

**Bay Area Air Quality Management District**

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San Francisco, CA 94109  
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**Permit Evaluation  
and  
Statement of Basis  
for a  
Minor Revision  
to the  
MAJOR FACILITY REVIEW PERMIT**

**For**

**CRITERION CATALYSTS & TECHNOLOGIES, L.P.**

**Facility #A0227**

**Facility Address:**

2840 Willow Pass Road  
Pittsburg, CA 94565

**Mailing Address:**

P.O. Box 5159  
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Application Engineer: Dharam Singh

Site Engineer: Dharam Singh

December 2011

Application: 23296

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## **Title V Statement of Basis**

### **A. Background**

This facility is subject to the Operating Permit requirements of Title V of the federal Clean Air Act, Part 70 of Volume 40 of the Code of Federal Regulations (CFR), and BAAQMD Regulation 2, Rule 6, Major Facility Review because it is a major facility as defined by BAAQMD Regulation 2-6-212. It is a major facility because it has the “potential to emit,” as defined by BAAQMD Regulation 2-6-218, of more than 100 tons per year of a regulated air pollutant.

Major Facility Operating permits (Title V permits) must meet specifications contained in 40 CFR Part 70 as contained in BAAQMD Regulation 2, Rule 6. The permits must contain all applicable requirements (as defined in BAAQMD Regulation 2-6-202), monitoring requirements, recordkeeping requirements, and reporting requirements. The permit holders must submit reports of all monitoring at least every six months and compliance certifications at least every year.

In the Bay Area, state and District requirements are also applicable requirements and are included in the permit. These requirements can be federally enforceable or non-federally enforceable. All applicable requirements are contained in Sections I through VI of the permit.

Each facility in the Bay Area is assigned a facility identifier that consists of a letter and a 4-digit number. This identifier is also considered to be the identifier for the permit. The identifier for this facility is **A0227**.

### **Current Permit Action**

New sources S322 and S323 will be added to the Title V permit. Permit condition for S606 will be amended. As described in the attached NSR permit evaluations, there is no net increase in emissions at the facility resulting from this action. Because the proposed revisions to the Title V permit do not meet the definition of significant revision per 2-6-226 or the definition of administrative amendment per 2-6-201, they are considered to be a minor revision and do not require public notice.

Permit to operate for S322, covered by Application # 21356, was issued on 10/29/2010.  
Permit to operate for S323, covered by Application # 23272, was issued on 6/23/2011.  
Change of condition for S606, covered by Application # 22844, was issued on 4/29/2011.

## B. NSR Permit Evaluation

**ENGINEERING EVALUATION REPORT  
CRITERION CATALYSTS & TECHNOLOGIES, LP  
PLANT NUMBER 227  
APPLICATION NUMBER 21356**

### BACKGROUND

Criterion Catalysts & Technologies, LP (Criterion) has been operating a catalyst manufacturing plant in Pittsburg, CA. The plant is a Title V facility. Criterion has submitted an application to obtain an authority to construct and a permit to operate a fines tanker truck delivery system. The system will be an alternative to the existing grinding operation on-site (grinder (S320)). The raw material, grounded offsite, will be delivered directly to the existing silos (S314 through S317) by the proposed delivery system bypassing the grinder, S320. The transfer of material is achieved by creating negative pressure in the silos. Particulate emissions from the silos are abated by baghouses A44 through A47. There will be no net increase in PM10 and Nickel emissions facility wide. However, PM10 and Nickel emissions are calculated to determine if it triggers BACT requirements of Regulation 2-2-301, and TBACT requirements of Regulation 2-5. BACT and TBACT are discussed below.

The application covers the following source:

**S-322 Fines tanker truck delivery system, 40,000 lb tanker, custom made.**

### EMISSIONS CALCULATIONS

PM10 emissions are calculated on the basis of maximum exhaust flow rate of 3000 cfm, a grain loading of 0.005 gr/dscf (existing condition) of the baghouse, and operating schedule of 24 hrs/day and 365 days/yr.

$$\begin{aligned} \text{PM-10 emissions} &= (0.005 \text{ gr/dscf}) (3,000 \text{ cfm}) (1,440 \text{ min/day}) \\ &\quad (365 \text{ days/yr}) / (7,000 \text{ gr/lb}) \\ &= \mathbf{1,126 \text{ lb/yr}} \\ &= \mathbf{0.563 \text{ tpy}} \end{aligned}$$

### PLANT CUMULATIVE INCREASE

PM10 emissions were accounted in application # 9450 (the previous cycle).

PM10 = 0.0 TPY

### TOXIC EMISSIONS AND HEALTH RISK SCREENING ANALYSIS

Fines contain 7% by weight of nickel, which is considered a toxic compound. Nickel emissions are calculated assuming 7% of PM-10 emissions.

$$\begin{aligned} \text{Nickel emissions} &= (1,126 \text{ lb/yr}) (7\%) \\ &= \mathbf{78.84 \text{ lb/yr}} \end{aligned}$$

Nickel emissions exceed the toxic trigger level of 0.43 lb/yr given in the Table 2-5-1, and therefore require health risk screening analysis. A health risk screening analysis was performed (toxic memo dated 2/23/2010) and the results indicate a maximum cancer risk of 4.4 in a million, a chronic hazard

index (HI) of 0.19, and an acute HI of 0.26. In accordance with District Regulation 2-5, these risk levels are acceptable with application of TBACT.

The emissions are controlled by baghouses. Baghouse with exhaust grain loading of 0.01 gr/dscf or less is considered TBACT for this operation. The source complies with the TBACT requirements.

#### **STATEMENT OF COMPLIANCE**

On the basis of the information submitted, the source and the baghouse will comply with the requirements of Regulation 6, Rule 1 for particulate and visible emissions. The grain loading of the exhaust from the baghouses will be less than 0.15 gr/dscf.

The project is categorically exempt from CEQA review per Regulation 2-1-312.11. The applicant has submitted a completed Appendix H. The project will not have any significant environmental effect, and satisfies criteria of "no net increase in emissions". A health risk screening analysis is required due to the emissions of Nickel. The results of the analysis are acceptable per Regulation 2, Rule 5. The emissions are controlled by baghouses and comply with TBACT requirements. Baghouse with exhaust grain loading of 0.01 gr/dscf or less is considered TBACT for this operation.

PM10 emissions are less than 10 lb/day, and therefore are not subject to the BACT requirements of Regulation 2-2-301.

PSD, NSPS, and NESHAPS requirements do not apply.

#### **PERMIT CONDITIONS**

The permit condition ID# 8468 is revised by adding S-322.

#### **RECOMMENDATIONS**

It is recommended that Criterion be issued an Authority to Construct the source described in the background section of this report.

**BY:** \_\_\_\_\_  
Dharam Singh AQE II

**ENGINEERING EVALUATION REPORT  
CRITERION CATALYSTS & TECHNOLOGIES, LP  
PLANT NUMBER 227  
APPLICATION NUMBER 22844**

#### **BACKGROUND**

Criterion Catalysts & Technologies, LP (Criterion) has been operating a catalyst manufacturing plant in Pittsburg, CA. The facility is a Title V facility.

Criterion operates a Calciner, S606, abated by a baghouse (A604), a NOx selective catalyst reduction system (A605), and a CO catalyst oxidizer (A606). The calciner was originally permitted on 5/19/1998 with permit condition ID# 15672. Part 8 of the condition is the BACT requirement for CO emissions, while part 9 limits CO annual emissions. Part 8 of the condition

has been amended four times since the issuance of the original permit. The amendments were proposed by Criterion because of various operational concerns, and lack of data.

After operating the calciner for over 12 years, and reviewing data and operating conditions, Criterion has proposed to reinstate the amended condition of February 1999. The current version of part 8 (amended on 4/22/2008 at the request of Criterion) includes an instantaneous requirement of duct burner flameout exemption. As presented in the episode history, there are very few times when the condition actually applies (21 times in 11 years). The time frame of the episodes and excess CO emissions are minimal and do-not exceed the annual CO limit. In fact, CO emissions from the source are in the range of 200 to 700 lb/yr and 1 to 2 lb/day. The non-compliance event creates tremendous amount of effort to investigate and create report with insignificant outcome.

In view of the presented facts, the permit condition is amended as proposed by the applicant. The amendment does not trigger any new regulatory requirements, and the source will continue to comply with the BACT requirements for CO, and its emission limit (19,524 lb/yr) of part 9 of the permit condition.

The proposed changes in the permit conditions are considered administrative in nature.

The application covers the following source:

**S-606            X3-Calciner.**

**EMISSIONS CALCULATIONS**

CO emissions from S606 will remain limited to 19,524 lb/yr (refer condition #15672, part 9). No change is proposed for this limit.

**PLANT CUMULATIVE INCREASE**

CO = 0.0 TPY

**STATEMENT OF COMPLIANCE**

Source, S606, continues to comply with the applicable regulatory requirements, and permit conditions.

**PERMIT CONDITIONS**

The permit condition ID# 15672, part 8 is amended as proposed.

**RECOMMENDATIONS**

It is recommended that Criterion be issued amended permit condition ID# 15672 for the calciner, S-606.

**BY:** \_\_\_\_\_  
Dharam Singh AQE II

**ENGINEERING EVALUATION REPORT  
CRITERION CATALYSTS & TECHNOLOGIES, LP  
PLANT NUMBER 227  
APPLICATION NUMBER 23272**

**2840 Willow Pass Road  
Pittsburg, CA 94565**

**BACKGROUND**

Criterion Catalysts & Technologies, LP (Criterion) has been operating a catalyst manufacturing plant in Pittsburg, CA. The plant is a Title V facility. Criterion has submitted an application to obtain an authority to construct and a permit to operate a fines grinder feed hopper system (secondary). The system will be in addition to an existing feed hopper system, S-313. The secondary hopper system will enable custom blending of different types of fines raw materials with the material processed in the existing feed hopper. It will also be useful in recycling more materials that would otherwise be shipped offsite as hazardous waste. The combined materials throughput at both feed hoppers will remain at the current permitted level of 4,380 tons/yr. Emissions from the new hopper will also be abated by an existing dust collector, A-40. The airflow rate and the exhaust grain loading of the dust collector will remain at the current permitted levels. The materials fed at both hoppers will contain nickel, the percentage of which will remain at the current permitted level of 7% by weight. In view of the abovementioned scenario, there will be no net increase in PM10, and Nickel emissions.

The application covers the following source:

**S-323 Fines grinder feed hopper system (secondary), custom made, abated by A-40.**

**EMISSIONS CALCULATIONS**

There will be no net increase in PM10 emissions from the operations of both feed hoppers.

PM-10 emissions increase = 0.0 lb/yr

**PLANT CUMULATIVE INCREASE**

PM10 emissions were accounted in application # 9450 (the previous cycle).

PM10 = 0.0 TPY

**TOXIC EMISSIONS AND HEALTH RISK SCREENING ANALYSIS**

Materials contain 7% by weight of nickel, which is considered a toxic compound. But there will be no net increase in nickel emissions, and therefore a health risk screening analysis is not required.

**STATEMENT OF COMPLIANCE**

On the basis of the information submitted, the source and the baghouse will comply with the requirements of Regulation 6, Rule 1 for particulate and

visible emissions. The grain loading (0.005 gr/dscf) of the exhaust from the baghouse, A-40, is less than 0.15 gr/dscf.

The project is categorically exempt from CEQA review per Regulation 2-1-312.11. The applicant has submitted a completed Appendix H. The project will not have any significant environmental impact, and satisfies criteria of "no net increase in emissions". A health risk screening analysis is not required due to the emissions of Nickel.

BACT and offset requirements for PM10 emissions are not triggered.

PSD, NSPS, and NESHAPS requirements do not apply.

**PERMIT CONDITIONS**

The permit condition ID# 3344 is revised by adding S-323, and updating the language. In addition, since the batch loading process does not enable monitoring of hourly nickel percentage, as required by part 7, the applicant has requested a longer averaging period of 24-hour.

**RECOMMENDATIONS**

It is recommended that Criterion be issued a Permit to Operate (waive A/C) the source described in the background section of this report.

**BY:** \_\_\_\_\_  
Dharam Singh AQE II

**C. Supplemental Information**

**I. Standard Conditions**

This section contains administrative requirements and conditions that apply to all facilities.

Changes in this action

None.

**II. Equipment**

This section of the permit lists all permitted or significant sources. Each source is identified by an S and a number (e.g., S24).

Changes in this action

Sources, S322 and S323, will be added to Section II of the permit.

**III. Generally Applicable Requirements**

This section of the permit lists requirements that generally apply to all sources at a facility including insignificant sources and portable equipment that may not require a District permit

Changes in this action

None.



#### **IV. Source-Specific Applicable Requirements**

Section IV of the permit contains citations to all of the applicable requirements. The text of the requirements is found in the regulations, which are readily available on the District's or EPA's websites, or in the permit conditions, which are found in Section VI of the permit.

#### Complex Applicability Determinations

This permit did not require any complex applicability determinations.

#### Other changes in this action

Table IV-L will be modified by adding S323.

Table IV-M will be modified by adding S322.

#### **V. Schedule of Compliance**

A schedule of compliance is required in all Title V permits pursuant to BAAQMD Regulation 2-6-409.10 which provides that a major facility review permit shall contain the following information and provisions:

“409.10 A schedule of compliance containing the following elements:

- 10.1 A statement that the facility shall continue to comply with all applicable requirements with which it is currently in compliance;
- 10.2 A statement that the facility shall meet all applicable requirements on a timely basis as requirements become effective during the permit term; and
- 10.3 If the facility is out of compliance with an applicable requirement at the time of issuance, revision, or reopening, the schedule of compliance shall contain a plan by which the facility will achieve compliance. The plan shall contain deadlines for each item in the plan. The schedule of compliance shall also contain a requirement for submission of progress reports by the facility at least every six months. The progress reports shall contain the dates by which each item in the plan was achieved and an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.”

Since the District has not determined that the facility is out of compliance with an applicable requirement, the schedule of compliance for this permit contains only sections 2-6-409.10.1 and 2-6-409.10.2.

#### **VI. Permit Conditions**

The regulatory basis is listed following each condition. The regulatory basis may be a rule or regulation. The District is also using the following terms for regulatory basis:

- **BACT:** This term is used for a condition imposed by the Air Pollution Control Officer (APCO) to ensure compliance with the Best Available Control Technology in Regulation 2-2-301.
- **Cumulative Increase:** This term is used for a condition imposed by the APCO which limits a source's operation to the operation described in the permit application pursuant to BAAQMD Regulation 2-1-403.
- **Offsets:** This term is used for a condition imposed by the APCO to ensure compliance with the use of offsets for the permitting of a source or with the banking of emissions from a source pursuant to Regulation 2, Rules 2 and 4.
- **PSD:** This term is used for a condition imposed by the APCO to ensure compliance with a Prevention of Significant Deterioration permit issued pursuant to Regulation 2, Rule 2.

- **TRMP:** This term is used for a condition imposed by the APCO to ensure compliance with limits that arise from the District’s Toxic Risk Management Policy.

All changes to existing permit conditions are clearly shown in “strike-out/underline” format in the proposed permit. When the permit is issued, all ‘strike-out’ language will be deleted and all “underline” language will be retained, subject to consideration of comments received.

Additional monitoring has been added, where appropriate, to assure compliance with the applicable requirements.

Changes in this action

Permit condition ID# 3344 will be revised by adding S323, and updating the language.  
 Permit condition ID# 8468 will be revised by adding S322, and updating the language.  
 Permit condition ID# 15672, part 8 will be revised.

**VII. Applicable Limits and Compliance Monitoring Requirements**

This section of the permit is a summary of numerical limits and related monitoring requirements for each source. The summary includes a citation for each monitoring requirement, frequency of monitoring, and type of monitoring. The applicable requirements for monitoring are completely contained in Sections IV, Source-Specific Applicable Requirements, and VI, Permit Conditions, of the permit.

The District has reviewed all monitoring and has determined the existing monitoring is adequate with the following exceptions.

The tables below contain only the limits for which there is no monitoring or inadequate monitoring in the applicable requirements. The District has examined the monitoring for other limits and has determined that monitoring is adequate to provide a reasonable assurance of compliance. Calculations for potential to emit will be provided in the discussion when no monitoring is proposed due to the size of a source.

PM Sources

<b>S# &amp; Description</b>	<b>Emission Limit Citation</b>	<b>Federally Enforceable Emission Limit</b>	<b>Monitoring</b>
1* (see footnote)	BAAQMD Regulation 6-1-301 SIP Regulation 6-301	Ringelmann 1.0	None
1* (see footnote)	BAAQMD Regulation 6-1-310 SIP Regulation 6-310	0.15 gr/dscf	None
1* (see footnote)	BAAQMD Regulation 6-1-310.3 SIP Regulation 6-310.3	0.15 gr/dscf at 6% O2	None

### PM Sources

<b>S# &amp; Description</b>	<b>Emission Limit Citation</b>	<b>Federally Enforceable Emission Limit</b>	<b>Monitoring</b>
2* (see footnote)	BAAQMD Regulation 6-1-311 SIP Regulation 6-311	$4.10P^{0.67}$ lb/hr, where P is process weight, ton/hr	None

1\*- S3, S4, S5, S6, S8 thru S11, S19, S107, S109, S201, S205 thru S208, S210, S211, S216, S221, S223 thru S231, S303 thru S310, S408 thru S410, S412, S414 thru S418, S511 thru S513, S515 thru S520, S600, S603

2\*- S1 thru S11, S19, S104 thru S107, S109 thru S114, S201, S205 thru S208, S210, S211, S216, S220 thru S231, S303 thru S323, S401, S407 thru S410, S412, S414 thru S418, S504 thru S507, S509 thru S520, S600 thru S604, S606

#### **PM Discussion:**

#### BAAQMD Regulation 6, Rule 1 “Particulate Matter”, SIP Regulation 6

##### Visible Emissions, Regulation 6-1-301, SIP Regulation 6-301

BAAQMD Regulation 6-1-301 limits visible emissions to no darker than 1.0 on the Ringelmann Chart (except for periods or aggregate periods less than 3 minutes in any hour). Visible emissions are normally not associated with combustion of gaseous fuels, such as natural gas. Sources S109, S205, and S206 burn natural gas exclusively, therefore, per the EPA’s June 24, 1999 agreement with CAPCOA and ARB titled “Summary of Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP”, no monitoring is required to assure compliance with this limit for these sources.

Sources (1\*) listed in the table above have no monitoring for 6-301, but are abated by baghouses, therefore visible emissions are not expected and monitoring is not required.

##### Particulate Weight Limitation, Regulation 6-1-310, SIP Regulation 6-310

BAAQMD Regulation 6-1-310 limits filterable particulate (FP) emissions from any source to 0.15 grains per dry standard cubic foot (gr/dscf) of exhaust volume. Section 310.3 limits filterable particulate emissions from “heat transfer operations” to 0.15 gr/dscf @ 6% O<sub>2</sub>. These are the “grain loading” standards.

Sources (2\*) listed in the table above have no monitoring for 6-310, but are abated by baghouses with maximum expected grain loading of 0.006 gr/dscf, significantly less than the standard, therefore compliance is expected and monitoring is not required.

Exceedances of the grain loading standards are normally not associated with combustion of gaseous fuels, such as natural gas. Sources S109, S205, and S206 burn natural gas exclusively, therefore, per the EPA's July 2001 agreement with CAPCOA and ARB entitled "CAPCOA/CARB/EPA Region IX Recommended Periodic Monitoring for Generally Applicable Grain Loading Standards in the SIP: Combustion Sources: Summary of Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP", no monitoring is required to verify compliance with this limit for these sources.

#### General Operations, Regulation 6-1-311, SIP Regulation 6-311

BAAQMD Regulation 6-311 limits the particulate matter emission rate from any emission point to greater than the rate given in the Table 1 of the regulation for the process weight indicated.

Sources (2\*) listed in the table above have no monitoring for 6-311, but are abated by baghouses with low grain loading limits. The mass emission rate is much less than the lowest applicable limit of 1.8 lb/hr as shown below for the highest rated baghouse, therefore compliance is expected and monitoring is not required.

Baghouse, A603 abating S604, X-3 Dryer:

Basis: Exhaust flow rate = 12,000 dscfm; grain loading = 0.006 gr/dscf  
PM emission rate = (12000 dscfm)(0.006 gr/dscf)(lb/7000 gr)(60 min/hr)  
= 0.62 lb/hr

#### **Discussion of Other Limits:**

The permit contains other limits, such as HAP limits, hours of operation, and heat input. There is adequate monitoring for these limits in the standards or permit conditions.

#### Changes in this action

Table VII-L will be modified by adding S323.

Table VII-M will be modified by adding S322.

Table VII-AA will be modified by changing the CO emission limit.

#### **VIII. Test Methods**

This section of the permit lists test methods that are associated with standards in District or other rules. It is included only for reference. In most cases, the test methods in the rules are source test methods that can be used to determine compliance but are not required on an ongoing basis. They are not applicable requirements.

If a rule or permit condition requires ongoing testing, the requirement will also appear in Section IV of the permit.

#### **IX. Permit Shield:**

The District rules allow two types of permit shields. The permit shield types are defined as follows: (1) A provision in a major facility review permit explaining that specific federally enforceable regulations and standards do not apply to a source or group of sources, or (2) A

provision in a major facility review permit explaining that specific federally enforceable applicable requirements for monitoring, recordkeeping and/or reporting are subsumed because other applicable requirements for monitoring, recordkeeping, and reporting in the permit will assure compliance with all emission limits.

The second type of permit shield is allowed by EPA's White Paper 2 for Improved Implementation of the Part 70 Operating Permits Program. The District uses the second type of permit shield for all streamlining of monitoring, recordkeeping, and reporting requirements in Title V permits. The District's program does not allow other types of streamlining in Title V permits.

This facility has no permit shields.  
This permit has no streamlining.

**X. Revision History**

This section contains the details of issuance and revisions for each permit.

**XI. Glossary**

This section contains terms that may be unfamiliar to the general public or EPA.

**D. Alternate Operating Scenarios:**

No alternate operating scenario has been requested for this facility.

**F. Differences between the Application and the Proposed Permit:**

There is no difference between the application and the proposed permit.

APPENDIX A  
GLOSSARY

**ACT**

Federal Clean Air Act

**APCO**

Air Pollution Control Officer

**ARB**

Air Resources Board

**BAAQMD**

Bay Area Air Quality Management District

**BACT**

Best Available Control Technology

**Basis**

The underlying authority which allows the District to impose requirements.

**CAA**

The federal Clean Air Act

**CAAQS**

California Ambient Air Quality Standards

**CAPCOA**

California Air Pollution Control Officers Association

**CEM**

Continuous Emission Monitor

**CEQA**

California Environmental Quality Act

**CFR**

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

**CO**

Carbon Monoxide

**Cumulative Increase**

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Cumulative increase is used to determine whether threshold-based requirements are triggered.

**District**

The Bay Area Air Quality Management District

**dscf**

Dry Standard Cubic Feet

**EPA**

The federal Environmental Protection Agency.

**Excluded**

Not subject to any District regulations.

**FDOC**

Final Determination of Compliance (FDOC), prepared pursuant to District Regulation 2, Rule 3, Power Plants.

**Federally Enforceable, FE**

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS), Part 61 (NESHAPs), Part 63 (MACT), and Part 72 (Permits Regulation, Acid Rain), including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

**FP**

Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

**HAP**

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by 40 CFR Part 63.

**HRSG**

Heat Recovery Steam Generator

**Major Facility**

A facility with potential emissions of: (1) at least 100 tons per year of regulated air pollutants, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

**MFR**

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Federal Clean Air Act and implemented by District Regulation 2, Rule 6.

**MOP**

The District's Manual of Procedures.

**NAAQS**

National Ambient Air Quality Standards

**NESHAPS**

National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63.

**NMHC**

Non-methane Hydrocarbons (Same as NMOC)



**NMOC**

Non-methane Organic Compounds (Same as NMHC)

**NOx**

Oxides of nitrogen.

**NSPS**

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Federal Clean Air Act, and implemented by 40 CFR Part 60 and District Regulation 10.

**NSR**

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the Federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

**Offset Requirement**

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of POC, NOx, PM10, and SO2.

**Phase II Acid Rain Facility**

A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

**POC**

Precursor Organic Compounds

**PM**

Particulate Matter

**PM10**

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

**PSD**

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

**PUC**

Public Utilities Commission (California)

**SIP**

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

**SO2**

Sulfur dioxide

**THC**

Total Hydrocarbons (NMHC + Methane)

**Title V**

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

**TOC**

Total Organic Compounds (NMOC + Methane, Same as THC)

**TPH**

Total Petroleum Hydrocarbons

**TRMP**

Toxic Risk Management Plan

**TSP**

Total Suspended Particulate

**VOC**

Volatile Organic Compounds

**Units of Measure:**

bhp	=	brake-horsepower
btu	=	British Thermal Unit
cfm	=	cubic feet per minute
g	=	grams
gal	=	gallon
gpm	=	gallons per minute
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inches
max	=	maximum
m <sup>2</sup>	=	square meter
min	=	minute
mm	=	million
MMbtu	=	million btu
MMcf	=	million cubic feet
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scfm	=	standard cubic feet per minute
yr	=	year