16.8
EU-18	Probox Fill Station	62.5	16.8
EU-19	Probox Fill Surge Bins (2)	62.5	16.8
EU-20	50lb Bag Packaging	30	14.4
EU-21	House Vacuum (scf/hr)	<sup>1</sup> 64,440	<sup>1</sup> 64,440
EU-22	Parent Seed Receiving	9.375	9.375
EU-23	Parent Seed Bins (20)	9.375	9.375
EU-24	Parent Seed Loadout	9.375	9.375
EU-25	Discard Bin Loadout (2)	41.67	41.67
EU-26	Probulk Loadout	150	75
EU-27	Parent Bin Farm Load/Unload Road	9.375	<sup>2</sup> 9.375
EU-28	Commercial Seed Receiving Road	150	<sup>2</sup> 150
EU-29	Commercial Seed Shipping/Rework Road	155	<sup>2</sup> 48
EU-30	Probulk Access Road	75	<sup>2</sup> 75
EU-31	Discard Loadout Road	41.67	<sup>2</sup> 41.67
EU-32	Parent Seed Receiving Road	9.375	<sup>2</sup> 9.375
EU-33	Parent Seed Shipping Road	9.375	<sup>2</sup> 9.375
EU-35	Treated Probox Unloading	48	16.8
EU-38	Belt	48	16.8
EU-39	Treater Drum	48	16.8
EU-40	Post-Treater Surge Bin	48	16.8
EU-44	Jumbo Bag/Probox Filling Line (2)	48	16.8
EU-45a	Vision Sorters (3)	79.37	79.37
EU-45b	Vision Sorters (8)	33.6	33.6

MHDR = maximum hourly design rate, <sup>1</sup> Standard cubic feet per hour

## PROJECT DESCRIPTION

Pioneer Hi-Bred International, Inc. is making equipment changes to the New Madrid facility's soybean seed conditioning Line B. These change include dismantling and removing the belt sorter (EU-08) which removes the bottleneck on the re-run gravity separator (EU-09b). EU-09b is moving to the previous location of EU-08 and increasing its MHDR to 10.98 tons/hr from 5.11 tons/hr. Emissions from EU-09b continue to be controlled by a baghouse (CD-07). Eight enclosed vision sorters (EU-45b) are being installed with a combined MHDR of 33.6 tons/hr. The multiple feed streams to EU-45b are accounted for in this MHDR. The equipment changes of this project only de-bottleneck EU-09b and do not affect the MHDR of any other systems in the installation. A new baghouse (CD-33) is being installed to control emissions from EU-45b.

## EMISSIONS/CONTROLS EVALUATION

The emission factors used in this analysis were obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 9.9.1 Grain Elevators and Processes, May 2003. Baghouse capture efficiency for process equipment was assumed at 100 percent since equipment and transfer points are completely enclosed. Baghouse control efficiencies of 99.5 percent for PM and PM<sub>10</sub> and 99.0 percent for PM<sub>2.5</sub> were used.

Table 4 provides an emissions summary for this project. Existing potential emissions were taken from construction permit amendment 072011-003B. Existing actual emissions were taken from the installation's 2018 EIQ. Potential emissions of the application represent the potential of the new equipment and debottlenecked equipment listed in the Application, assuming continuous operation (8760 hours per year).

Table 4: Emissions Summary (tpy)

Pollutant	Regulatory De Minimis Levels	<sup>1</sup> Existing Potential Emissions	Existing Actual Emissions (2018 EIQ)	<sup>2</sup> Potential Emissions of the Project	<sup>3</sup> New Installation Potential Emissions
PM	25.0	42.32	N/A	0.06	40.88
PM <sub>10</sub>	15.0	13.12	1.99	0.03	12.32
PM <sub>2.5</sub>	10.0	3.14	0.24	0.01	3.01
SO <sub>x</sub>	40.0	0.01	0.0003	N/A	0.01
NO <sub>x</sub>	40.0	1.15	0.05	N/A	1.15
VOC	40.0	37.85	1.40	N/A	37.85
CO	100.0	0.97	0.04	N/A	0.97
GHG (CO <sub>2</sub> e)	N/A	1,385.16	N/A	N/A	1385.16
GHG (mass)	N/A	1,393.54	N/A	N/A	1393.54
Combined HAPs	25.0	0.07	0.00	N/A	0.07
Formaldehyde	<sup>4</sup> 2.0	0.05	N/A	N/A	0.05
Ethylene Glycol	10.0	N/A	N/A	N/A	N/A

N/A = Not Applicable; N/D = Not Determined

<sup>1</sup> Existing Potential Emissions are calculated using the calculation spreadsheet from 072011-003B using a baghouse efficiency of 99.5% for PM and PM<sub>10</sub> and 99.0% for PM<sub>2.5</sub>

<sup>2</sup> Potential Emissions of the Project is a summation of the PTE for EU-09b and EU-45b

<sup>3</sup> New Installation Potential Emissions are calculated by removing EU-08 and adding EU-09b and EU-45b to the 072011-003B calculation spreadsheet

<sup>4</sup> Screening Model Action Level (SMAL)

### PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. For this project the potential emissions of all pollutants are below de minimis.

### APPLICABLE REQUIREMENTS

Pioneer Hi-Bred International, Inc. shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved.

## GENERAL REQUIREMENTS

- *Start-Up, Shutdown, and Malfunction Conditions*, 10 CSR 10-6.050
- *No operating permit is required because all criteria pollutants are below de minimis.*
- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
  - Per 10 CSR 10-6.110(4)(B)2.B(II) and (4)(B)2.C(II) a full EIQ is required for the first full calendar year the equipment (or modifications) approved by this permit are in operation.
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

## SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400.  
All equipment of this project are vented to baghouses and comply with this requirement.

## STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, it is recommended that this permit be granted with special conditions.

## APPENDIX A

### Abbreviations and Acronyms

<b>%</b> .....percent	<b>Mgal</b> .....1,000 gallons
<b>°F</b> .....degrees Fahrenheit	<b>MW</b> .....megawatt
<b>acfm</b> .....actual cubic feet per minute	<b>MHDR</b> .....maximum hourly design rate
<b>BACT</b> .....Best Available Control Technology	<b>MMBtu</b> .....Million British thermal units
<b>BMPs</b> .....Best Management Practices	<b>MMCF</b> .....million cubic feet
<b>Btu</b> .....British thermal unit	<b>MSDS</b> .....Material Safety Data Sheet
<b>CAM</b> .....Compliance Assurance Monitoring	<b>NAAQS</b> ....National Ambient Air Quality Standards
<b>CAS</b> .....Chemical Abstracts Service	<b>NESHAPs</b> National Emissions Standards for Hazardous Air Pollutants
<b>CEMS</b> .....Continuous Emission Monitor System	<b>NO<sub>x</sub></b> .....nitrogen oxides
<b>CFR</b> .....Code of Federal Regulations	<b>NSPS</b> .....New Source Performance Standards
<b>CO</b> .....carbon monoxide	<b>NSR</b> .....New Source Review
<b>CO<sub>2</sub></b> .....carbon dioxide	<b>PM</b> .....particulate matter
<b>CO<sub>2e</sub></b> .....carbon dioxide equivalent	<b>PM<sub>2.5</sub></b> .....particulate matter less than 2.5 microns in aerodynamic diameter
<b>COMS</b> .....Continuous Opacity Monitoring System	<b>PM<sub>10</sub></b> .....particulate matter less than 10 microns in aerodynamic diameter
<b>CSR</b> .....Code of State Regulations	<b>ppm</b> .....parts per million
<b>dscf</b> .....dry standard cubic feet	<b>PSD</b> .....Prevention of Significant Deterioration
<b>EIQ</b> .....Emission Inventory Questionnaire	<b>PTE</b> .....potential to emit
<b>EP</b> .....Emission Point	<b>RACT</b> .....Reasonable Available Control Technology
<b>EPA</b> .....Environmental Protection Agency	<b>RAL</b> .....Risk Assessment Level
<b>EU</b> .....Emission Unit	<b>SCC</b> .....Source Classification Code
<b>fps</b> .....feet per second	<b>scfm</b> .....standard cubic feet per minute
<b>ft</b> .....feet	<b>SDS</b> .....Safety Data Sheet
<b>GACT</b> .....Generally Available Control Technology	<b>SIC</b> .....Standard Industrial Classification
<b>GHG</b> .....Greenhouse Gas	<b>SIP</b> .....State Implementation Plan
<b>gpm</b> .....gallons per minute	<b>SMAL</b> .....Screening Model Action Levels
<b>gr</b> .....grains	<b>SO<sub>x</sub></b> .....sulfur oxides
<b>GWP</b> .....Global Warming Potential	<b>SO<sub>2</sub></b> .....sulfur dioxide
<b>HAP</b> .....Hazardous Air Pollutant	<b>SSM</b> .....Startup, Shutdown & Malfunction
<b>hr</b> .....hour	<b>tph</b> .....tons per hour
<b>hp</b> .....horsepower	<b>tpy</b> .....tons per year
<b>lb</b> .....pound	<b>VMT</b> .....vehicle miles traveled
<b>lbs/hr</b> .....pounds per hour	<b>VOC</b> .....Volatile Organic Compound
<b>MACT</b> .....Maximum Achievable Control Technology	
<b>µg/m<sup>3</sup></b> .....micrograms per cubic meter	
<b>m/s</b> .....meters per second	