

Bay Area Air Quality Management District

939 Ellis Street
San Francisco, CA 94109
(415) 771-6000

Permit Evaluation and Statement of Basis for MAJOR FACILITY REVIEW PERMIT

for
**Tosco Refining Company, Contra Costa Carbon Plant
Facility #A0022**

Facility Address:

2101 Franklin Canyon Road
Rodeo, CA 94572

Mailing Address:

2101 Franklin Canyon Road
Rodeo, CA 94572

TABLE OF CONTENTS

A.	Background.....	3
B.	Facility Description.....	3
C.	Permit Content	3
I.	Standard Conditions.....	4
II.	Equipment.....	4
III.	Generally Applicable Requirements.....	5
IV.	Source-Specific Applicable Requirements.....	5
V.	Schedule of Compliance.....	6
VI.	Permit Conditions.....	7
VII.	Applicable Limits and Compliance Monitoring Requirements.....	8
VIII.	Test Methods.....	15
IX.	Permit Shield:.....	15
D.	Alternate Operating Scenario:	16
E.	Compliance Status:.....	16
F.	Differences Between the Application and the Proposed Permit:.....	16

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 the Code of Volume 40 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, 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. The permits must contain all applicable requirements (as defined in 40 CFR § 70.2), 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 number that consists of a letter and a 4-digit number. This facility number is also considered to be the identifier for the permit.

B. Facility Description

Tosco Refining Company refines petroleum coke. The process used is as follows:

1. Petroleum coke is received from a refinery.
2. Coke is conveyed to the coke calciner where it is calcined (heated). This process removes impurities from the coke, including sulfur and water.
3. The hot waste gases from the calciner are sent to the pyroscrubber that removes particulate by a combination of settling and incineration. Sulfur compounds are oxidized to sulfur dioxide.
4. The hot waste gases are sent to a heat recovery steam generator for the production of steam for the generation of electricity. The cooled waste gases pass through a baghouse and tall stack and are then emitted into the atmosphere.
5. The resulting refined coke is sold.

C. Permit Content

The legal and factual basis for the permit follows. The permit sections are described in the order that they are presented in the permit.

I. Standard Conditions

This section contains administrative requirements and conditions that apply to all facilities. If the Title IV (Acid Rain) requirements for certain fossil-fuel fired electrical generating facilities or the accidental release (40 CFR § 68) programs apply, the section will contain a standard condition pertaining to these programs. Many of these conditions derive from 40 CFR § 70.6, Permit Content, which dictates certain standard conditions that must be placed in the permit. The language that the District has developed for many of these requirements has been adopted into the BAAQMD Manual of Procedures, Volume II, Part 3, Section 4, and therefore must appear in the permit.

The standard conditions also contain references to BAAQMD Regulation 1 and Regulation 2. These are the District's General Provisions and Permitting rules.

Condition I.J has been added to clarify that the capacity limits shown in Table II-A are enforceable limits.

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).

Permitted sources are those sources that require a BAAQMD operating permit pursuant to BAAQMD Rule 2-1-302.

Significant sources are those sources that have a potential to emit of more than 2 tons of a "regulated air pollutant," as defined in BAAQMD Rule 2-6-222, per year or 400 pounds of a "hazardous air pollutant," as defined in BAAQMD Rule 2-6-210, per year.

All abatement (control) devices that control permitted or significant sources are listed. Each abatement device is identified by an A and a number (e.g., A24). If a source is also an abatement device, such as when an engine controls VOC emissions, it will have an "S" number.

The equipment section is considered to be part of the facility description. It contains information that is necessary for applicability determinations, such as fuel types, contents or sizes of tanks, etc. This information is part of the factual basis of the permit.

Each of the permitted sources has previously been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. These permits are issued in accordance with state law and the District's regulations. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-403.

There are no differences between the equipment list in the permit and the equipment list in the original Title V permit application.

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. If a generally applicable requirement applies specifically to a source that is permitted or significant, the standard will also appear in Section IV and the monitoring for that requirement will appear in Section VII of the permit. Parts of this section apply to all facilities (e.g., particulate, architectural coating, odorous substance, and sandblasting standards). In addition, standards that apply to insignificant or unpermitted sources at a facility (e.g., refrigeration units that use more than 50 pounds of an ozone-depleting compound) are placed in this section.

Unpermitted sources are exempt from normal District permits pursuant to an exemption in BAAQMD Regulation 2, Rule 1. They may, however, be specifically described in a Title V permit if they are considered a significant source pursuant to the definition in BAAQMD Rule 2-6-239.

IV. Source-Specific Applicable Requirements

This section of the permit lists the applicable requirements that apply to permitted or significant sources. These applicable requirements are contained in tables that pertain to one or more sources that have the same requirements. The order of the requirements is:

- District Rules
- SIP Rules (if any) listed following the corresponding District Rules. SIP rules are District rules that have been approved by EPA into the California State Implementation Plan. SIP rules are “federally enforceable” and a “Y” (yes) indication will appear in the “Federally Enforceable” column. If the SIP rule is the current District rule, separate citation of the SIP rule is not necessary and the “Federally Enforceable” column will have a “Y” for “yes”. If the SIP rule is not the current District rule, the SIP rule or the necessary portions of the SIP rule are cited separately after the District rule. The SIP portions will be federally enforceable; the non-SIP versions will not be federally enforceable, unless EPA has approved them through another program.
- Other District requirements, such as the Manual of Procedures, as appropriate.
- Federal Requirements (other than SIP provisions)
- BAAQMD permit conditions. The text of BAAQMD permit conditions is found in Section VI of the permit.
- Federal permit conditions. The text of Federal permit conditions, if any, is found in Section VI of the permit.

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

Acid Rain: In accordance with 40 CFR Part 72 – Permits Regulation, Subpart A, paragraph 72.6 (b) (4) (i), the facility is NOT an affected facility since it is a cogeneration facility which produces less than

219,000 MW-hrs actual electric output on an annual basis for sale (on a gross basis) to any utility power distribution system.

40 CFR 60, Subparts D and Da: In accordance with 40 CFR Part 60 – Standards of Performance for New Stationary Sources, Subpart D, paragraph 60.40 (a) (1) and Subpart Da, paragraph 60.40a (a) (1), the facility is NOT an affected facility. The US EPA has made a determination that petroleum coke is not a fossil fuel. (reference: February 4, 1983 memorandum, subject: KPL Applicability Determination, from Director, Stationary Source Compliance Division, Office of Air Quality Planning & Standards, to Carl M. Walter, Chief, Air Branch, Region VII) Approximately 180 million Btu per hour of natural gas total can be fired in the two kilns so the fossil fuel heat input is below the 73 megawatts (250 million Btu per hour) threshold for an affected facility.

BAAQMD Regulation 1-520, Subsection 520.1: This subsection does not apply (NOX, oxygen, and opacity CEM requirement) since the heat input to each waste heat recovery boiler is less than 250 MMBTU/hr.

BAAQMD Regulation 6-310 and 6-310.3: S1 and S2, Calciners, are subject to the general grain loading limitation in 6-310. The exhaust gases are then routed to an incinerator and a heat recovery steam generator. The heat recovery steam generator is subject to 6-310.3. Either standard can be the most stringent depending on the oxygen content of the exhaust gases. The exhaust gases are subject to both standards in accordance with BAAQMD Regulation 1-107, which states: “Where air contaminants from two or more sources are combined prior to emission and there are no adequate and reliable means to establish the nature, extent and quantity of emission from each source, District Regulations shall be applied to the combined emission as if it originated in a single source. Such emissions shall be subject to the most stringent limitations and requirements of District Regulations applicable to any of the sources whose air contaminants are so combined.”

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 only contains elements 2-6-409.10.1 and 2-6-409.10.2.

The BAAQMD Compliance and Enforcement Division has conducted a review of compliance over the past year and has no records of compliance problems at this facility. The compliance report is contained in Appendix A of this permit evaluation and statement of basis.

VI. Permit Conditions

During the Title V permit development, the District has reviewed the existing permit conditions, deleted the obsolete conditions, and as appropriate, revised the conditions for clarity and enforceability. Each permit condition is identified with a unique numerical identifier, up to five digits.

Where necessary to meet Title V requirements, additional monitoring, recordkeeping, or reporting has been added to the permit.

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; all “underline” language will be retained.

The existing permit conditions are generally derived from previously issued District Authorities to Construct (A/C) or Permits to Operate (P/O). It is also possible for permit conditions to be imposed or revised as part of the annual review of the facility by the District pursuant to California Health and Safety Code (H&SC) § 42301(e), through a variance pursuant to H&SC § 42350 *et seq.*, an order of abatement pursuant to H&SC § 42450 *et seq.*, or as an administrative revision initiated by District staff. After issuance of the Title V permit, permit conditions will be revised using the procedures in Regulation 2, Rule 6, Major Facility Review.

For sources without existing throughput limits, emissions have been calculated based on the capacity of the equipment. In order to ensure that emissions will not increase as a result of a replacement or modification that increases the capacity of a permitted source without a proper preconstruction permit review, conditions have been added to limit the annual throughput of each source of the Title V permit.

Conditions that are obsolete or that have no regulatory basis have been deleted from this permit. The regulatory basis has been referenced following each condition. The regulatory basis may be a rule or regulation. The District is also using the following codes for regulatory basis:

- BACT: This code is used for a condition imposed by the APCO to ensure compliance with the Best Available Control Technology in Regulation 2-2-301.
- Cumulative Increase: This code 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 code 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 code is used for a condition imposed by the APCO to ensure compliance with a Prevention of Significant Deterioration permit pursuant to Regulation 2, Rule 2.
- **TRMP:** This code is used for a condition imposed by the APCO to ensure compliance with limits that arise from the District’s Toxic Risk Management Policy.

Abatement device operating parameter monitoring has been added for the baghouses. The pyroscrubbers are upstream of the baghouses and additional monitoring has not been added for the pyroscrubbers. (The pyroscrubbers and the baghouses are used to control particulate. The pyroscrubbers complete the combustion of particles. The baghouses remove remaining particulate from the gas stream by filtration.)

Substantial changes have been made to Condition 136. The APCO recently required CEMs so the condition no longer reflects a coke analysis plus coke sulfur limit option in lieu of installing CEMs. A ground level monitor (GLM) system condition has been removed since a GLM system is required by Regulation 9, Rule 1 and does not have to be repeated in Condition 136. Additional monitoring includes pressure drop monitoring and an annual source test to help ensure that the annual filterable particulate emissions do not exceed 175 tons per year per kiln.

VII. Applicable Limits and Compliance Monitoring Requirements

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

Under Title V, the District has the authority to impose additional monitoring where: (1) the existing applicable requirement does not require monitoring AND (2) monitoring is necessary to ensure compliance with such applicable requirement.

The tables below show the limits, which, prior to incorporation in the Title V permit, lack periodic monitoring requirements. Additional monitoring, if any, imposed pursuant to Title V is shown in the last column. The basis for the monitoring decision is present in the discussion following each table. Applicable limits not shown in the following tables have adequate monitoring, and so no additional monitoring is being proposed in the Title V permit.

NOX and CO Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
	No NOx or CO limits		

NOx and CO Discussion:

Since no NOX or CO limits apply to the facility, there is no monitoring for NOX or CO.

SO₂ Sources

S# & Description	Fed. Enf. Emission Limit Citation	Federally Enforceable Emission Limit	Potential to Emit: tpy	Monitoring
S-1 K-1 Coke Calcine Kiln/Cooler, Natural gas fired, 60 MMBTU/HR	BAAQMD 9-1-301	Ground level concentrations shall not exceed: 0.5 ppm for 3 consecutive minutes AND 0.25 ppm averaged over 60 consecutive minutes AND 0.05 ppm averaged over 24 hours	1,091 (based on 113 kg/hr x 8760 hrs/yr)	Continuous/Existing
S-1 K-1 Coke Calcine Kiln/Cooler, Natural gas fired, 60 MMBTU/HR	BAAQMD 9-1-310.2	400 ppm by volume	1,091 (based on 113 kg/hr x 8760 hrs/yr)	Continuous/Existing
	BAAQMD 9-1-310.2	113 kg per hour	1,091 (based on 113 kg/hr x 8760 hrs/yr)	Continuous/Existing
S-2, K-2 Coke Calcine Kiln/Cooler, Natural gas fired, 60 MMBTU/HR	BAAQMD 9-1-301	Ground level concentrations shall not exceed: 0.5 ppm for 3 consecutive minutes AND 0.25 ppm averaged over 60 consecutive minutes AND 0.05 ppm averaged over 24 hours	1,091 (based on 113 kg/hr x 8760 hrs/yr)	Continuous/existing
	BAAQMD 9-1-310.2	400 ppm by volume	1,091 (based on 113 kg/hr x 8760 hrs/yr)	Continuous/Existing
	BAAQMD 9-1-310.2	113 kg per hour	1,091 (based on 113 kg/hr x 8760 hrs/yr)	Continuous/Existing

SO2 Discussion:

The potential to emit calculation for kiln SO₂ assumes emissions occur at the limit allowed by Regulation 9, Rule 1, Section 310.2 of 113 kilograms per hour for 8,760 hours per year.

BAAQMD Regulation 9, Rule 1:

This facility uses area monitoring to determine compliance with BAAQMD Regulation 9-1-301. Compliance with 9-1-310.2 is determined by continuous emission monitors.

Particulate Sources

S# & Description	Fed. Enf. Emission Limit Citation	Federally Enforceable Emission Limit	Potential to Emit: tpy	Monitoring
S-1 K-1 Coke Calcine Kiln/Cooler, Natural gas fired, 60 MMBTU/HR	BAAQMD 6-301	Ringelmann 1.0 for < 3 minutes/hr	175 (based on 18.1 kg/hr x 8760 hrs/yr)	Quarterly visible emission monitoring; weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-310	0.15 gr/dscf	175 (based on 18.1 kg/hr x 8760 hrs/yr)	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-310	0.15 gr/dscf	175 (based on 18.1 kg/hr x 8760 hrs/yr)	Annual source test for FP/Proposed
	BAAQMD 6-310.3	0.15 gr/dscf @ 6% oxygen by volume	175 (based on 18.1 kg/hr x 8760 hrs/yr)	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-310.3	0.15 gr/dscf @ 6% oxygen by volume	175 (based on 18.1 kg/hr x 8760 hrs/yr)	Annual source test for FP/Proposed
	BAAQMD 6-311	4.10P ^{0.67} lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr	175 (based on 18.1 kg/hr x 8760 hrs/yr)	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
	<u>BAAQMD 6-311</u>	4.10P ^{0.67} lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr	175 (based on 18.1 kg/hr x 8760 hrs/yr)	Annual source test for FP/Proposed

Particulate Sources

S# & Description	Fed. Enf. Emission Limit Citation	Federally Enforceable Emission Limit	Potential to Emit: tpy	Monitoring
S-2, K-2 Coke Calcine Kiln/Cooler, Natural gas fired, 60 MMBTU/HR	BAAQMD 6-301	Ringelmann 1.0 for < 3 minutes/hr	175 (based on 18.1 kg/hr x 8760 hrs/yr)	Quarterly visible emission monitoring; weekly pressure drop monitoring; annual baghouse inspection /Proposed
S-2, K-2 Coke Calcine Kiln/Cooler, Natural gas fired, 60 MMBTU/HR	BAAQMD 6-310	0.15 gr/dscf	175 (based on 18.1 kg/hr x 8760 hrs/yr)	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-310	0.15 gr/dscf	175 (based on 18.1 kg/hr x 8760 hrs/yr)	Annual source test for FP/Proposed
	BAAQMD 6-310.3	0.15 gr/dscf @ 6% oxygen by volume	175 (based on 18.1 kg/hr x 8760 hrs/yr)	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-310.3	0.15 gr/dscf @ 6% oxygen by volume	175 (based on 18.1 kg/hr x 8760 hrs/yr)	Annual source test for FP/Proposed
	BAAQMD 6-311	4.10P ^{0.67} lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr	175 (based on 18.1 kg/hr x 8760 hrs/yr)	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-311	4.10P ^{0.67} lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr	175 (based on 18.1 kg/hr x 8760 hrs/yr)	Annual source test for FP/Proposed
S-5 Nine (9) Coke Storage Bins with two Product Elevators, Two B-9 Feed Screws, and Two Discharge Conveyors	BAAQMD 6-301	Ringelmann 1.0 for < 3 minutes/hr	Calculation not required	Quarterly visible emission monitoring; weekly pressure drop monitoring; annual baghouse inspection /Proposed

Particulate Sources

S# & Description	Fed. Enf. Emission Limit Citation	Federally Enforceable Emission Limit	Potential to Emit: tpy	Monitoring
S-5 Nine (9) Coke Storage Bins with two Product Elevators, Two B-9 Feed Screws, and Two Discharge Conveyors	BAAQMD 6-310	0.15 gr/dscf	Calculation not required	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-311	4.10P ^{0.67} lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr	Calculation not required	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
S-6 Railcar and Truck Coke Loading Spout with Reclaim Hopper, Reclaim Conveyor, and Loading Conveyor	BAAQMD 6-301	Ringelmann 1.0 for < 3 minutes/hr	Calculation not required	Quarterly visible emission monitoring; weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-310	0.15 gr/dscf	Calculation not required	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-311	4.10P ^{0.67} lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr	Calculation not required	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
S-7 Stockpile fugitive emissions; Including All Transfer, Traffic, and Wind Erosion at Green and Calcined Stockpiles	BAAQMD 6-301	Ringelmann 1.0 for < 3 minutes/hr	Calculation not required	Quarterly visible emission monitoring
S-16 Rotary Cooler K1, Including Wet Coke Reclaim	BAAQMD 6-301	Ringelmann 1.0 for < 3 minutes/hr	Calculation not required	Quarterly visible emission monitoring; weekly pressure drop monitoring; annual baghouse inspection /Proposed

Particulate Sources

S# & Description	Fed. Enf. Emission Limit Citation	Federally Enforceable Emission Limit	Potential to Emit: tpy	Monitoring
	BAAQMD 6-310	0.15 gr/dscf	Calculation not required	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
S-16 Rotary Cooler K1, Including Wet Coke Reclaim	BAAQMD 6-311	4.10P ^{0.67} lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr	Calculation not required	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
S-17 Rotary Cooler K2; Including Wet Coke Reclaim	BAAQMD 6-301	Ringelmann 1.0 for < 3 minutes/hr	Calculation not required	Quarterly visible emission monitoring; weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-310	0.15 gr/dscf	Calculation not required	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-311	4.10P ^{0.67} lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr	Calculation not required	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
S-22 Product Building Crossover Conveyor	BAAQMD 6-301	Ringelmann 1.0 for < 3 minutes/hr	Calculation not required	Quarterly visible emission monitoring; weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-310	0.15 gr/dscf	Calculation not required	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-311	4.10P ^{0.67} lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr	Calculation not required	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
S-23 Portable Conveyor	BAAQMD 6-301	Ringelmann 1.0 for < 3 minutes/hr	Calculation not required	Quarterly visible emission monitoring/Proposed
S-26 K-1 Product Screw Conveyor	BAAQMD 6-301	Ringelmann 1.0 for < 3 minutes/hr	Calculation not required	Quarterly visible emission monitoring; weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-310	0.15 gr/dscf	Calculation not required	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-311	4.10P ^{0.67} lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr	Calculation not required	Weekly pressure drop monitoring; annual baghouse inspection /Proposed

Particulate Sources

S# & Description	Fed. Enf. Emission Limit Citation	Federally Enforceable Emission Limit	Potential to Emit: tpy	Monitoring
S-27 K-2 Product Screw Conveyor	BAAQMD 6-301	Ringelmann 1.0 for < 3 minutes/hr	Calculation not required	Quarterly visible emission monitoring; weekly pressure drop monitoring; annual baghouse inspection /Proposed
	BAAQMD 6-310	0.15 gr/dscf	Calculation not required	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
S-27 K-2 Product Screw Conveyor	BAAQMD 6-311	4.10P ^{0.67} lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr	Calculation not required	Weekly pressure drop monitoring; annual baghouse inspection /Proposed
S-30 Portable Conveyor	BAAQMD 6-301	Ringelmann 1.0 for < 3 minutes/hr	Calculation not required	Quarterly visible emission monitoring/Proposed
S-31 Portable Conveyor	BAAQMD 6-301	Ringelmann 1.0 for < 3 minutes/hr	Calculation not required	Quarterly visible emission monitoring/Proposed

PM Discussion:

The potential to emit for particulate at the kiln assumes emissions occur at the limit allowed by Regulation 6, Section 311 of 18.1 kilograms per hour for 8,760 hours per year.

Monitoring was added for most particulate sources in accordance with the CAPCOA/ARB/EPA document “Periodic Monitoring Recommendations For Generally Applicable Requirements in SIP.” The potential to emit has not been calculated for these sources.

An annual source test for filterable particulate was added for each coke calciner kiln due to the potential to emit 175 tons per year of filterable particulate.

POC Sources

S# & Description	Fed. Enf. Emission Limit Citation	Federally Enforceable Emission Limit	Potential to Emit: tpy	Monitoring
------------------	-----------------------------------	--------------------------------------	------------------------	------------

S# & Description	Fed. Enf. Emission Limit Citation	Federally Enforceable Emission Limit	Potential to Emit: tpy	Monitoring
S-24 Non Retail Gasoline Dispensing Facility, One Nozzle (GDF #6050)	BAAQMD 8-7-301.2	95% (wt) organic vapor recovery efficiency	0.33	Not recommended.
	BAAQMD 8-7-301.6	Leak-free and vapor tight	0.33	Annual leak test/Proposed
	BAAQMD Condition #8749, Part 1	60,000 gallons per year annual throughput	0.33	Monthly record keeping/proposed

POC Discussion:

An annual static pressure performance test was added for the gasoline storage tank. Since the potential to emit is so low, no further monitoring for the 8-7-301.2 limit is necessary.

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 VI 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 that identifies and justifies specific federally enforceable regulations and standards which the APCO has confirmed are not applicable to a source or group of sources, or (2) A provision in a major facility review permit that identifies and justifies specific federally enforceable applicable requirements for monitoring, recordkeeping and/or reporting which 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. Therefore, this permit has no streamlining.

D. Alternate Operating Scenarios:

No alternate operating scenario has been requested for this facility.

E. Compliance Status:

A March 11, 2002 office memorandum the Director of Compliance and Enforcement to the Director of Permit Services presents a review of the compliance record of Tosco Carbon Plant, Facility A0022. The Compliance and Enforcement Division staff has reviewed the records for the period between March 1, 2001 through March 1, 2002. This review was initiated as part of the District evaluation of the application. During the period subject to review,

- There were no Notices of Violation issued.
- The District did not receive any complaints.
- The facility is not operating under a Variance or an Order of Abatement from the District Board.
- There were no monitor excesses or equipment breakdowns reported or documented by District staff.

The Director of Compliance and Enforcement has concluded that on-going compliance can be reasonably assured for this facility.

The owner certified that all equipment was operating in compliance on August 10, 1999. No non-compliance issues have been identified to date.

F. Differences between the Application and the Proposed Permit:

The permit holder has voluntarily terminated the use of diesel as a fuel for S-2 during a natural gas curtailment.

Throughput limits were added to every source without a previous limit based upon previously processed permit applications or demonstrated coke throughput or fuel usage.

Changes have been made to the conditions to improve monitoring.

In addition to the above, substantial changes have been made to Condition 136. The APCO recently required CEMs so the condition no longer reflects a coke analysis plus coke sulfur limit option in lieu of installing CEMs. A ground level monitor (GLM) system condition has been removed since a GLM system is required by Regulation 9, Rule 1 and does not have to be repeated in Condition 136. Additional monitoring includes an annual source test to help ensure that the annual filterable particulate emissions do not exceed 175 tons per year per kiln.

Throughput limits (identified by a basis of Regulation 2-1-234.3) have been added to all sources with no existing throughput or emission limits.

APPENDIX A
BAAQMD COMPLIANCE REPORT

APPENDIX B
GLOSSARY

ACT

Federal Clean Air Act

APCO

Air Pollution Control Officer: Head of Bay Area Air Quality Management District

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). 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.

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.

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)

NO_x

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, NO_x, 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.

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 ²	=	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