

## AIR QUALITY PERMIT NO. 53592 FREEPORT MCMORAN –MIAMI SMELTER

### I. INTRODUCTION

This Class I renewal permit is being issued to Freeport McMoRan Miami Inc., the Permittee, for the continued operation of a copper smelter in Miami in Gila county, Arizona. This permit renews and supersedes Operating Permit No. 1000046 (as revised by Significant Revision No. 29622).

#### A. Company Information

Facility Name: Freeport McMoRan Miami Inc. (FMMI)  
Mailing Address: P.O. Box 4444  
Claypool, Arizona 85532  
Facility Address: Hwy 60, North of Miami  
Miami, Gila County, Arizona 85532

#### B. Attainment Classification

Miami area is currently designated as a non-attainment area for particulate matter less than 10 microns (PM<sub>10</sub>), maintenance for sulfur dioxide and attainment for all other criteria pollutants.

#### C. Learning Sites Evaluation

In accordance with ADEQ's Environmental Permits and Approvals near Learning Sites Policy, the Department conducted an evaluation to determine if any nearby learning sites are located within a two mile radius of the facility. Learning sites consist of all existing public schools, charter schools and private schools at the K-12 level, and all planned sites for schools approved by the Arizona School Facilities Board. The learning sites policy was established to ensure that the protection of children at learning sites is considered before a permit approval is issued by ADEQ.

There are no learning sites within 2 miles of the facility.

### II. FACILITY DESCRIPTION

#### A. Material Handling and Bedding Plant

Copper concentrate is delivered to the bedding plant by truck and rail car. In bedding plant, the stockpiles of smelter feed are built up and prepared for feed to IsaSmelt (Isa) furnace. The metallurgical characteristics of each pile are determined, and the flux requirements calculated. The concentrate is conveyed to bins, and then to blending belt where coal, fluxes and reverts are blended with concentrates of copper and other metals, and routed to a paddle mixer, and then to Isa furnace.

Flux coal and reverts are delivered to the smelter by dump trucks and stored in individual storage bins. From the storage bins, these are then metered onto the blending belt that carries concentrate to the paddle mixer.

## **B. Smelter**

IsaSmelt furnace is the primary smelting furnace. Ore concentrates, fluxes and reverts are fed, along with oxygen enriched air and fuel to Isa furnace. In the IsaSmelt process, heat is utilized from the partial oxidation of sulfide charge, thus saving energy costs. The electric furnace receives matte/slag mixture from Isa vessel and slag from converters. Once the copper matte settles down, slag on the top is removed and hauled to slag storage area. Matte is tapped from the electric furnace into ladles and transported by cranes to converters (four Hoboken and one Inspiration). Blister copper from converters is transferred by ladles to two anode furnaces for refining.

Exhaust gases from the Isa vessel are routed through a waste heat boiler (WHB) where a portion of entrained dust settles out. The collected dust is returned to the bedding plant or reverts bin. The gases from the WHB are routed to an electrostatic precipitator (ESP). Dust from the ESP is collected and sent to electric furnace or reverts bin. The gases are routed to a double contact acid plant.

Process gases from electric furnace are cooled off in an off-take duct with water sprays and then routed to the acid plant.

Converter gases are cooled by water sprays and then combined with gases from Isa vessel and electric furnace, and routed to the acid plant. These gases are treated in the acid plant and exhaust at the acid plant tail gas stack.

Emissions from the electric furnace matte tapping launders, furnace converter slag return launders, furnace slag tapping launders, and Isa vessel matte tapping launders are collected by vent fume system. These gases pass through a chemical scrubber and wet electrostatic precipitators (WESPs) and then exhaust through the vent fume stack.

### **Electrolytic Refinery**

The cast electrodes are transported to the electrolytic refinery at Miami or El Paso. In the refinery, copper is separated from impurities by electrolysis. Metallic impurities settle at the bottom sludge of refinery tanks. The sludge is removed to recover precious metals. Scrap copper from the refinery is returned to the smelter.

The electrolytic refinery has 2 natural-gas fired boilers.

### **Rod Plant**

At the rod plant cathodes from various sources are melted in a gas-fired shaft furnace, and molded into copper rods using a continuous caster and rolling mill. The rod is brightened by cleaning with isopropyl alcohol, wax coating is applied and the rod is coiled. Scrap copper is returned to smelter.

## **III. COMPLIANCE HISTORY**

There have been 122 air quality inspections (106 file reviews and 16 facility inspections) associated with this facility since 2006. One air quality violation was developed for this facility as a result of these inspections.

The facility was issued a Notice of Violation (No. 121311) on November 1, 2010 exceeding the particulate matter emission limit on the acid plant tail gas stack during performance test conducted on May 14 and 15, 2010. The case was closed on November 29, 2010 as the facility documented compliance by subsequent performance test on June 30, 2010 which demonstrated that the emission source was brought back into compliance.

#### IV. FACILITYWIDE EMISSIONS

Following tables provide summary of the facility-wide potential-to-emit (PTE), and facility-wide PTE for greenhouse gases.

**Table 1: Facility-wide PTE**

Pollutant	Non Fugitive Emissions	Fugitive Emissions	Total
	tpy	tpy	tpy
PM	407.00	1007.00	1414.00
PM <sub>10</sub>	387.00	422.00	809.00
PM <sub>2.5</sub>	354.00	211.00	565.00
SO <sub>2</sub> *	4866.00	5517.00	10383.00
NO <sub>x</sub>	545.00	68.40	613.40
CO	65.10	57.40	122.50
VOCs	8.29	191.00	199.29
Total HAPs**			158.49

\*SO<sub>2</sub> emissions for acid plant tail gas stack, vent fume stack, and fugitives are based on existing permit limits

\*\* Lead PTE based on existing permit limit of 105 tpy for vent fume stack, and 44.45 tpy for smelter fugitives

**Table 2: Facility-Wide PTE for Greenhouse Gases**

Emission Unit	Total Greenhouse Gas Emissions
	(CO <sub>2</sub> equivalent Metric Tons)
Smelter Natural Gas/coke including Isa Vessel, converters, mold pouring, electric furnace, anode furnaces, etc.	787,766
Boilers/heaters	40,404
Generators	3,069
Rod Plant Shaft Furnace	25,287
Others	10,878
Total	867,405

#### V. APPLICABLE REGULATIONS VERIFICATION

The Permittee has identified the applicable regulations that apply to each unit in the permit application. The following table summarizes the findings of the Department with respect to applicability or non-applicability of applicable regulations that apply to each unit. Installation Permit and other previous permit conditions are discussed under Section VII of this technical review document.

**Table 3: Applicable regulations verification**

Unit ID	Control Equipment	Applicable Regulations	Verification
Material Handling and Bedding Plant	Baghouses for individual storage bins, water sprays	A.A.C. R18-2-702.B A.A.C. R18-2-715	Standards of Performance for Existing Primary Copper Smelters A.A.C. R18-2-715 are applicable to the material handling and bedding plant.  The particulate matter emission limits from Installation permit #1232 are retained in the Title V permit.
Process Gases from the IsaSmelt Furnace and Converters (Acid Plant Tail Gas Stack)	Acid Plant, and Chemical Scrubber for control of SO <sub>2</sub> emissions	40 CFR 60 Subpart P 40 CFR 63 Subpart QQQ A.A.C. R18-2-715 A.A.C. R18-2-715.01	As the IsaSmelt furnace was installed in the early-90s, after the October 6, 1974 trigger date for 40 CFR 60 Subpart P, acid plant tail gas stack is subject to New Source Performance Standards (NSPS) under 40 CFR 60 Subpart P.  The National Emission Standard for Hazardous Air Pollutants (NESHAP) Subpart QQQ is applicable to any existing or new copper smelter that is a major source of HAP emissions.  Standards of Performance for Existing Primary Copper Smelters A.A.C. R18-2-715 and 715.01 are applicable to the smelter facility.  Additionally, the particulate matter, lead and SO <sub>2</sub> emissions are subject to the emission standards from the installation permit #1232. Also, NO <sub>x</sub> emission limitation from the PSD permit revision #1000266 is retained.
Vent Fume Stack	Wet scrubber, Wet Electrostatic Precipitators (ESPs)	40 CFR 63 Subpart QQQ A.A.C. R18-2-715 A.A.C. R18-2-715.01	The Vent Fume stack is subject to NESHAP 40 CFR 63 Subpart QQQ.  Standards of Performance for Existing Primary Copper Smelters A.A.C. R18-2-715 and 715.01 are applicable to the smelter facility.  Additionally, the particulate matter, lead and SO <sub>2</sub> emissions are subject to the emission standards for the vent fume stack from installation permit #1232.

Unit ID	Control Equipment	Applicable Regulations	Verification
Smelter Fugitives		A.A.C. R18-2-702.B A.A.C. R18-2-702.E 40 CFR 63 Subpart QQQ	Opacity standard from A.A.C R18-2-702.B and E are applicable to emissions from the smelter building.  Smelter building is also subject to NESHAP 40 CFR 63 Subpart QQQ.
Converters	N/A	40 CFR 61 Subpart O	The facility is subject this standard for arsenic emissions under 40 CFR 61 Subpart O.
Anode Furnaces and Utility Vessels	Steam Injection System	A.A.C. R18-2-702.B, A.A.C. R18-2-702.E	Opacity standard from A.A.C R18-2-702.B and E are applicable to emissions from the anode furnaces and utility vessels.
Change Room Boiler, Acid Plant Pre-heater, Rod Plant Thermal Breaker Heater	N/A	A.A.C. R18-2-724	The fossil-fuel fired industrial equipment boilers and heaters are subject to A.A.C. R18-2-724. These boilers/heaters are less than 10 MMBtu/hr each, and hence not subject to 40 CFR 60 subpart Dc.
Isa Auxiliary Boiler and Electrolytic Refinery Boilers	N/A	40 CFR 60 Subpart Dc	These boilers, each more than 10 MMBtu/hr and installed after the trigger date of June 9, 1989 are subject to 40 CFR 60 Subpart Dc.
Screening Machine		A.A.C R18-2-721 A.A.C R18-2-722 A.A.C. R18-2-702	A.A.C R18-2-721-Standards of Performance for Existing Nonferrous Metals Industry Sources, and A.A.C R18-2-722-Standards of Performance for Existing Gravel or Crushed Stone Processing Plants are applicable to screening machine.
Diesel Engines	None	A.A.C. R18-2-719	Engines constructed prior to 2006 are subject to Existing Stationary Rotating Machinery standards under A.A.C. R18-2-719.  The engines constructed after 2006 are subject to NSPS 40 CFR 60 Subpart III. Less than 500 brake HP engines located at a major source of HAP emissions are required to comply with the requirements of 40 CFR 63 Subpart ZZZZ by meeting the

Unit ID	Control Equipment	Applicable Regulations	Verification
			<p>requirements of 40 CFR 60 Subpart III.</p> <p>The National Emission Standard for Hazardous Air Pollutants (NESHAP) Subpart ZZZZ is applicable to reciprocating internal combustion engines (RICE) located at major and area sources of HAPs. Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions are not required to meet the requirements of this Subpart (40 CFR 6590(b)(3)(iii)).</p>
Gasoline Storage Tanks	None	A.A.C. R18-2-710	<p>The gasoline storage tank is subject to the requirements under A.A.C. R18-2-710.</p> <p>NSPS Subpart Kb is not applicable as the capacity of gasoline storage tank is less than 20,000 gallons.</p>
<p>Electrolytic refining and Anode slime processing operations</p> <p>Rod Plant Shaft Furnace, Thermal Breaker, Cooling Towers, Misc. Storage Tanks</p>		A.A.C. R18-2-730	<p>These units are not covered by any specific existing source standard. They are, hence, regulated as unclassified sources under A.A.C. R18-2-730.</p>
Fugitive Dust Sources	Water and other reasonable precautions	A.A.C. Article 6, A.A.C. R18-2-702	<p>These standards are applicable to all fugitive dust sources at the facility.</p>
Mobile Sources	<p>Water Sprays/Water Truck for dust control</p> <p>N/A</p>	A.A.C. R18-2 Article 8	<p>This Article is applicable to off-road mobile sources, which either move while emitting air pollutants or are frequently moved during the course of their utilization.</p>

Unit ID	Control Equipment	Applicable Regulations	Verification
Other Periodic Activities	Various	A.A.C. R18-2-727 A.A.C. R18-2-730 A.A.C. R18-2-1101.A.8	This section deals with activities such as sandblasting, spray painting, demolition/renovation asbestos control, and gaseous or odorous materials handling.
Ambient Monitors		A.A.C. R18-2-215 A.A.C. R18-2-216 A.A.C. R18-2-715.02.E	Ambient air quality standards and requirement to operate ambient monitors

## VI. PREVIOUS PERMIT CONDITIONS

### A. Previous Permits

The table below lists previous permits held by this facility.

**Table 4: Previous Permits**

Permit Number	Date Issued	Application Basis
29622	July 5, 2006	Title V Significant Permit Revision (Permit No. 1000046 revised and reissued)
37553	May 11, 2006	Minor Permit Revision
41848	May 1, 2007	Significant Permit Revision
43398	February 14, 2008	Significant Permit Revision
45593	March 13, 2008	Minor Permit Revision
48448	April 15, 2009	Minor Permit Revision
49986	November 17, 2009	Minor Permit Revision
54218	February 8, 2012	Minor Permit Revision
55226	May 7, 2012	Minor Permit Revision
55691	Granted	Minor Permit Revision

### B. Previous Permit Conditions

Following table compares the conditions in Permit No. 1000046 (as revised by Significant Permit Revision No. 29622) with the conditions in this renewal permit.

**Table 5: Comparison with pervious permit conditions**

Condition # in Permit No. 29622	Determination				Comments
	Deleted	Kept	Revised	Streamlined	
Attachment "A"			x		This Attachment has been revised and the most recent Attachment "A" is used for this permit.
Attachment "B"					
Conditions I.A to -C		x			The facility-wide requirements for an EPA Method 9 certified observer, and submittal of compliance certifications & monthly reports are retained.
Conditions I.D though M		x			40 CFR 63 Subpart QQQ general requirements, as revised by Permit Revision Nos. 41848 and 45593 (except initial compliance demonstration requirements) are retained.
Section II			x		The throughput limitations for the concentrate and monitoring, recordkeeping and reporting requirements from the Installation Permit No. 1232 are retained. The requirements for recyclable waste are deleted as the facility will not longer be processing any recyclable waste.
Condition III.A		x			Particulate matter emission standards in the Installation Permit No. 1232 for material handling and bedding plant are retained.
Condition III.B		x			Air pollution control requirements in the Installation Permit No. 1232 for material handling and bedding plant are retained.
Conditions IV.A.1.a and d		x			Particulate matter and lead emission limitations from the Installation Permit No. 1232 for acid plant tail gas stack are retained.
Conditions IV.A.1.b and c		x			Non sulfuric acid particulate matter emission standard and opacity standard for tail gas stack are retained.
Conditions IV.A.2.a and b		x			Opacity and emissions monitoring requirements for the tail gas stack are retained.



Condition # in Permit No. 29622	Determination				Comments
	Deleted	Kept	Revised	Streamlined	
IV.A.3.a through c		x			The performance test requirements for particulate matter, opacity and lead emissions are retained.
Conditions IV.A.3.d, 4, 5	x				The initial compliance demonstration requirements for 40 CFR 63 Subpart QQQ are already complied with, and hence deleted.
Condition IV.A.6		x			The continuous compliance demonstration requirements for 40 CFR 63 Subpart QQQ are retained.
Conditions IV.B.1.a and b		x			Sulfur dioxide emission limitations from the Installation Permit No. 1232, and 40 CFR 60 Subpart F for acid plant tail gas stack are retained.
Conditions IV.B.2.a and b		x			Air pollution control requirements for SO <sub>2</sub> are retained.
Condition IV.B.3		x			The monitoring, reporting and recordkeeping requirements for SO <sub>2</sub> are retained.
Condition IV.C.1		x			The NO <sub>x</sub> emission standards from the Permit Revision No. 1000266 to Installation Permit No. 1232 for acid plant tail gas stack are retained.
Conditions IV.C.2 and 3		x			The monitoring, reporting & recordkeeping, and performance testing requirements for NO <sub>x</sub> are retained.
Condition V.A.1		x			Particulate matter, opacity and lead emission limitations from the Installation Permit No. 1232 are retained. Also, particulate matter and opacity emission standards from A.A.C. R18-2-715 & 40 CFR 63 Subpart QQQ for the vent fume stack are retained.
Condition V.A.2.a		x			Air pollution control requirements in the Installation Permit No. 1232 for vent fume stack are retained.
Condition V.A.2.b and c		x			Air pollution control requirements for the capture system to collect gases from copper matte or slag tapping ports are retained.

Condition # in Permit No. 29622	Determination				Comments
	Deleted	Kept	Revised	Streamlined	
Condition V.A.2.d		x			The monitoring requirement for the wet scrubber is retained.
Condition V.A.3			x		Opacity, particulate matter emission monitoring, requirements for the vent fume stack is retained. 40 CFR 63 Subpart QQQ requirements are revised to include requirements for wet ESPs in addition to those for wet scrubbers.
Condition V.A.4		x			The performance testing requirements for the vent fume stack are retained.
Condition V.A.5	x				The initial compliance demonstration requirements for 40 CFR 63 Subpart QQQ are already complied with, and hence deleted.
Condition V.A.6		x			The continuous compliance demonstration requirements for 40 CFR 63 Subpart QQQ are retained.
Section VI		x			The requirements for smelter fugitives are retained.
Section VII		x			The requirements for anode furnace and utility vessels are retained.
Section VIII			x		The requirements for fuel burning equipment are streamlined. Fuel burning equipment for electrolytic refinery and rod plan are moved to their respective Section. Also, the requirements for Isa Auxiliary Boiler and Electrolytic Refinery Boilers are revised as these boilers are subject to 40 CFR 60 Subpart Dc.
Section IX			x		The requirements for stationary rotating machinery, as revised by Permit Revision Nos. 54218, 55226 and 55691 are retained. Additionally, 40 CFR 63 Subpart ZZZZ requirements for affected engines are included.
Section X		x			The facility-wide requirements for SO <sub>2</sub> emissions (Multi Point Rollback Rule) are retained.

Condition # in Permit No. 29622	Determination				Comments
	Deleted	Kept	Revised	Streamlined	
Section XI		x			The requirements for converters arsenic charging rate are retained.
Section XII		x			The requirements for electrolytic refinery and rod plant are retained, and are now located under separate sections. Also, the requirements for rod plant are revised to include new air pollution control requirements for catalytic oxidizer unit.
Section XIII				x	The requirements for continuous emission monitoring system (CEMS) are streamlined to locate all CEMS requirements from various Sections under this Section.
Section XIV		x			The requirements for non-point sources are retained. This section is now renamed as "Fugitive Dust Sources". Also, the requirements for open burning are deleted as these activities will be covered under separate permit as and when required.
Section XV		x			This section for other periodic activities requirements is replaced with the most recent version of the language currently used in ADEQ permits.
Section XVI		x			The requirements for miscellaneous storage tanks are retained.
Section XVII			x		The section is renamed as "Gasoline Storage Tanks", is revised to include additional monitoring and recordkeeping requirements from A.A.C. R18-2-710.
Section XVIII		x			The ambient monitoring requirements are revised to include current ADEQ data reporting requirements.
Section XIX				x	The requirements for screening machine are streamlined to include screening of copper bearing material under Section XXII (as authorized by Permit Revision No. 48448)
Section XX	x				The requirements for high vacuum desorption unit are deleted as the facility no longer intends to use this system.

Condition # in Permit No. 29622	Determination				Comments
	Deleted	Kept	Revised	Streamlined	
Section XXI	x				The requirements for coal injection system, as revised by Permit Revision No. 43398 are deleted as these were never implemented and the facility no longer intends to make these changes.
Attachment "D"		x			The procedure for sulfur balance method, as revised by Permit Revision No. 49986, is retained.
Attachment "E"		x			The fugitive dust control requirements are retained.
Attachment "F"		x			The operation and maintenance requirements are retained.

## VII. MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

### A. Feed to smelter

The Permittee is required to limit the feed of concentrate to Isa and Electric furnace to 850,000 tons per year. The Permittee is required to maintain records of daily, monthly and rolling twelve month totals of concentrate feed.

### B. Opacity Monitoring

1. The Permittee is required to conduct bi-weekly monitoring of opacity from the stacks associated with material handling and bedding plant, tail gas stack, vent fume stack, smelter building, anode furnaces and utility vessels building, screening machine, anode slimes dryer, electrolytic refinery, rod plant shaft furnace and thermal breaker stacks; and fugitive dust sources.
2. The Permittee is required to conduct monthly monitoring of opacity from the stacks associated boilers and heaters, rod plant thermal breaker heater, diesel engines
3. The Permittee is required to conduct quarterly monitoring of opacity from the cooling towers.

### C. Particulate Matter

The Permittee is required to operate and maintain continuous parametric monitoring system to monitor flow rate on the wet scrubber, and operating parameters for wet electrostatic precipitators to minimize particulate matter emissions from the vent fume stack.

### D. Sulfur Dioxide

1. The Permittee is required to operate continuous emission monitoring system (CEMS) on the tail gas stack and vent fume stack to monitor sulfur dioxide emissions.

2. The Permittee is required to perform monthly material balance for determining facility-wide sulfur dioxide emissions. The Permittee must report average monthly emission, annual average emissions and number of 3-hour emission averages that exceeded the applicable emission levels.
3. The Permittee is required to submit a monthly report of all periods when the valve bypassing the sulfur removal equipment was operated

**E. Arsenic**

The Permittee is required to compute 12-month average arsenic charging rate in pounds per hour every month and maintain records of these calculations. The Permittee is required to submit annual report of monthly computations of annual arsenic charging rates.

**VIII. PERFORMANCE TESTING REQUIREMENTS**

- A. The Permittee is required to conduct EPA Reference Method 5 performance tests on two representative stacks from the concentrate, flux, revert, and coal bins in the first year of the permit term to show compliance with the particulate matter emission limits
- B. The Permittee is required to conduct annual performance test for particulate matter emissions from the tail gas stack and vent fume stack to demonstrate compliance with 40 CFR 63 Subpart QQQ emission limitations.
- C. The Permittee is required to conduct semi-annual performance tests for particulate matter emissions from the vent fume stack and acid plant tail gas stack to demonstrate compliance with the hourly and annual emission limitations.
- D. The Permittee is required to conduct semi-annual performance tests for lead emissions from the vent fume stack and acid plant tail gas stack to demonstrate compliance with the hourly and annual emission limitations.
- E. The Permittee is required to conduct semi-annual performance test for nitrogen oxide emissions from the acid plant tail gas stack to demonstrate compliance with the hourly and annual emission limitations.
- F. The Permittee is required to conduct performance test for nitrogen oxide emissions from Isasmelt Auxiliary Boiler in the first year of the permit term to show compliance with the emission limit.
- G. The Permittee is required to calibrate continuous emission monitoring system (CEMS) for SO<sub>2</sub> and gas volumetric flow measurement for tail gas stack and vent fume stack in accordance with the schedule identified in the permit.

**IX. COMPLIANCE ASSURANCE MONITORING (CAM)**

The only pollutant-specific emission units that use a control device to achieve compliance and have potential pre-control emissions greater than 100 tons per year are the smelter electric furnace, Isa vessel and converters which generate sulfur dioxide, particulate matter and nitrogen oxides. The process gasses pass through an acid plant before being exhausted through the acid plant tail stack to atmosphere. The collected fugitives pass through a scrubber and wet electrostatic precipitator before being exhausted through the vent fume stack to atmosphere.

The sulfur dioxide emissions from both stacks are monitored by CEMS. Thus these stacks are exempt from the CAM requirements (40 CFR 64.2(b)(vi)).

Emissions of particulate matter from the vent fume stack and tail stack particulate are subject to Maximum Available Control Technology (MACT) standards proposed after November 15, 1990, and hence, are exempt from CAM requirements (40 CFR 64.2(b)(i)).

No control device is utilized to control NO<sub>x</sub> emissions in the tail gas. Hence, CAM requirements are not applicable for NO<sub>x</sub> emissions (40 CFR 64.2(a)(2)).

**X. LIST OF ABBREVIATIONS**

A.A.C.	Arizona Administrative Code
AAC	Ambient Air Concentration
ADEQ	Arizona Department of Environmental Quality
AQD	Air Quality Division
As	Arsenic
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon monoxide
EPA	United States Environmental Protection Agency
HAP	Hazardous Air Pollutant
HP	Horsepower
MACT	Maximum Achievable Control Technology
NO <sub>x</sub>	Nitrogen Oxide
NOV	Notice of Violation
NESHAPS	National Emission standards for Hazardous Air Pollutants
NSPS	New Source Performance Standards
Pb	Lead
PM <sub>10</sub>	Particulate Matter Nominally less than 10 Micrometers
PSD	Prevention of Significant Deterioration
PTE	Potential-to-Emit
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
TPY	Tons per Year
VOC	Volatile Organic Compound
WESP	Wet Electrostatic Precipitator