Bay Area Air Quality Management District

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Permit Evaluation and Statement of Basis for Significant Revision, Minor Revisions, and Renewal of

MAJOR FACILITY REVIEW PERMIT

for ConocoPhillips Carbon Plant Facility #A0022

> Facility Address: 2101 Franklin Canyon Road Rodeo, CA 94572

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> > February 2012

Application Engineer: Brian Lusher Site Engineer: Brenda Cabral

Applications: 15619 Renewal, 8389 Significant Revision

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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 Title 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 regulated air pollutants, NOx and SO2, and more than 10 tons per year of a hazardous air pollutant, hydrogen chloride.

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 A0022.

This facility received its initial Title V permit on July 31, 2002. The permit was modified under Application No. 17331 a significant revision to the permit. This revision incorporated permit conditions that were imposed on the facility so that the facility could obtain SO2 offsets and "CEQA" PM10 offsets for the Clean Fuel Expansion Project (CFEP) at the ConocoPhillips Refinery, Facility A0016, which includes a hydrogen plant, Facility 17419.

This application is for a renewal of the Title V permit and to process numerous revisions to the Title V permit submitted under Application No. 8389. This statement of basis contains the basis for the Title V permit.

Changes to the permit due to Application No. 8389

The purpose of this significant permit revision is to primarily change permit conditions that have been revised under applications 8389 and 11396. The only hardware change was made under new source review application 11396 where an underground gasoline storage tank was retrofitted with a required Enhanced Vapor Return Phase I upgrade. There are several other changes. The proposed changes include the following:

- Change description of A-41 K-1 Sodium Carbonate Storage Silo *Baghouse* to A-41 K-1 Sodium Carbonate Storage Silo *Vent Filter*, change description of A-42 K-2 Sodium Carbonate Storage Silo *Baghouse* to A-42 K-2 Sodium Carbonate Storage Silo *Vent Filter*, and revise associated Condition #17820 to delete parts 8 and 9 for pressure drop monitoring, change visible emission monitoring in part 10 from quarterly to annually, and replace baghouse inspection in part 11 with a corrective action requirement and a maintenance log requirement. Because this is a reduction in monitoring, it is a significant revision. However, these changes comply with the "June 24, 1999 Summary, Periodic Monitoring Recommendations For Generally Applicable Requirements in SIP," (reference: <u>http://www.arb.ca.gov/fcaa/tv/tvinfo/pmrec624.pdf</u> and <u>http://www.arb.ca.gov/fcaa/tv/tvinfo/pmrec624.doc</u>) Subpart I.G.2.a. for Vent Filters for Receiving Silos. Revise Tables IIB, IV-J, and VII-J to reflect these changes.
- Addition of allowable pressure drop ranges, which were provided by Permit Holder, to Table IIB for all baghouses and to Permit Conditions #136, Part 8; #10438, Part 4; #10439, Part 4; #17539, Part 3 to replace the part of a condition that stated, "Within 3 months of final issuance of the Major Facility Review permit, the permit holder shall install a District approved manometer or other District-approved device which measures the pressure drop across each baghouse. Within 6 months of final issuance of the Major Facility Review permit, the permit holder shall determine the proper pressure drop range for each baghouse. These ranges shall be submitted to the Permit Division of the District for inclusion in the permit as an administrative permit amendment."
- Revisions associated with S-25 Non Retail Gasoline Dispensing Facility (GDF #6050) to show that current Regulation 8, Rule 7, Gasoline Dispensing Facilities, amended 11/6/02 is the federally enforceable rule, that the storage tank is an underground tank rather than an above ground tank, test method for leakage should be for an underground tank with EVR Phase I rather than an above ground tank, deletion of permit conditions 701 and 17571 and addition of permit condition 20666, which applies to Enhanced Vapor Recovery Phase I upgrade. Tables IV-H and VII-H revised accordingly
- Correct Permit Condition #136, Part 12b to apply limits to S2 and A2 rather than S1 and A1, which are already limited by Part 12a
- Correct Permit Condition #3752, Part 3, where *fuel gas* should have been referred to as *natural gas*.
- Correction of an omission in Condition #17539, part 2, where the following is being reinserted after being inadvertently deleted, "A-3 baghouse may be disconnected for routine maintenance while S-6 is operating provided that S-6 is abated by the A-4 baghouse" and add S-6 to sources abated by A-4 in Table IIB
- Correct calcined coke throughput limit in Tables VII-A and VII-B to agree with limits in Permit Condition #136, Parts 12a and 12b, respectively
- Change Table VIII to replace the above ground storage tank test method with a test method for an underground storage tank plus a CARB test procedure
- Add CARB test procedures to Table VIII for enhanced vapor recovery Phase I
- Correct description of one of the sources for Permit Condition #10439 in Section VI from S-17 Rotary Cooler K1 to S-17 Rotary Cooler K-2

B. Facility Description

The ConocoPhillips Carbon Plant 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.

The emissions from the facility have varied with the amount of coke processed per year. The actual emissions summaries submitted by the plant for 1999, for 2006, and for 2011 are shown below.

Year	NOx (tons/year)	CO (tons/year)	POC (tons/year)	PM10 (tons/year)	SOx (tons/year)
1999	576	10.7	<1.0	61.5	1535
2006	533	3.8	<1.0	63.5	1212
2011	507	4.1	0.2	37.2	1151

C. Permit Content

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

I. Standard Conditions

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

Changes to permit

Effective dates will be updated for Regulations identified in Standard Condition A Administrative Requirements and will add BAAQMD Regulation 2, Rule 5 and Regulation 2, Rule 6 to this section..

Standard language will be added and the basis will be updated for Standard Condition B.1. The basis of Standard Condition B.11 will be added. Standard Condition B.12 will be added to the permit.

Regulation 3 will be removed as a basis for Standard Condition E.2 and F.

Standard Condition G was revised as shown in the draft permit.

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 whose primary function is to reduce emissions is identified by an A and a number (e.g., A24).

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 the permitted sources table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-403.

Changes to permit:

Table II B-Abatement Devices will be changed as shown in the draft permit to make the following changes.

The following pressure drop ranges were provided by the permit holder and are proposed to be added as an operating parameter:

<u>A#</u> <u>Pressure drop range in inches of water</u>

A-3	1 to 5.5
A-4	0.5 to 5
A-10	1.0 to 10
A-11	1.0 to 10

The description of A-41 K-1 Sodium Carbonate Storage Silo Baghouse is proposed to be changed to A-41 K-1 Sodium Carbonate Storage Silo Vent Filter and the operating parameters removed (no pressure drop monitoring). Because this is a reduction in monitoring, it is a significant revision. However, these changes comply with the "June 24, 1999 Summary, Periodic Monitoring Recommendations For Generally Applicable Requirements in SIP," (reference: <u>http://www.arb.ca.gov/fcaa/tv/tvinfo/pmrec624.pdf</u> and

http://www.arb.ca.gov/fcaa/tv/tvinfo/pmrec624.doc) Subpart I.G.2.a. for Vent Filters for Receiving Silos.

The description of A-42 K-2 Sodium Carbonate Storage Silo Baghouse is proposed to be changed to A-42 K-2 Sodium Carbonate Storage Silo Vent Filter and the operating parameters removed (no pressure drop monitoring). Because this is a reduction in monitoring, it is a significant revision. However, these changes comply with the "June 24, 1999 Summary, Periodic Monitoring Recommendations For Generally Applicable Requirements in SIP," (reference: <u>http://www.arb.ca.gov/fcaa/tv/tvinfo/pmrec624.pdf</u> and <u>http://www.arb.ca.gov/fcaa/tv/tvinfo/pmrec624.doc</u>) Subpart I.G.2.a. for Vent Filters for Receiving Silos.

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 Sections IV and 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 significant sources pursuant to the definition in BAAQMD Rule 2-6-239.

Changes to permit

The following standard text was changed as follows:

1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board<u>of Directors</u>

The dates of the regulations contained in Table III were updated as necessary in the draft permit.

Table III will be revised to include the following regulations as shown in the Table below.

Regulation	Action
SIP Regulation 2-1-429	Added to Table III
BAAQMD Regulation 2, Rule 5	Added to Table III
BAAQMD Regulation 6, Rule 1	Added to Table III
SIP Regulation 6	Added to Table III
SIP Regulation 8, Rule 3	Added to Table III
SIP Regulation 8, Rule 51	Added to Table III
California Health and Safety Code Section	Added to Table III

Regulation	Action
41750 requirements for Portable Equipment	
California Health and Safety Code Section	Added to Table III
44300 requirements for Air Toxics Hot Spots	
Air Toxics Control Measure for Stationary	Added to Table III
Diesel Engines	
Air Toxics Control Measure for Portable	Added to Table III
Diesel Engines	
Mandatory Greenhouse Gas Reporting for the	Added to Table III
State of California	
40 CFR Part 61, Subpart M (National Emission	Added to Table III
Standard for Asbestos)	
40 CFR Part 98 Mandatory Greenhouse Gas	Added to Table III
Reporting for the federal government	

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) are listed following the corresponding District rules. SIP rules are District rules that have been approved by EPA for inclusion in 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 portion of the SIP rule is cited separately after the District rule. The SIP portion will be federally enforceable; the non-SIP version will not be federally enforceable, unless EPA has approved it 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. All monitoring requirements are cited in Section IV. Section VII is a cross-reference between the limits and monitoring requirements. A discussion of monitoring is included in Section C.VII of this permit evaluation/statement of basis.

The applicability of many requirements is discussed in the Engineering Evaluation for Application 13424. This statement of basis will only address items that are not addressed in the Engineering Evaluation.

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.

40 CFR Part 64, Compliance Assurance Monitoring (CAM): S-1 and S-2, Calciners, are subject to 40 CFR 64, Compliance Assurance Monitoring (CAM) because they meet the criteria in Section 64.2(a). They use the pyroscrubbers, A-1 and A-2, the baghouses, A-10 and A-11, and the dry sorbent injection systems, A-14 and A-15, for compliance with the federally enforceable SO2 limits in BAAQMD Regulation 9-1-310.2 and the federally enforceable filterable particulate limits in BAAQMD Regulations 6-310, 6-310.3, and 6-311. The annual SO2 limit in Condition #136, Part 5, is also a federally enforceable limit. The PM10 limit in Condition #136, part 10, is not federally enforceable. The emissions of both SO2 and filterable particulate are more than 100 tons per year before abatement. The SO2 emissions are also more than 100 tons per year after abatement.

An analysis of the CAM requirements was included in the Statement of Basis for Application 17331, which was issued on June 18, 2009. The analysis is summarized below.

ConocoPhillips will comply with CAM for the SO2 limits because Section 64.3(d) allows the use of existing CEMs for compliance and Section 64.4(b)(2) acknowledges that CEMs are "presumptively acceptable."

However, the existing monitoring for particulate consists of weekly pressure drop measurements, quarterly visible emissions monitoring, and annual source tests was not adequate to comply with CAM requirements.

Therefore, the facility proposed daily visible emissions monitoring in addition to the existing weekly pressure drop monitoring and the annual baghouse inspection. An annual source test for PM10 was also required to ensure compliance with the annual PM10 limit. Where there is no

direct measurement, the facility must use an "indicator" to determine that the control device is operating properly. The facility proposed that the indicator would be any visible emissions, which would be considered to be an excursion pursuant to Section 64.6(c)(2). The visible emissions monitoring is performed using EPA Method 22, which is more appropriate to determine whether there are any visible emissions, instead of the BAAQMD Method, "Evaluation of Visible Emissions." The BAAQMD method is appropriate for determining the opacity of the emissions.

The end of Section 64.3(a) states that: "In addition, unless specifically stated otherwise by an applicable requirement, the owner or operator shall monitor indicators to detect any bypass of the control device (or capture system) to the atmosphere, if such bypass can occur based on the design of the pollutant-specific emissions unit." Each kiln has a bypass stack prior to the pyroscrubbers.

ConocoPhillips will determine whether the bypass is in use by using the CEM to note changes in concentration and flow through the main stack. This monitoring was added in Condition 136, part 3d.

Section 64.3(b)(4)(ii) requires that for sources where the emissions after control are more than 100 tons per year of the controlled regulated air pollutant, the monitoring method must collect four or more data points per hour and average the values. The SO2 emissions after control are more than 100 tons per year, therefore this requirement will be added as Condition #136, part 3c.

The facility uses the quality assurance procedures in the BAAQMD Manual of Procedures, Volume V, Continuous Emission Monitoring Policy and Procedures, for the SO2 CEM, so it will comply the requirement for quality assurance procedures in Section 64.3(b)(3).

40 CFR 60, Subpart J, Standards of Performance for Petroleum Refineries: This subpart applies to fluid catalytic cracking unit catalyst regenerators, fuel gas combustion devices and Claus sulfur recovery plants. Since the facility does not have any "affected sources," as defined in Subpart J, the facility is not subject to this subpart.

40 CFR **60**, Subpart K, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June **11**, **1973**, and Prior to May **19**, **1978**: The applicability for this standard is not affected by the facility's association with a petroleum refinery. The facility has no tanks that are subject to 40 CFR **60**, Subpart K.

40 CFR 60, Subpart Ka, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984: The applicability for this standard is not affected by the facility's association with a petroleum refinery. The facility has no tanks that are subject to 40 CFR 60, Subpart Ka.

40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction,

Reconstruction, or Modification Commenced after July 23, 1984: The applicability for this standard is not affected by the facility's association with a petroleum refinery. The facility has no tanks that are subject to 40 CFR 60, Subpart Kb.

40 CFR 60, Subpart QQQ, Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems: Although the facility is associated with a refinery, the facility itself is not a petroleum refinery and does not contain any "affected facilities located in petroleum refineries" as defined in Subpart QQQ, and therefore, it is not subject to 40 CFR 60, Subpart QQQ.

40 CFR 61, Subpart FF, National Emission Standard for Benzene Waste Operations: This standard applies to hazardous waste treatment, storage, and disposal facilities that treat, store, or dispose of hazardous waste generated by chemical manufacturing plants, coke by-product recovery plants, and petroleum refineries. The waste streams subject to the provisions of this subpart are any streams containing benzene-containing hazardous waste. Tosco Refining does not produce benzene-containing hazardous waste, and therefore, is not subject to 40 CFR 61, Subpart FF.

Refinery MACT, 40 CFR 63, Subpart CC, National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries: Although the facility is associated with a refinery, the facility itself is not a petroleum refinery, and therefore, it is not subject to 40 CFR 63, Subpart CC. Moreover, the facility does not have petroleum refining process units as defined in 40 CFR 63.641, and does not have any related emission points listed in 40 CFR 63.640, paragraphs (c)(1) through (c)(7).

Refinery MACT, 40 CFR 63, Subpart UUU, National Emission Standards for Hazardous Air Pollutants For Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units: Although the facility is associated with a refinery, the facility itself is not a petroleum refinery, and therefore, it is not subject to 40 CFR 63, Subpart UUU. Moreover, the facility does not have any catalytic cracking units, catalytic reforming units, or sulfur recovery units.

40 CFR 82, Ozone Depleting Compounds: The facility is subject to this standard due to its association with the refinery. Although it does not store or use 50 pounds of refrigerant, the refinery does. The Title VI requirements are included Section III of the Title V permit for the carbon plant.

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. The rated heat duty of each Zurn Industries waste heat boiler is 23.4 MMBtu/hour with a design load of 117,865 lb steam per hour.

BAAQMD Regulation 6-1-310 and 6-1-310.3: S1 and S2, Calciners, are subject to the general grain loading limitation in 6-1-310. The exhaust gases are then routed to an incinerator and a heat recovery steam generator. The heat recovery steam generator is subject to 6-1-310.3. 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."

BAAQMD Regulation 7: Regulation 7 is included in Section III, Generally Applicable Requirements, but is not triggered until the APCO receives odor complaints from ten or more complainants within a 90-day period. The applicability for this standard is not affected by the facility's association with a petroleum refinery.

BAAQMD Regulation 8, Rule 1, Organic Compounds, General Provisions: Regulation 8, Rule 1 is included in Section III, Generally Applicable Requirements. The applicability for this standard is not affected by the facility's association with a petroleum refinery.

BAAQMD Regulation 8, Rule 5, Organic Compounds, Storage of Organic Liquids: The facility is not subject to Regulation 8, Rule 5 because it has no tanks that contain organic liquids with a vapor pressure over 0.5 psia except for the tanks at the gasoline dispensing facility, S-24, which is subject to Regulation 8, Rule 7, Organic Compounds, Gasoline Dispensing Facilities. The applicability for this standard is not affected by the facility's association with a petroleum refinery.

BAAQMD Regulation 8, Rule 8, Organic Compounds, Wastewater (Oil-Water) Separators: The facility is not subject to Regulation 8, Rule 8 because it has no oil-water separators. The applicability for this standard is not affected by the facility's association with a petroleum refinery.

BAAQMD Regulation 8, Rule 18, Organic Compounds: The facility is not subject to Regulation 8, Rule 18 because it does not handle organic gases or liquids and therefore has no equipment that could have leaks of organic compounds.

BAAQMD Regulation 8, Rule 28, Organic Compounds: The facility is not subject to Regulation 8, Rule 28 because it does not handle gaseous organic compounds, does not have pressure relief valves, and is not a petroleum refinery, although it is associated with a petroleum refinery.

BAAQMD Regulation 9, Rule 1: Regulation 9-1 does apply to the carbon plant. The facility meets the conditional exemption for area monitoring under 9-1-110. The facility operates an area monitor meeting the requirements contained in 9-1-110.1 and 110.2. Therefore, the facility is exempt from the concentration limit in 9-1-302.

The facility must comply with the concentration limits contained in 9-1-301. The facility is also subject to 9-1-310.2 which limits SO_2 emissions from coke calcining kilns to 400 ppm by

volume or 250 pound per hour. Section 9-1-310.3 requires facilities subject to 9-1-310.1 or 310.2 to comply with the requirements contained in 9-1-110.1 and 110.2.

BAAQMD Regulation 9, Rule 10: Regulation 9-10 does not apply to the carbon plant. Regulation 9-10 requires that NOx emissions from refinery boilers, steam generators, and process heaters, on a refinery-wide basis, must be below 0.033 pounds NOx per million BTU of heat input. The District has determined that none of the combustion devices at ConocoPhillips Carbon are boilers, steam generators, or process heaters. As a result, they are not included in the refinery-wide average for determination of compliance.

Other Changes to permit

Table IV-A and IV-B will have the effective date for each regulation updated as necessary. Table IV-B will have BAAQMD Regulation 6, Rule 1 requirements identified as not federally enforceable.

Tables IV-C, D, F, and G will have the following added to each table: BAAQMD Regulation 1, Section 523; SIP Regulation 1, Section 523; and BAAQMD Regulation 6, Rule 1 requirements. In addition, the effective date for each regulation will be updated as necessary.

Table IV-E will have BAAQMD Regulation 6, Rule 1 requirements added to the table and have the effective date for each regulation updated as necessary.

Table IV – H for S-24 Non Retail Gasoline Dispensing Facility (GDF #6050) is proposed to be revised to show that the current BAAQMD Regulation 8, Rule 7 is SIP approved, to delete BAAQMD Permit Conditions #701 and #17571 and add BAAQMD Permit Condition #20666.

Table IV-I will have BAAQMD Regulation 6, Rule 1 requirements added to the Table and have the effective date for each regulation updated as necessary. Regulation 9, Rule 8 citations will be added to Table IV-I. 40 CFR Part 63 Subpart A and Subpart ZZZZ citations will be added to Table IV-I. The Stationary Diesel Engine Air Toxics Control Measure citations will also be added to Table IV-I.

Table IV – J for S-41 K-1 Sodium Carbonate Storage Silo and S-42 K-2 Sodium Carbonate Storage Silo Non Retail Gasoline Dispensing Facility (GDF #6050) is proposed to be revised to delete Parts 8 and 9 of the applicable requirements for BAAQMD Condition #17820 associated with pressure drop monitoring, change baghouse to vent filter in Parts 6 and 11 and add a corrective action requirement and maintenance record requirement to Part 11.

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."

The District has determined that the facility has not demonstrated compliance with an applicable requirement. The schedule of compliance for this permit contains a plan pursuant to section 2-6-410.3 as shown below.

Changes to the Permit

1. Compliance with Airborne Toxic Control Measure for Stationary Compressions Ignition Engines contained in title 17, California Code of Regulations section 93115 (sections 93115 through 93115.15). This regulation applies to the two diesel engines in use at the facility (S-32, S-33).

Specifically 93115.7(b) In-Use Stationary Prime Diesel-Fueled CI Engine (>50 bhp) Emissions Standards

- a. ConocoPhillips performed emissions testing on two diesel engines (S-32, S-33) in 2006 and 2007 to demonstrate compliance with the ATCM for Stationary Compression Ignition Diesel Engines. The District Source Test Section completed a review of the source test data and the data does not demonstrate compliance with ATCM requirements contained in 93115.7(b). The two diesel engines in use at the facility (S-32, S-33) were required to demonstrate compliance with the ATCM by January 1, 2009 (See 93115.12).
- b. Compliance Milestones
- i) By April 1, 2012: The owner/operator of S-32 and S-33 will comply with one of the two options below.

Option 1: The owner/operator shall submit source test results that demonstrate compliance with the ATCM and follow the testing requirements contained in 93115.13 and 93115.14. The testing shall be performed in accordance with ISO 8178 procedures or at all engine operating conditions as approved by the APCO.

Option 2: Withdraw permit application 15563 and submit a new permit application documenting an alternative means for compliance with the ARB ATCM.

- c. Reporting
- i) The owner/operator of S-32 and S-33 shall submit progress reports along with the

monitoring reports on January 31st and July 31st of each year.

VI. Permit Conditions

The Major Facility Review permit contains conditions that are derived from previously issued District Authorities to Construct (A/C) or Permits to Operate (P/O). Permit conditions may also 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.

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

Each permit condition is identified with a unique numerical identifier, up to five digits.

All changes to existing permit conditions that are proposed in this action 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.

Changes to permit:

The following permit condition changes are proposed:

- BAAQMD Regulation 6, Particulate Matter, has been changed to Regulation 6, Particulate Matter, Rule 1, General Requirements. The citations of the rule will be changed throughout the permit.
- Condition 136, part 10, PM10 limit will be revised from 29.40 tons/year to 46.10 tons/year. The 29.40 tons/year limit was based on subtracting 8 tons/year (CEQA reduction) from a 37.4 ton/year baseline based on front half particulate test results. The District is revising the baseline to 54.10 tons/year to include condensable particulate matter. All future testing to demonstrate that ConocoPhillips has reduced emissions by 8 tons/year (CEQA reduction) at K-2 will be based on front half and condensable particulate results. This change will ensure that the 8 tons/year CEQA reduction is a permanent reduction in PM10 which includes front half and condensable particulate matter. Please see Appendix C for a detailed calculation of the revised baseline.
- Condition 136, part 13, will be reworded to ensure that daily records of visible particulate emissions collected using EPA Method 22 will be kept onsite for a minimum of five years. This is a minor revision to the permit.
- Condition 136, part 15b, limits were corrected to apply to S-2 and A-2. This is an administrative amendment to the permit.
- Conditions #10438, part 4; #10439, part 4; #17539, part 3: These parts were replaced with the pressure drop range provided by the permit holder. This is an administrative revision.

- Conditions #701, 17571 and 20666: Old Conditions #701 and 17571 were deleted and replaced with Condition #20666, which is a standard condition for a gasoline dispensing facility with an enhanced vapor recovery upgrade. This is a minor revision to the permit.
- Condition #3752, part 3: *Fuel gas* was replaced with *natural gas*. This is an administrative amendment.
- Condition #17539, part 2: A sentence in this part that was inadvertently dropped during the initial issuance of the Title V permit was reinserted. This is a minor revision.
- Condition #17820, parts 7 through 11: The terms "baghouses" in part 6 and "baghouse" in part 7 was changed to "vent filters" and "vent filter," respectively; parts 8 and 9 for pressure drop monitoring were deleted, visible emission monitoring in part 10 was changed from quarterly to annually, and baghouse inspection in part 11 was replaced with a corrective action requirement and a maintenance log requirement. These changes comply with the "June 24, 1999 Summary, Periodic Monitoring Recommendations For Generally Applicable Requirements in SIP," (reference: http://www.arb.ca.gov/fcaa/tv/tvinfo/pmrec624.pdf and http://www.arb.ca.gov/fcaa/tv/tvinfo/pmrec624.doc) Subpart I.G.2.a. for Vent Filters for Receiving Silos. This is a relaxation of monitoring and therefore is considered a

significant revision pursuant to Regulation 2-6-226.3.

• Conditions 10438, part 6; 10439, part 6; 17539, part 5; 17540, part 1; and 17820, part 10 have been reworded to require a District approved method for visible emissions monitoring. EPA method 9 has been added to these conditions as a District approved method for visible emissions monitoring. This is a minor revision to the permit.

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.

Changes to permit:

BAAQMD Regulation 6, Particulate Matter, has been changed to Regulation 6, Particulate Matter, Rule 1, General Requirements. The citations of the rule will be changed for the sources affected by this action and during the Major Facility Review permit renewal for the remaining sources.

The District has reviewed all monitoring and has revised Tables VII–H for S-24 Non Retail Gasoline Dispensing Facility (GDF #6050) VII-I for S-32 and S-33 Internal Combustion Engines, and VII-J for S-41 K-1 Sodium Carbonate Storage Silo and S-42 K-2 Sodium Carbonate Storage Silo.

Table VII–H for S-24 Non Retail Gasoline Dispensing Facility (GDF #6050): The lines referencing permit conditions #701 and 17571 were deleted since those conditions have been replaced. A new annual source test requirement for vapor tightness was added since it is now a

rule requirement. A new once every 3 years source test requirement for leaks was added as discussed in the attached NSR permit evaluation for application 11396.

Table VII-I for S-32 and S-33 Internal Combustion Engines: Table referenced BAAQMD Regulation 6, Section 311 process weight limit and this requirement does not apply to the engines. The citation for BAAQMD 6-311 will be deleted from Table VII-I.

Table VII–J for S-41 K-1 Sodium Carbonate Storage Silo and S-42 K-2 Sodium Carbonate Storage Silo: Pressure drop monitoring and annual baghouse inspection have been deleted for opacity and filterable particulate and visible emission monitoring has been relaxed to annually from quarterly as allowed by the "June 24, 1999 Summary, Periodic Monitoring Recommendations For Generally Applicable Requirements in SIP," (reference: http://www.arb.ca.gov/fcaa/tv/tvinfo/pmrec624.pdf and http://www.arb.ca.gov/fcaa/tv/tvinfo/pmrec624.pdf and http://www.arb.ca.gov/fcaa/tv/tvinfo/pmrec624.doc) Subpart I.G.2.a. for Vent Filters for Receiving Silos.

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

The tables below contain only the limits, the citation for the limits, and the existing or proposed monitoring. The District has examined the monitoring and has determined that monitoring is adequate to provide a reasonable assurance of compliance.

Monitoring decisions are typically the result of a balancing of several different factors including: 1) the likelihood of a violation given the characteristics of normal operation, 2) degree of variability in the operation and in the control device, if there is one, 3) the potential severity of impact of an undetected violation, 4) the technical feasibility and probative value of indicator monitoring, 5) the economic feasibility of indicator monitoring, and 6) whether there is some other factor, such as a different regulatory restriction applicable to the same operation, that also provides some assurance of compliance with the limit in question.

These factors are the same as those historically applied by the District in developing monitoring for applicable requirements. It follows that, although Title V calls for a re-examination of all monitoring, there is a presumption that these factors have been appropriately balanced and incorporated in the District's prior rule development and/or permit issuance. It is possible that, where a rule or permit requirement has historically had no monitoring associated with it, no monitoring may still be appropriate in the Title V permit if, for instance, there is little likelihood of a violation. Compliance behavior and associated costs of compliance are determined in part by the frequency and nature of associated monitoring requirements. As a result, the District will generally revise the nature or frequency of monitoring only when it can support a conclusion that existing monitoring is inadequate.

NOX and CO Sources

	Emission Limit	Federally Enforceable	
S# & Description	Citation	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.

S# &	Fed. Enf. Emission	Federally Enforceable	Potential to	Monitoring
Description	Limit Citation	Emission Limit	Emit: tpy	Ū.
S-1 K-1 Coke	BAAQMD 9-1-301	Ground level concentrations	1,091	Continuous/Existing
Calcine		shall not exceed: 0.5 ppm	(based on 113	C C
Kiln/Cooler,		for 3 consecutive minutes	kg/hr x 8760	
Natural gas		AND 0.25 ppm averaged	hrs/yr)	
fired, 60		over 60 consecutive minutes	-	
MMBTU/HR		AND 0.05 ppm averaged		
		over 24 hours		
S-1 K-1 Coke	BAAQMD 9-1-310.2	400 ppm by volume	1,091	Continuous/Existing
Calcine			(based on 113	
Kiln/Cooler,			kg/hr x 8760	
Natural gas			hrs/yr)	
fired, 60				
MMBTU/HR				
	BAAQMD 9-1-310.2	113 kg per hour	1,091	Continuous/Existing
			(based on 113	, c
			kg/hr x 8760	
			hrs/yr)	
S-2, K-2 Coke	BAAQMD 9-1-301	Ground level concentrations	749.32	Continuous/existing
Calcine		shall not exceed: 0.5 ppm	(based on	
Kiln/Cooler,		for 3 consecutive minutes	Condition 136,	
Natural gas		AND 0.25 ppm averaged	part 5)	
fired, 60		over 60 consecutive minutes	_	
MMBTU/HR		AND 0.05 ppm averaged		
		over 24 hours		
S-2, K-2 Coke	BAAQMD 9-1-310.2	400 ppm by volume	749.32	Continuous/Existing
Calcine			(based on	
Kiln/Cooler,			Condition 136,	
Natural gas			part 5)	
fired, 60				
MMBTU/HR				
	BAAQMD 9-1-310.2	113 kg per hour	749.32	Continuous/Existing
			(based on	C C
			Condition 136,	
			part 5)	

SO₂ Sources

SO₂ Sources

S# &	Fed. Enf. Emission	Federally Enforceable	Potential to	Monitoring
Description	Limit Citation	Emission Limit	Emit: tpy	
	BAAQMD Cond.	749.32 tons in any 12-	749.32	Continuous/Existing
	#136, part 5	month period		

SO2 Discussion:

The potential to emit calculation for kiln S-1 assumes SO_2 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. Kiln S-2 is limited by permit condition 136 part 5 to 749.32 tons per year of SO_2 .

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. The use of area monitoring and continuous emission monitors on S-1 and S-2 is adequate to ensure compliance with the SO₂ permit limits.

S# & Description	Fed. Enf. Emission	Federally Enforceable	Monitoring
	Limit Citation	Emission Limit	
S-1 and S-2 Coke	BAAQMD 6-1-301	Ringelmann 1.0 for < 3	Daily visible emission monitoring,
Calcine Kiln/Cooler		minutes/hr	weekly pressure drop monitoring, and
			annual baghouse inspection
S-1 and S-2 Coke	SIP 6-301	Ringelmann 1.0 for < 3	Daily visible emission monitoring,
Calcine Kiln/Cooler		minutes/hr	weekly pressure drop monitoring, and
			annual baghouse inspection
S-1 and S-2 Coke	BAAQMD 6-1-310	0.15 gr/dscf	Daily visible emission monitoring,
Calcine Kiln/Cooler			weekly pressure drop monitoring,
			annual baghouse inspection, and
			annual source test
S-1 and S-2 Coke	SIP 6-310	0.15 gr/dscf	Daily visible emission monitoring,
Calcine Kiln/Cooler			weekly pressure drop monitoring,
			annual baghouse inspection, and
			annual source test
S-1 and S-2 Coke	BAAQMD 6-1-310.3	0.15 gr/dscf @ 6% O_2	Daily visible emission monitoring,
Calcine Kiln/Cooler			weekly pressure drop monitoring,
			annual baghouse inspection, and
			annual source test

PM Sources

S# & Description	Fed. Enf. Emission	Federally Enforceable	Monitoring
	Limit Citation	Emission Limit	
S-1 and S-2 Coke Calcine Kiln/Cooler	SIP 6-310.3	0.15 gr/dscf @ 6% O_2	Daily visible emission monitoring, weekly pressure drop monitoring,
			annual baghouse inspection, and
			annual source test
S-1 and S-2 Coke	BAAQMD 6-1-311	$4.10P^{0.67}$ lb/hr but not to	Daily visible emission monitoring,
Calcine Kiln/Cooler		exceed 40 lb/hr, where P is	weekly pressure drop monitoring,
		process weight, ton/hr;	annual baghouse inspection, and
		maximum 40 lb/hr	annual source test
S-1 and S-2 Coke	SIP 6-311	$4.10P^{0.67}$ lb/hr but not to	Daily visible emission monitoring,
Calcine Kiln/Cooler		exceed 40 lb/hr, where P is	weekly pressure drop monitoring,
		process weight, ton/hr;	annual baghouse inspection, and
		maximum 40 lb/hr	annual source test
<u>6 1 1 6 2 C 1</u>			
S-1 and S-2 Coke	BAAQMD Cond.	Pressure drop at the	Weekly pressure drop monitoring
Calcine Kiln/Cooler	#136, parts 11 and	baghouse shall be	
	12	maintained between 1.0	
		and 10.0 inches of water	
		gauge except during	
		cleaning and maintenance	
S-2 Coke Calcine	BAAQMD Cond.	46.10 tons in any 12-month	Annual source test
Kiln/Cooler	#136, part 10	period	
S-5 Coke Storage Bins	BAAQMD 6-1-301	Ringelmann 1.0 for < 3	Quarterly visible emission
(9), S-22 Conveyor, S-6 Conveyor, S-16 Rotary		minutes/hr	monitoring, weekly pressure drop
Cooler, S-26 Conveyor,			monitoring, and annual baghouse
S-17 Rotary Cooler, and			inspection
S-27 Conveyor			
S-5 Coke Storage Bins (9), S-22 Conveyor, S-6	SIP 6-301	Ringelmann 1.0 for < 3	Quarterly visible emission
Conveyor, S-16 Rotary		minutes/hr	monitoring, weekly pressure drop
Cooler, S-26 Conveyor,			monitoring, and annual baghouse
S-17 Rotary Cooler, and			inspection
S-27 Conveyor S-5 Coke Storage Bins	DAAOMD (1 210	0.15/	Quarterly visible emission
(9), S-22 Conveyor, S-6	BAAQMD 6-1-310	0.15 gr/dscf	monitoring, weekly pressure drop
Conveyor, S-16 Rotary			monitoring, and annual baghouse
Cooler, S-26 Conveyor, S-17 Rotary Cooler, and			inspection
S-27 Conveyor			
S-5 Coke Storage Bins	SIP 6-310	0.15 gr/dscf	Quarterly visible emission
(9), S-22 Conveyor, S-6			monitoring, weekly pressure drop
Conveyor, S-16 Rotary Cooler, S-26 Conveyor,			monitoring, and annual baghouse inspection
S-17 Rotary Cooler, and			inspection
S-27 Conveyor			
S-5 Coke Storage Bins	BAAQMD 6-1-311	$4.10P^{0.67}$ lb/hr but not to	Quarterly visible emission
(9), S-22 Conveyor, S-6 Conveyor, S-16 Rotary		exceed 40 lb/hr, where P is	monitoring, weekly pressure drop monitoring, and annual baghouse
Cooler, S-26 Conveyor,		process weight, ton/hr;	inspection
S-17 Rotary Cooler, and		maximum 40 lb/hr	<u>F</u>
S-27 Conveyor		maximum +0 10/m	

S# & Description	Fed. Enf. Emission	Federally Enforceable	Monitoring
	Limit Citation	Emission Limit	
S-5 Coke Storage Bins (9), S-22 Conveyor, S-6 Conveyor, S-16 Rotary Cooler, S-26 Conveyor, S-17 Rotary Cooler, and S-27 Conveyor	SIP 6-311	4.10P ^{0.67} lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr; maximum 40 lb/hr	Quarterly visible emission monitoring, weekly pressure drop monitoring, and annual baghouse inspection
S-7 Stockpile fugitives, S-23 Portable Conveyor, S-30 Portable Conveyor, and S-31 Portable Conveyor	BAAQMD 6-1-301	Ringelmann 1.0 for < 3 minutes/hr	Quarterly visible emission monitoring
S-7 Stockpile fugitives, S-23 Portable Conveyor, S-30 Portable Conveyor, and S-31 Portable Conveyor	SIP 6-301	Ringelmann 1.0 for < 3 minutes/hr	Quarterly visible emission monitoring
S-32 and S-33 Internal Combustion Engine, Detroit Diesel 3-71, 87 hp	BAAQMD 6-1-303	Ringelmann 2.0 for < 3 minutes/hr	None
S-32 and S-33 Internal Combustion Engine, Detroit Diesel 3-71, 87 hp	SIP 6-303	Ringelmann 2.0 for < 3 minutes/hr	None
S-32 and S-33 Internal Combustion Engine, Detroit Diesel 3-71, 87 hp	BAAQMD 6-1-310	0.15 gr/dscf	None
S-32 and S-33 Internal Combustion Engine, Detroit Diesel 3-71, 87 hp	SIP 6-310	0.15 gr/dscf	None
S-32 and S-33 Internal Combustion Engine, Detroit Diesel 3-71, 87 hp S-41 Silo, S-42 Silo	CCR, Title 17, Section 93115 ATCM for Stationary Compression Ignition Engines 93115.7(b) Emission Standards In Use Prime Engines (Not federally enforcable) BAAQMD 6-1-301	85% Reduction from Baseline Level, or 0.01 g/bhp-hr (Not federally enforceable) Ringelmann 1.0 for < 3	None Annual visible emission monitoring
S-41 Silo, S-42 Silo S-41 Silo, S-42 Silo	SIP 6-301	Ringelmann 1.0 for < 3 minutes/hr Ringelmann 1.0 for < 3	Annual visible emission monitoring Annual visible emission monitoring
S-41 Silo, S-42 Silo	BAAQMD 6-1-310	minutes/hr 0.15 gr/dscf	Annual visible emission monitoring

S# & Description	Fed. Enf. Emission	Federally Enforceable	Monitoring
	Limit Citation	Emission Limit	
S-41 Silo, S-42 Silo	SIP 6-310	0.15 gr/dscf	Annual visible emission monitoring
S-41 Silo, S-42 Silo	BAAQMD 6-1-311	4.10P ^{0.67} lb/hr but not to	Annual visible emission monitoring
		exceed 40 lb/hr, where P is	
		process weight, ton/hr;	
		maximum 40 lb/hr	
S-41 Silo, S-42 Silo	SIP 6-311	4.10P ^{0.67} lb/hr but not to	Annual visible emission monitoring
		exceed 40 lb/hr, where P is	
		process weight, ton/hr;	
		maximum 40 lb/hr	

PM Discussion:

S-1 and S-2 are abated by baghouses and are monitored on a daily basis for visible emissions, on a weekly basis for pressure drop across the baghouse, and on an annual basis for the baghouse inspection and annual PM source test. The monitoring requirements are adequate to demonstrate compliance with the applicable PM limits. S-2 has an annual CEQA permit limit of 46.1 tons/year. The facility uses the annual source test results to develop an PM emission factor per ton of coke calcined. This emission factor and the coke throughput are the basis for demonstrating compliance with this permit limit.

S-5, S-6, S-16, S-17, S-22, S-26, and S-27 are all required by permit condition to monitor visible emissions on a quarterly basis using a District approved method. The sources abated by baghouses are required to monitor the pressure drop across the baghouse on a weekly basis. In addition, each baghouse is required to be inspected on an annual basis.

S-7, S-23, S-30, and S-31 are required by permit condition to monitor visible emissions on a quarterly basis using a District approved method.

The two 87 hp diesel engines (S-32 and S-33) are prime engines that typically operate less than 100 hour per year. The particulate emissions from these two engines are abated by a diesel particulate filter. The engines are not expected to have visible emissions that exceed Ringleman 2.0 for more than 3 minutes per hour. The engines are expected to comply with Regulation 6 Rule 1 and SIP Regulation requirements. The engines are not large enough to require periodic source testing to demonstrate compliance with these particulate limits. The engines will be required to demonstrate compliance with the non-federally enforceable particulate limits contained in the ATCM for Stationary Compression Ignition Engines. This compliance or the use of certified and verified equipment to meet the ATCM emission requirements. Please see Section V Compliance Schedule for more information.

S-41 and S-42 Silos are abated by vent filters and are required to monitor visible emissions using a District approved method on an annual basis.

The PM monitoring for all of the particulate sources meets or exceeds the Title V Periodic Monitoring Recommendations approved by CAPCOA on June 24, 1999. The PM monitoring is adequate to demonstrate compliance with all of the PM limits contained in the permit.

S# & Description	Fed. Enf. Emission Limit Citation	Federally Enforceable Emission Limit	Potential to Emit: tpy	Monitoring
S-24 Non	BAAQMD 8-7-301.2	95% (wt) organic vapor	0.33	Not recommended.
Retail		recovery efficiency		
Gasoline				
Dispensing				
Facility, One				
Nozzle (GDF				
#6050)				
	BAAQMD 8-7-301.6	Limited leakage	0.33	Annual leak test/Proposed
	BAAQMD Condition	Limited leakage	0.33	Source test every 3 years
	#20666, Part 2			

POC Sources

POC Discussion:

An annual static pressure performance test was added for the gasoline storage tank. The storage tank owner or operator is also required to conduct and pass a Rotatable Adaptor Torque Test (CARB Test Procedure TP201.1B) and either a Drop Tube/Drain Valve Assembly Leak Test (TP201.1C) or, if operating drop tube overfill prevention devices ("flapper valves"), a Drop Tube Overfill Prevention Device and Spill Container Drain Valve Leak Test (TP201.1D) at least once in each 36-month period. Measured leak rates of each component shall not exceed the levels specified in VR-102. 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 IV of the permit.

Changes to permit

Table VIII
Test Methods

Applicable			
Requirement	Description of Requirement	Acceptable Test Methods	
BAAQMD	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible	
6-1-301		Emissions, or EPA Method 9	
SIP 6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible	
		Emissions, or EPA Method 9	
BAAQMD	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling.	
6-1-310		or EPA Method 5	
SIP 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling.	
		or EPA Method 5	
BAAQMD	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling.	
6-1-310.3		or EPA Method 5	
SIP 6-310.3	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling.	
	C C	or EPA Method 5	
BAAQMD	General Operations	Manual of Procedures, Volume IV, ST-15, Particulates Sampling,	
6-1-311	1	or EPA Method 5	
SIP 6-311	General Operations	Manual of Procedures, Volume IV, ST-15, Particulates Sampling,	
	1	or EPA Method 5	
BAAQMD	Limited Leakage	Manual of Procedures, Volume IV, ST-3 <u>0</u> 8, Gasoline Dispensing	
8-7-301.6	U	Facility, Static Pressure Integrity Test, Aboveground	
		Vaulted Underground Storage Tanks, or CARB Test Procedure	
		<u>TP-201.3</u>	
BAAQMD	Limitations on Ground Level	Manual of Procedures, Volume VI, Air Monitoring Procedures,	
9-1-301	Concentrations	Part 1, Ground Level Monitoring for Hydrogen Sulfide and Sulfur	
		Dioxide	
BAAQMD	Emission Limitations for Coke	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide,	
9-1-310.2	Calcining Kilns	Continuous Sampling, or	
		ST-20, Sulfur Dioxide, Sulfur Trioxide, Sulfuric Acid Mist	
BAAQMD	Sulfuric acid mist testing	Manual of Procedures, Volume IV, ST-12, Determination of	
Condition		Sulfur Dioxide, Sulfur Trioxide, and Sulfur Acid Mist in Effluents	
#136, Part 6		EPA Method 8, or EPA Method 5/8	
BAAQMD	Annual PM10 limit		
Condition		from stationary sources	
#136, Part 10		EPA Method 201A, Determination of PM10 Emissions, plus EPA	
		Method 202, Determination of Condensable Particulate Emissions	
		from Stationary Sources	
BAAQMD	Visible Emissions Monitoring	Manual of Procedures, Volume I, Evaluation of Visible	
Condition		Emissions, or EPA Method 9	
#136, Part 13			

Table VIII
Test Methods

Applicable			
Requirement	Description of Requirement	Acceptable Test Methods	
BAAQMD	Determination of PM10	CARB Method 501 including CP, Determination of Size	
Condition	Emissions	Distribution of Particulate Matter from Stationary Sources; or	
#17820, Part 3		CARB Method 501 including CP, Determination of Size	
		Distribution of Particulate Matter from Stationary Sources, plus	
		CARB Method 5 including CP, Determination of Particulate	
		Matter Emissions from Stationary Sources; or	
		EPA Method 201/ 201A, Determination of PM10 Emissions, plus	
		EPA Method 202, Determination of Condensaible Particulate	
		Emissions from Stationary Sources	
BAAQMD	Limited Leakage	CARB Test Procedure TP-201.1B and TP-201.1C or TP-201.1D	
Condition			
#20666, Part 2			
CCR, Title 17,	Diesel PM Emissions	Diesel PM emission testing shall be done in accordance with one	
Section 93115		of the following methods:	
ATCM for		(A) California Air Resources Board Method 5 (ARB Method 5), "Determination of Particulate Matter Emissions from Stationary	
Stationary		Sources," as amended July 28, 1997, which is incorporated herein	
<u>Compression</u>		by reference.	
Ignition		<u>1. For purposes of this subsection, diesel PM shall be measured</u> only by the probe catch and filter catch and shall not include PM	
		captured in the impinger catch or solvent extract.	
Engines		2. The tests are to be carried out under steady state operation. Test	
<u>93115.7(b)</u>		cycles and loads shall be in accordance with ISO-8178 Part 4 or	
Emission		alternative test cycle approved by the District APCO. 3. The District APCO may require additional engine or	
Standards		operational duty	
In Use Prime		cycle data if an alternative test cycle is requested; or	
Engines		(B) International Organization for Standardization (ISO) 8178	
		Test procedures: ISO 8178-1:1996(E) ("ISO 8178 Part 1") ISO	
		8178-2: 1996(E) ("ISO 8178 Part 2"); and ISO 8178-4:1996(E)	
		("ISO 8178 Part 4"), which are incorporated herein by reference; or	
		<u>(C)</u> Title 13, California Code of Regulations, section 2423,	
		"Exhaust Emission Standards and Test Procedures - Off-Road	
		Compression Ignition Engines," which is incorporated herein by	
		reference.	

Table VIII				
Test Methods				

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
CCR, Title 17,	NOx, CO, and HC emissions	NOx, CO and HC emission testing shall be done in accordance
Section 93115	testing	with one of the following methods:
	<u>costing</u>	(A) California Air Resources Board Method 100 (ARB Method 100), "Procedures for Continuous Gaseous Emission Stack
ATCM for		Sampling," as amended July 28, 1997, which is incorporated
Stationary		herein by reference.
<u>Compression</u>		1. Tests using ARB Method 100 shall be carried out under steady
Ignition		state operation. Test cycles and loads shall be in accordance with
Engines		ISO-8178 Part 4 or alternative test cycle approved by the District
93115.7(b)		APCO.
		2. The District APCO may require additional engine or operational duty cycle data if an alternative test cycle is requested;
Emission		or
Standards		(B) International Organization for Standardization (ISO) 8178
In Use Prime		Test procedures: ISO 8178-1:1996(E) ("ISO 8178 Part 1") ISO
Engines		8178-2: 1996(E) ("ISO 8178 Part 2"); and ISO 8178-4:1996(E)
		("ISO 8178 Part 4"), which are incorporated herein by reference;
		or (C) Title 13, California Code of Regulations, section 2423,
		"Exhaust Emission Standards and Test Procedures - Off-Road
		Compression Ignition Engines," which is incorporated herein by
		reference.
CCR, Title 17,	NMHC emissions testing (if	<u>NMHC</u> emission testing shall be done in accordance with one of
Section 93115	necessary)	the following methods:
ATCM for		(A) International Organization for Standardization (ISO) 8178 Test procedures: ISO 8178-1:1996(E) ("ISO 8178 Part 1")
		ISO 8178-2:1996(E) ("ISO 8178 Part 2"); and ISO 8178-
Stationary		4:1996(E) ("ISO 8178 Part 4"), which are incorporated herein by
Compression		reference; or
Ignition		(B) Title 13, California Code of Regulations, section 2423,
Engines		"Exhaust Emission Standards and Test Procedures - Off-Road Compression Ignition Engines," which is incorporated herein by
<u>93115.7(b)</u>		reference.
Emission		
Standards		
In Use Prime		
Engines		

IX. Permit Shield:

Changes to permit:

This action proposes no changes to permit shields.

X. Revision History

Changes to permit:

A revision history section will be added with the following information:

Initial Issuance (Application 25817) July 31, 2002

Significant Revision (Application 17331):

Renewal (Application 15619) and Significant Revision (Application 8389) TBD

• Add pressure drop ranges, which were provided by Permit Holder, to Table IIB for baghouses and to Permit Conditions #10438, Part 4; #10439, Part 4; #17539, Part 3

June 18, 2009

• Change A-41 and A-42 description from baghouse to vent filter in Tables IIB and IV-J, and Permit Condition #17820, Parts 6 and 7

• Change Permit Condition #136, Part 12b to apply limits to S2 and A2 rather than S1 and A1, which are already limited by Part 12a

• Change Permit Condition #3752, Part 3, to apply to *natural* gas rather than *fuel* gas

• Add back sentence that had been inadvertently deleted in Permit Condition #17539, Part 2 and add S-6 to sources abated by A-4 in Table IIB

• Delete Parts 8 and 9 of Permit Condition #17820 and all references to those parts and the measurement of pressure drops across A-41 and A-42 in Tables IIB, IV-J, and VII-J

• Change visible emission monitoring in Permit Condition #17820, Part 10, to annually from quarterly.

• Revise Permit Condition #17820, Part 11 by deleting annual baghouse inspection and adding corrective action requirement and maintenance log requirement. Revise Tables IV-J and VII-J accordingly.

• Update Table IV-H to show that Regulation 8, Rule 7 amended 11/6/02 is both the current and SIP-approved rule and apply section of rule for Underground Storage Tank rather than section of rule that had erroneously been applied for an Aboveground Storage Tank.

• Delete Permit Conditions #701 and #17571 and add Permit Condition #20666 for Enhanced Vapor Recovery Phase I upgrade. Revise Tables IV-H and VII-H accordingly.

• Condition 10438 part 6, 10439 part 6, 17539 part 5, 17540 part 1, and 17820 part 10 have been reworded to require a District approved method for visible emissions monitoring. EPA method 9 has been added to these conditions as a District approved method for visible emissions monitoring. This is a minor revision to the permit.

• Change Table VIII to replace the above ground storage tank test method with a test method for an underground storage tank plus a CARB test procedure. Table VIII was updated to allow the use of EPA Method 9 for visible emissions, EPA Method 5 for TSP, and EPA 201A/202 for PM10. Table VIII was updated to include ATCM approved source test methods for testing of S-32 and S-33.

- Add CARB test procedures to Table VIII for enhanced vapor recovery Phase I
- Correct description of one of the sources for Permit Condition #10439 in Section VI from S-17 Rotary Cooler K1 to S-17 Rotary Cooler K-2.

XI. Glossary

Changes to permit:

This action proposes no changes to the glossary.

D. Alternate Operating Scenarios:

No alternate operating scenario has been requested for this facility.

E. Compliance Status:

See Section C.V above and Appendix A which contains the compliance record for the facility.

APPENDIX A

BAAQMD COMPLIANCE RECORD

COMPLIANCE & ENFORCEMENT DIVISION

Inter-Office Memorandum

JIM KARAS – ACTING DIRECTOR OF ENGINEERING JE 130 / BRIAN BATEMAN – DIRECTOR OF ENFORCEMENT JE 126 / 2 REVIEW OF COMPLIANCE DEC TO:

FROM:

SUBJECT: REVIEW OF COMPLIANCE RECORD OF:

CONOCOPHILLIPS CARBON PLANT, SITE #A0022

Background

This review was initiated as part of the District evaluation of an application by ConocoPhillips Carbon Plant (CARBON PLANT) for a Title V Permit Renewal. It is standard practice of the Compliance and Enforcement Division to undertake a compliance record review in advance of a renewal of a Title V Permit. The purpose of this review is to assure that any non-compliance problems identified during the prior five-year permit term have been adequately addressed, or, if non-compliance persists, that a schedule of compliance is properly incorporated into the Title V permit compliance schedule. In addition, the review checks for patterns of recurring violation that may be addressed by additional permit terms. Finally, the review is intended to recommend, if necessary, any additional permit conditions and limitations to improve compliance.

The CARBON PLANT refines petroleum coke received from the ConocoPhillips refinery into carbon-bearing materials. The coke is processed in two calciners to remove impurities from the coke, including sulfur and water. Hot waste gases from the calciners are sent to the pyroscrubber that removes particulate by a combination of settling and incineration. The recovered hot waste gases are used for the production of steam for the generation of electricity. The cooled waste gases pass through a baghouse and exits to the atmosphere through the cold stacks. Continuous Emission Monitors are in place on the stacks to measure applicable pollutants.

Compliance Review

Compliance records were reviewed for the time period from December 29, 2006 through December 31, 2011. The results of this review are summarized as follows. REVIEW OF COMPLIANCE RECORD OF: <u>ConocoPhillips Carbon Plant, SITE #A0022</u> January 24, 2012 Page 2 of 4

1. Violation History

Staff reviewed the CARBON PLANT Annual Compliance Certifications and found one (1) instance of an ongoing non-compliance issue.

The CARBON PLANT has two diesel engines (District Sources: S-32 & S-33) that are used to rotate the rotary kilns during startup and maintenance. These engines were required to demonstrate compliance with the Airborne Toxic Control Measure (ACTM) for Stationary compression engines contained in the Title 17, California Code of Regulations section 93115 (Sections 93115 through 93115.15) by January 1, 2009 (See 93115.12).

Although ConocoPhillips performed emissions testing in 2006 and 2007 to demonstrate compliance with the ACTM, a review of the source test data by the District's Technical Division determined compliance with the ATCM requirements have not been met. The testing for the baseline configuration and post diesel particulate filter configuration was done at different engine operating conditions that were not in accordance with ISO 8178 test cycles or approved in advance by the APCO as required by the ATCM.

The District's Engineering Division is proposing to incorporate a Compliance Schedule in the Title V Permit for the CARBON PLANT which includes the following two compliance options:

- The owner/operator shall submit source test results that demonstrate compliance with the ATCM and follow the testing requirements contained in 93115.13 and 93115.14. The testing shall be performed in accordance with ISO 8178 procedures or at all engine operating conditions as approved by the APCO.
- Withdraw permit application 15563 and submit a new permit application to install ARB verified and certified equipment that complies with the ATCM (Specifically 93115.7(b) Emissions Standards).

Staff also reviewed the District compliance records for the review period. During this period the CARBON PLANT activities known to the District include:

District-issued two (2) Notice of Violation(s):

NOV#	Regulation	Date Occur	# of Days	Comments	Disposition
A49451	9-1-310	8-4-07	1	Exceeded SO2 limit	Resolved
A51270	2-6-307	8-26-10	1	PM 10 Emissions	Pending

2. Complaint History

The District received three (3) air pollution complaints alleging the CARBON PLANT as the source.

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REVIEW OF COMPLIANCE RECORD OF: <u>ConocoPhillips Carbon Plant, SITE #A0022</u> January 24, 2012 Page 3 of 4

3. Reportable Compliance Activity

Reportable Compliance Activity (RCA), also known as "Episode" reporting, is the reporting of compliance activities involving a facility as outlined in District Regulations and State Law. Reporting covers breakdown requests, indicated monitor excesses, pressure relief device releases, inoperative monitor reports and flare monitoring.

Within the review period, the District received seventeen (17) notifications for RCAs. One (1) NOV was issued as a result of these RCAs:

Episode	Date Occur	# of Days	Comments	Disposition
04Y33	12/29/06	2	Inoperative Monitor	Resumed Operation
05A49	5/19/07	32	Inoperative Monitor	Resumed Operation
05A99	6/27/07	2	Inoperative Monitor	Resumed Operation
05B00	6/30/07	1	Inoperative Monitor	Resumed Operation
05B08	6/30/07	1	Inoperative Monitor	Resumed Operation
05B46	8/4/07	1	Indicated SO2 Excess	NOV A49451
05D33	12/25/07	1	Inoperative Monitor	Resumed Operation
05F13	4/13/08	1	Inoperative Monitor	Resumed Operation
05F20	4/14/08	2	Inoperative Monitor	Resumed Operation
05G09	6/3/08	3	Inoperative Monitor	Resumed Operation
05G66	7/7/08	1	Inoperative Monitor	Resumed Operation
05L35	3/13/09	1	K-1 Kiln Burner Boiler Tube Failure	Breakdown Granted
05873	3/29/10	1	Indicated SO2 Excess	Technical Determined not an Excess
05T67	5/8/10	1	Plant Shutdown Due to Power Failure	Breakdown Granted
05Y09	1/12/11	1	Indicated SO2 Excess	Technical Determined not an Excess
05Y32	2/1/11	1	Indicated SO2 Excess	Technical Determined not an Excess
06C70	12/8/11	1	Indicated SO2 Excess	Pending

4. Enforcement Agreements, Variances, or Abatement Orders

There were no enforcement agreements, variances, or abatement orders for CARBON PLANT over review period.

Conclusion

Following its review of all available facility and District compliance records from December 29, 2006 through December 31, 2011, the District's Compliance and

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REVIEW OF COMPLIANCE RECORD OF: <u>ConocoPhillips Carbon Plant, SITE #A0022</u> January 24, 2012 Page 4 of 4

Enforcement Division has determined that the CARBON PLANT was in intermittent compliance from the initial permit period through the present.

Based on this review and analysis of all the violations for the review period, the District has concluded that a schedule of compliance or change in permit terms is necessary beyond what is already contained in the facility's current Title V permit.

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APPENDIX B

GLOSSARY

ARB

Air Resources Board

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

Basis

The underlying authority that allows the District to impose requirements.

CAA

The federal Clean Air Act

CAAQS

California Ambient Air Quality Standards

CEM

Continuous Emission Monitor

CEQA

California Environmental Quality Act

CFEP

Clean Fuel Expansion Project

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.

СО

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.

EFRT

External Floating Roof Tank 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.

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.

NH3

Ammonia

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.

POC

Precursor Organic Compounds

PM

Particulate Matter

PM10

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

PSD

Permit Evaluation and Statement of Basis: Site A0022, ConocoPhillips Carbon Plant, 2101 Franklin Canyon Road, Rodeo, CA

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.

SCR

Selective Catalytic Reduction

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

Title V

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

TRMP

Toxic Risk Management Plan

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

APPENDIX C

Engineering Evaluation Application 11396

Evaluation Report A/N 11396 G# 6050 (Plant 22, Source 24) ConocoPhillips Carbon Plant, 2101 Franklin Canyon Rd., Rodeo

Background

Gettler-Ryan, on behalf of ConocoPhillips, has applied for an A/C to replace the Phase I vapor recovery on ConocoPhillips's existing underground gasoline tank with EVR certified Phase I equipment. No other work is proposed under this application.

ConocoPhillips currently operates a 10,000 gallon underground gasoline tank with one OPW 2A gasoline nozzle equipped with coaxial Phase I. This tank is exempt from Phase II vapor recovery under Section 8-7-112.7, as it was installed prior to 1983 and has a throughput < 60,000 gal/yr. This equipment is permitted as Source 24 at Plant 24.

This source is currently subject to condition #s 701, 8749, and 17571. Cond #8749 limits annual gasoline throughput to 60,000 gallons per year pursuant to the Phase II exemption. Cond #701 requires ongoing compliance with CARB Executive Order G-70-52AM, and Cond # 17571 requires an annual ST-38 test. These last two conditions do not apply to this source and should be removed. G-70-52AM applies only to sites with Phase II vapor recovery, while the ST-38 test can only be used on aboveground tanks.

Proposed Phase I equipment consists of OPW EVR Phase I per CARB Executive Order VR-102D. All other equipment will remain unchanged.

Emissions

No change in permitted throughput has been requested.

As the EVR Phase I equipment is certified at 98% efficiency (vs. 95% for conventional Phase I) there should be no increase in emissions per unit throughput.

The net emission increase under this A/N will be zero.

Statement of Compliance

As there will be no net emissions increase from this project, this application is exempt from the BACT and offset requirements of Regulation 2, Rule 2.

The proposed OPW EVR Phase I equipment is certified under G-VR-102D, while the existing Phase II equipment is certified under G-70-17AD and 52AM. Use of CARB certified equipment satisfies all requirements of District Regulation 8, Rule 7.

Permit Conditions

Authority to Construct Conditions:

(Data Bank Cond ID# to be assigned)

- 1. The Phase I equipment shall be installed in accordance with California Air Resources Board (CARB) Executive OrderVR-102 (OPW EVR Phase I systems.
- Only the replacement of the existing Phase I system with EVR-certified equipment is authorized under this Authority to Construct. No other work, including modifications to dispensers or vapor recovery piping, is allowed.
- 3. Only over fill prevention devices (e.g., flapper valves, ball floats) listed in the applicable CARB Executive Order as compatible with the Phase I system may be installed. Note: Executive Order VR-104-A prohibits the use of drop tube overfill prevention devices (flapper valves) in conjunction with the CNI EVR Phase I system.
- 4. No more than three pressure vacuum (PV) valves may be installed on any manifolded tank system. The District recommends that vents be manifolded to a single relief valve whenever possible.
- 5. The following performance tests shall be successfully conducted within (30) days of start-up:.
 - I. Static Pressure Performance Test, in accordance with CARB procedure TP-201.3 or the applicable equivalent District test procedure (ST-30). If the tank size is 500 gallons or less, the test shall be performed on an empty tank.
 - II. Phase I Adaptor Static Torque Test on all rotatable Phase I adaptors in accordance with CARB TP-201.3.
 - III. One of the following tests. The measured leak rate for each component shall be within the limits set in the applicable CARB Executive Order:
 - a) Stations equipped with drop tube overfill prevention devices ("flapper valves"): a Drop Tube Overfill Prevention Device and Spill Container Drain Valve Leak Test in accordance with CARB Test Procedure TP-201.1D and the applicable CARB Executive Order.
 - b) All other stations: a Drop Tube/Drain Valve Assembly Leak Test in accordance with CARB Test Procedure TP-201.1C and the applicable CARB Executive Order.
- 6. The applicant shall notify Source Test by FAX at (415) 749-4922, 48 hours prior to any testing required for permitting. Test results for the performance tests required pursuant to conditions #7 shall be submitted within twenty (20) days of test date.
- 7. The current gasoline throughput at this facility shall not exceed 1.01 million gallons of fuel per year.

Permit to Operate Conditions

COND# 8749-----

For: S-24 Non Retail Gasoline Dispensing Facility (GDF #6050)

1. Pursuant to Regulation 8-7-112.7, this facility is exempt from Phase II vapor recovery equipment because the tank was installed prior to July 1, 1983 and the annual throughput is less than 60,000 gallons. Throughput shall not exceed 60,000 gallons per year. (Basis: Reg 8-7-112.7)

2. In order to demonstrate compliance with the part 1 of this condition and with Regulation 8-7-503, the following records shall be maintained in a District approved log. These records shall be kept on site and make available for District inspection for a period of 5 years from the date on which a record is made:

a. Amount of gasoline received per delivery
b. Total amount of gasoline received per calendar year.
c. Total amount of gasoline dispensed per month.
d. Maintenance records detailing the nature and date of each maintenance activity

(Basis: Reg 1-441, Reg 8-7-503, Cumulative Increase)

COND# 20666 -----

- The OPW EVR Phase I Vapor Recovery System, including all associated plumbing and components, shall be operated and maintained in accordance with the most recent version of California Air Resources Board (CARB) Executive Order VR-102. Section 41954(f) of the California Health and Safety Code prohibits the sale, offering for sale, or installation of any vapor control system unless the system has been certified by the state board. (District Regulation 8-7-301.2)
- 2. The owner or operator shall conduct and pass a Rotatable Adaptor Torque Test (CARB Test Procedure TP201.1B) and either a Drop Tube/Drain Valve Assembly Leak Test (TP201.1C) or, if operating drop tube overfill prevention devices ("flapper valves"), a Drop Tube Overfill Prevention Device and Spill Container Drain Valve Leak Test (TP201.1D) at least once in each 36- month period. Measured leak rates of each component shall not exceed the levels specified in VR-102. Results shall be submitted to BAAQMD within 15 days of the test date in a District-approved format. (District Regulation 8-7-301.2)

Title V Permit Revisions

This plant has a Title V permit. This project will require a minor revision of the Title V permit. The revisions to the Title V permit are being processed under A/N 11400.

Proposed revisions to the Title V permit are attached.

Recommendation

All fees have been paid. Recommend that an A/C be issued for the above project.

By _____ date_____

Scott Owen Supervising AQ Engineer

DRAFT Table IV - H Source-specific Applicable Requirements S-24 Non Retail Gasoline Dispensing Facility (GDF #6050)

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD			
Regulation 8,	Organic Compounds - Gasoline Dispensing Facilities (11/17/99)		
Rule 7			
8-7-112.7	Phase II Exemption - Older Facilities with Low Annual Throughput	Y	
8-7-113	Tank Gauging and Inspection Exemption	Y	
8-7-114	Stationary Tank Testing Exemption	N	
8-7-301	Phase I Requirements	Ν	
8-7-301.1	Requirement for CARB Phase I System	N	
8-7-301.2	Installation of Phase I Equipment per CARB Requirements	N	
8-7-301.3	Submerged Fill Pipes	Y	
8-7-301.5	Maintenance of Phase I Equipment per Manufacturers Guidelines	Y	
8-7-301.6	Leak-Free, Vapor-Tight	Ν	
8-7-301.7	Poppetted Drybreaks	Ν	
8-7-301.8	No Coaxial Phase I	Ν	
8-7-301.9	CARB-Certified Anti-Rotational Coupler or Swivel Adapter	Ν	
8-7-301.10	System Vapor Recovery Rate	Ν	
8-7-301.11	CARB-Certified Spill Box	Ν	
8-7-301.12	Drain Valve Permanently Plugged	Ν	
8-7-301.13	Annual Vapor Tightness Test Requirement	<u>Y</u>	
8-7-303	Topping Off	Ν	
8-7-304	Certification Requirements	N	
8-7-308	Operating Practices	N	
8-7-315	Pressure Vacuum Valve Requirements, Underground Storage Tanks	Y	
8-7-316	Pressure Vacuum Valve Requirements, Aboveground Storage Tanks	N	
8-7-401	Equipment Installation and Modification	N	
8-7-406	Testing Requirements, New and Modified Installations	N	
8-7-501	Burden of Proof	N	
8-7-502	Right of Access	Y	
8-7-503	Record Keeping Requirements	Ν	

DRAFT Table IV - H Source-specific Applicable Requirements S-24 Non Retail Gasoline Dispensing Facility (GDF #6050)

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
SIP			
Regulation 8,	Organic Compounds - Gasoline Dispensing Facilities (6/1/94)		
Rule 7	Dheas I Dequimments	Y	
8-7-301	Phase I Requirements	Y	
8-7-301.1	Requirement for CARB Phase I System		
8-7-301.2	Installation of Phase I Equipment per CARB Requirements	Y	
8-7-301.3	Submerged Fill Pipes	Y	
8-7-301.4	Pressure Vacuum Relief Valve Requirement	Y	
8-7-301.5	Maintenance of Phase I Equipment per Manufacturers Guidelines	Y	
8-7-301.6	Leak-Free, Vapor-Tight	Y	
8-7-301.7	Poppetted Drybreaks	Y	
8-7-303	Topping Off	Y	
8-7-304	Certification Requirements	Y	
8-7-308	Operating Practices	Y	
8-7-312	Removal of Gasoline	Y	
8-7-401	Equipment Installation and Modification	Y	
8-7-501	Burden of Proof	Y	
8-7-502	Right of Access	Y	
BAAQMD	Operate per CARB Executive Order G-70-52-AM (basis: BAAQMD	Y	
Condition	Regulation 8-7-301)		
#701			
BAAQMD			
Condition			
#8749			
Part 1	Annual throughput limitation (basis: BAAQMD Regulation 8, Rule	Y	
	7, Section 112.7)		
Part 2	Recordkeeping (basis: BAAQMD Regulations 1-441 and 8-7-503,	Y	
	Cumulative increase)		
BAAQMD			
Condition			
#17571			
Part 1	Perform leak test annually (basis: BAAQMD Regulation 8, Rule 7,	Y	
	Section 301.6)		
Part 2	Perform initial leak test (basis: BAAQMD Regulation 8, Rule 7,	Y	
	Section 301.6)		
Part 3	Submit test results (basis: BAAQMD Regulation 1-441)	Y	

DRAFT Table IV - H Source-specific Applicable Requirements S-24 Non Retail Gasoline Dispensing Facility (GDF #6050)

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Phase I equipment installed and maintained per CARB Executive	<u>Y</u>	
Condition	Order (Basis: District Regulation 8-7-301.2)		
<u>#20666 Part</u>			
<u>1</u>			
BAAQMD	Triennial drop tube/drain valve and static adaptor torque test	<u>Y</u>	
Condition	requirements (Basis: District Regulation 8-7-301.2)		
<u>#20666 Part</u>			
<u>2</u>			

Draft Table VII - H Applicable Limits and Compliance Monitoring Requirements S-24 Non Retail Gasoline Dispensing Facility (GDF #6050)

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
POC	8-7-301.2	Y		95% (wt) organic vapor		Ν	
				recovery efficiency			
	8-7-301.6	Y		Limited leakage	BAAQMD	P/A	Source Test
					Condition		
					#17571, Part		
					1		
	BAAQMD	Y		Operate per CARB	CARB	Ν	
	Condition			Executive Order G-70-52-	Executive		
	#701			AM	Order G-70-		
					52-AM		
	BAAQMD	Y		60,000 gallons per year	BAAQMD	P/A	Records
	Condition			annual throughput	Condition		
	#8749, Part				#8749, Part 2		
	1						

APPENDIX D

Revised PM10 Baseline for K-2 Including Condensable Particulate

Annual Carbon Plant Particulate Emissions

Table 1

Source Testing Results- Regulation 6-311 Compliance Testing - Normal Operation Emissions

		K-2				
	Total	Total PM		Front 1/2 PM		
Year	(lb/hr)	(lb/ton proc)	(lb/hr)	(lb/ton proc)	Wt (TPH)	
2004	7.36	0.26	5.97	0.21	28.50	Runs #2 and #3
2005	4.89	0.33	3.11	0.21	15.05	Runs #1 through #3
2006	12.97	0.55	6.34	0.27	23.45	Runs #1 and #3
		0.38		0.23		

Table 2

Source Testing Results - Regulation 6-311 Compliance Testing - Emissions during cleaning Operations

		Tota	I PM	Front	1/2 PM	Processing	
Year	Kiln	(lb/hr)	(lb/ton proc)	(lb/hr)	(lb/ton proc)	Wt (TPH)	
2004	K-2	42.84	1.503	41.313	1.450	28.5	Soot blowing during K-2 testing, run #1.
2006	K-2	41.43	1.77	32.21	1.37	23.45	Baghouse cleaning during K-2 test, run #2.
	Average	42.135	1.635	36.762	1.412	25.975	T -

Table 3

Emission Factor Summary - Front Half Only (lb/ton proc)

NormalCleaningK-20.231.412

Table 4

Baseline PM10 Emission Estimates

	Production (ton/day)	Emissions (ton/yr)	
	Kiln 2	Kiln 2 - F1/2 Only	K2 - Total PM10
8/03 - 7/04	600.0	38.7	56.0
8/04 - 7/05	601.6	38.7	56.0
8/05 - 7-06	540.7	34.7	50.3
3-yr average	580.8	37.4	54.1

Sample PM10 Calculation (using data from 8/1/03)

PM10 (lb/day) = Production (ton/day) * day/24 hr * [0.38 lb/ton proc * 21.5 hrs + 1.635 lb/ton proc * 2.5 hrs] PM10 (lb/day) = 671.1 ton/day * 1/24 hr * [0.38 lb/ton * 21.5 hr + 1.635 lb/ton * 2.5 hr] PM10 (lb/day) = 342.1 lb/d

Emissions estimated assuming for each kiln 2.5 hours per day are spent soot blowing/cleaning using the Cleaning emission factor. The other 21.5 hours per day calculated using the Normal Operation emission factor.

P is processing weight, "as-is", with moisture

	Processing Weight	ht Emissions (Ib/d)	
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
8/1/2003	671.13	236.3	342.1
8/2/2003	679.88	239.4	346.6
8/3/2003	651.38	229.3	332.0
8/4/2003	647	227.8	329.8
8/5/2003	660.92	232.7	336.9
8/6/2003	671.55	236.4	342.3
8/7/2003	670.92	236.2	342.0
8/8/2003	671.55	236.4	342.3
8/9/2003	671.55	236.4	342.3
8/10/2003	671.55	236.4	342.3
8/11/2003	671.55	236.4	342.3
8/12/2003	671.55	236.4	342.3
8/13/2003	671.55	236.4	342.3
8/14/2003	671	236.3	342.0
8/15/2003	668.6	235.4	340.8
8/16/2003	674.12	237.4	343.6
8/17/2003	670.76	236.2	341.9
8/18/2003	663.32	233.6	338.1
8/19/2003	674.12	237.4	343.6
8/20/2003	675.8	237.9	344.5
8/21/2003	672.92	236.9	343.0
8/22/2003	671.96	236.6	342.5
8/23/2003	684	240.8	348.7
8/24/2003	672.24	236.7	342.7
8/25/2003	666.36	234.6	339.7
8/26/2003	672.48	236.8	342.8
8/27/2003	687.56	242.1	350.5
8/28/2003	683	240.5	348.1
8/29/2003	668.01	235.2	340.5
8/30/2003	687.08	241.9	350.2
8/31/2003	623	219.4	317.6
9/1/2003	644.84	227.0	328.7
9/2/2003	668.6	235.4	340.8
9/3/2003	638.36	224.8	325.4
9/4/2003	597.78	210.5	304.7
9/5/2003	671.46	236.4	342.3
9/6/2003	677.46	238.5	345.3
9/7/2003	677.46	238.5	345.3
9/8/2003	677.46	238.5	345.3
9/9/2003	673.29	237.1	343.2
9/10/2003	682.02	240.1	347.6
9/11/2003	693	244.0	353.2
9/12/2003	676.92	238.3	345.0
9/13/2003	672.75	236.9	342.9
9/14/2003	692.1	243.7	352.8
9/15/2003	689.28	242.7	351.3
2.10.2000			

	Processing Weight	t Emissions (Ib/d)	
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
9/16/2003	658.35	231.8	335.6
9/17/2003	690.12	243.0	351.8
9/18/2003	677.16	238.4	345.2
9/19/2003	673.47	237.1	343.3
9/20/2003	679.4	239.2	346.3
9/21/2003	667.64	235.1	340.3
9/22/2003	674.36	237.4	343.7
9/23/2003	654.2	230.3	333.5
9/24/2003	680.6	239.6	346.9
9/25/2003	575	202.5	293.1
9/26/2003	686.07	241.6	349.7
9/27/2003	674.12	237.4	343.6
9/28/2003	599	210.9	305.3
9/29/2003	534.68	188.3	272.5
9/30/2003	672.92	236.9	343.0
10/1/2003	672.92	236.9	343.0
10/2/2003	661.16	232.8	337.0
10/3/2003	677.75	238.6	345.5
10/4/2003	656.39	231.1	334.6
10/5/2003	654.2	230.3	333.5
10/6/2003	649	228.5	330.8
10/7/2003	646.92	227.8	329.7
10/8/2003	657.77	231.6	335.3
10/9/2003	645.33	227.2	328.9
10/10/2003	637.14	224.3	324.8
10/11/2003	629.58	221.7	320.9
10/12/2003	636.06	224.0	324.2
10/13/2003	647.94	228.1	330.3
10/14/2003	652.83	229.9	332.8
10/15/2003	615.72	216.8	313.8
10/16/2003	629.72	221.7	321.0
10/17/2003	617.31	217.4	314.7
10/18/2003	614.6	216.4	313.3
10/19/2003	221.6	78.0	113.0
10/20/2003	659.73	232.3	336.3
10/21/2003	599.73	211.2	305.7
10/22/2003	557.01	196.1	283.9
10/23/2003	557.01	196.1	283.9
10/24/2003	569.24	200.4	290.2
10/25/2003	441.32	155.4	225.0
10/26/2003	625.64	220.3	318.9
10/27/2003	513.08	180.7	261.5
10/28/2003	488.12	171.9	248.8
10/29/2003	559.76	197.1	285.3
10/30/2003	559.2	196.9	285.0
10/31/2003	524.16	184.6	267.2
11/1/2003	546.2	192.3	278.4

	Processing Weight	nt Emissions (lb/d)	
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
11/2/2003	412.53	145.2	210.3
11/3/2003	399.33	140.6	203.5
11/4/2003	434.13	152.9	221.3
11/5/2003	462.81	163.0	235.9
11/6/2003	462.81	163.0	235.9
11/7/2003	498.87	175.6	254.3
11/8/2003	467.91	164.7	238.5
11/9/2003	475.14	167.3	242.2
11/10/2003	452.61	159.4	230.7
11/11/2003	478.35	168.4	243.8
11/12/2003	468.81	165.1	239.0
11/13/2003	491.13	172.9	250.3
11/14/2003	487.16	171.5	248.3
11/15/2003	209.2	73.7	106.6
11/16/2003	483.39	170.2	246.4
11/17/2003	476.82	167.9	243.0
11/18/2003	477.09	168.0	243.2
11/19/2003	530.82	186.9	270.6
11/20/2003	666.9	234.8	339.9
11/21/2003	661.16	232.8	337.0
11/22/2003	655.64	230.8	334.2
11/23/2003	671	236.3	342.0
11/24/2003	671	236.3	342.0
11/25/2003	671	236.3	342.0
11/26/2003	671	236.3	342.0
11/27/2003	678.33	238.8	345.8
11/28/2003	671	236.3	342.0
11/29/2003	671.1	236.3	342.1
11/30/2003	671.55	236.4	342.3
12/1/2003	677	238.4	345.1
12/2/2003	668.24	235.3	340.6
12/3/2003	672.08	236.6	342.6
12/4/2003	573.39	201.9	292.3
12/5/2003	670.65	236.1	341.8
12/6/2003	666.09	234.5	339.5
12/7/2003	672.66	236.8	342.9
12/8/2003	655.56	230.8	334.2
12/9/2003	562.5	198.1	286.7
12/10/2003	564	198.6	287.5
12/11/2003	587.13	206.7	299.3
12/12/2003	585.51	206.2	298.4
12/13/2003	552.15	194.4	281.4
12/14/2003	568.53	200.2	289.8
12/15/2003	604.53	212.9	308.1
12/16/2003	653.94	230.2	333.3
12/17/2003	626.58	220.6	319.4
12/18/2003	650.58	229.1	331.6

	Processing Weight	essing Weight Emissions (lb/d)	
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
12/19/2003	645.45	227.3	329.0
12/20/2003	672.92	236.9	343.0
12/21/2003	573.08	201.8	292.1
12/22/2003	472.04	166.2	240.6
12/23/2003	480.44	169.2	244.9
12/24/2003	657.8	231.6	335.3
12/25/2003	679.05	239.1	346.1
12/26/2003	671	236.3	342.0
12/27/2003	671	236.3	342.0
12/28/2003	671	236.3	342.0
12/29/2003	671	236.3	342.0
12/30/2003	669.56	235.7	341.3
12/31/2003	560.6	197.4	285.8
1/1/2004	666.52	234.7	339.7
1/2/2004	677.7	238.6	345.4
1/3/2004	679.83	239.4	346.5
1/4/2004	672.87	236.9	343.0
1/5/2004	651.69	229.5	332.2
1/6/2004	695.16	244.8	354.3
1/7/2004	667.68	235.1	340.3
1/8/2004	705.8	248.5	359.8
1/9/2004	710.85	250.3	362.3
1/10/2004	692.13	243.7	352.8
1/11/2004	705.09	248.3	359.4
1/12/2004	671.46	236.4	342.3
1/13/2004	672.18	236.7	342.6
1/14/2004	675.57	237.9	344.4
1/15/2004	619.86	218.2	316.0
1/16/2004	647.37	227.9	330.0
1/17/2004	668.6	235.4	340.8
1/18/2004	672.92	236.9	343.0
1/19/2004	680.12	239.5	346.7
1/20/2004	551.55	194.2	281.1
1/21/2004	671.55	236.4	342.3
1/22/2004	653.1	230.0	332.9
1/23/2004	671.55	236.4	342.3
1/24/2004	671.64	236.5	342.4
1/25/2004	671.55	236.4	342.3
1/26/2004	671	236.3	342.0
1/27/2004	655.74	230.9	334.2
1/28/2004	633.56	223.1	322.9
1/29/2004	665.33	234.3	339.1
1/30/2004	684.54	241.0	348.9
1/31/2004	676.89	238.3	345.0
2/1/2004	656.79	231.3	334.8
2/2/2004	670.95	236.2	342.0
2/3/2004	668.7	235.4	340.9

	Processing Weight	Emissions	; (lb/d)
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
2/4/2004	666.09	234.5	339.5
2/5/2004	668.73	235.5	340.9
2/6/2004	642.9	226.4	327.7
2/7/2004	666.9	234.8	339.9
2/8/2004	660.42	232.5	336.6
2/9/2004	673.38	237.1	343.2
2/10/2004	694.98	244.7	354.2
2/11/2004	669.06	235.6	341.0
2/12/2004	674.26	237.4	343.7
2/13/2004	681.56	240.0	347.4
2/14/2004	617.04	217.3	314.5
2/15/2004	607.4	213.9	309.6
2/16/2004	625.4	220.2	318.8
2/17/2004	629.37	221.6	320.8
2/18/2004	626.73	220.7	319.5
2/19/2004	628.17	221.2	320.2
2/20/2004	636.42	224.1	324.4
2/21/2004	653.61	230.1	333.2
2/22/2004	652.65	229.8	332.7
2/23/2004	663.93	233.8	338.4
2/24/2004	674.49	237.5	343.8
2/25/2004	652.05	229.6	332.4
2/26/2004	653.4	230.1	333.1
2/27/2004	675.27	237.8	344.2
2/28/2004	671.55	236.4	342.3
2/29/2004	657.45	231.5	335.1
3/1/2004	675.45	237.8	344.3
3/2/2004	684.33	240.9	348.8
3/3/2004	674.97	237.7	344.0
3/4/2004	656.97	231.3	334.9
3/5/2004	667.64	235.1	340.3
3/6/2004	640.52	225.5	326.5
3/7/2004	669.06	235.6	341.0
3/8/2004	670.5	236.1	341.8
3/9/2004	672.18	236.7	342.6
3/10/2004	656.76	231.2	334.8
3/11/2004	599.46	211.1	305.6
3/12/2004	678.44	238.9	345.8
3/13/2004	655.4	230.8 135.4	334.1
3/14/2004	384.44		196.0 230.2
3/15/2004	451.6	159.0	
3/16/2004	676.76	238.3	345.0 341.8
3/17/2004	670.52	236.1 235.4	341.8 340.8
3/18/2004	668.6	235.4 238.4	340.8 345.1
3/19/2004	677	238.4	345.1 345.1
3/20/2004	677	238.4	345.1
3/21/2004	677	200.4	040.1

	Processing Weight	Emissions	; (lb/d)
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
3/22/2004	677	238.4	345.1
3/23/2004	676.28	238.1	344.7
3/24/2004	675.32	237.8	344.2
3/25/2004	678.44	238.9	345.8
3/26/2004	657.69	231.6	335.2
3/27/2004	687.69	242.1	350.5
3/28/2004	674.25	237.4	343.7
3/29/2004	681.21	239.9	347.2
3/30/2004	683.37	240.6	348.3
3/31/2004	702.81	247.5	358.2
4/1/2004	673.15	237.0	343.1
4/2/2004	678.96	239.1	346.1
4/3/2004	673.46	237.1	343.3
4/4/2004	640.66	225.6	326.6
4/5/2004	653.86	230.2	333.3
4/6/2004	652.6	229.8	332.6
4/7/2004	669.26	235.6	341.1
4/8/2004	679.76	239.3	346.5
4/9/2004	677.4	238.5	345.3
4/10/2004	673.5	237.1	343.3
4/11/2004	657.3	231.4	335.0
4/12/2004	662.1	233.1	337.5
4/13/2004	668.6	235.4	340.8
4/14/2004	666.2	234.6	339.6
4/15/2004	673.35	237.1	343.2
4/16/2004	653.8	230.2	333.3
4/17/2004	668.2	235.3	340.6
4/18/2004	674.4	237.5	343.8
4/19/2004	671	236.3	342.0
4/20/2004	663.2	233.5	338.0
4/21/2004	663.75	233.7	338.3
4/22/2004	643.6	226.6	328.1
4/23/2004	673.35	237.1	343.2
4/24/2004	663.95	233.8	338.4
4/25/2004	675.85	238.0	344.5
4/26/2004	664.65	234.0	338.8
4/27/2004	676.73	238.3	344.9
4/28/2004	671.85	236.6	342.5
4/29/2004	668.85	235.5	340.9
4/30/2004	666.33	234.6	339.6
5/1/2004	659.3	232.1	336.1
5/2/2004	663.13	233.5	338.0
5/3/2004	662.63	233.3	337.8
5/4/2004	665.1	234.2	339.0
5/5/2004	669.03	235.6	341.0
5/6/2004	639.65	225.2	326.0
5/7/2004	663.5	233.6	338.2

	Processing Weight	Emissions	s (lb/d)
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
5/8/2004	673.8	237.2	343.5
5/9/2004	674.14	237.4	343.6
5/10/2004	676.5	238.2	344.8
5/11/2004	0	0.0	0.0
5/12/2004	0	0.0	0.0
5/13/2004	594.86	209.4	303.2
5/14/2004	671.36	236.4	342.2
5/15/2004	674.27	237.4	343.7
5/16/2004	670.66	236.1	341.9
5/17/2004	676.96	238.4	345.1
5/18/2004	679	239.1	346.1
5/19/2004	673	237.0	343.0
5/20/2004	677	238.4	345.1
5/21/2004	665.93	234.5	339.4
5/22/2004	680.86	239.7	347.0
5/23/2004	678.47	238.9	345.8
5/24/2004	677.62	238.6	345.4
5/25/2004	656.06	231.0	334.4
5/26/2004	678.96	239.1	346.1
5/27/2004	676.67	238.3	344.9
5/28/2004	674.1	237.3	343.6
5/29/2004	696.86	245.4	355.2
5/30/2004	672.56	236.8	342.8
5/31/2004	632.2	222.6	322.2
6/1/2004	414.3	145.9	211.2
6/2/2004	0	0.0	0.0
6/3/2004	0	0.0	0.0
6/4/2004	0	0.0	0.0
6/5/2004	0	0.0	0.0
6/6/2004	0	0.0	0.0
6/7/2004	0	0.0	0.0
6/8/2004	0	0.0	0.0
6/9/2004	0	0.0	0.0
6/10/2004	0	0.0	0.0
6/11/2004	0	0.0	0.0
6/12/2004	0	0.0	0.0
6/13/2004	0	0.0	0.0
6/14/2004	0	0.0	0.0
6/15/2004	0	0.0	0.0
6/16/2004	0	0.0	0.0
6/17/2004	0	0.0	0.0
6/18/2004	0	0.0	0.0
6/19/2004	334.78	117.9	170.6
6/20/2004	527.95	185.9	269.1
6/21/2004	527.95	185.9	269.1
6/22/2004	527.95	185.9	269.1
6/23/2004	528.15	186.0	269.2

	Processing Weight	Emissions	(lb/d)
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
6/24/2004	529.06	186.3	269.7
6/25/2004	541.43	190.6	276.0
6/26/2004	553.36	194.8	282.1
6/27/2004	553.26	194.8	282.0
6/28/2004	550.42	193.8	280.6
6/29/2004	552.34	194.5	281.5
6/30/2004	552.31	194.5	281.5
7/1/2004	553.33	194.8	282.0
7/2/2004	551.2	194.1	281.0
7/3/2004	552.5	194.5	281.6
7/4/2004	616.3	217.0	314.1
7/5/2004	648.84	228.5	330.7
7/6/2004	713.39	251.2	363.6
7/7/2004	669.24	235.6	341.1
7/8/2004	548.4	193.1	279.5
7/9/2004	616.53	217.1	314.3
7/10/2004	622.22	219.1	317.2
7/11/2004	624.45	219.9	318.3
7/12/2004	618.75	217.9	315.4
7/13/2004	620.05	218.3	316.1
7/14/2004	561.25	197.6	286.1
7/15/2004	621.64	218.9	316.9
7/16/2004	623.65	219.6	317.9
7/17/2004	620.75	218.6	316.4
7/18/2004	623.29	219.5	317.7
7/19/2004	622.99	219.4	317.6
7/20/2004	625.35	220.2	318.8
7/21/2004	616.64	217.1	314.3
7/22/2004	624.85	220.0	318.5
7/23/2004	625.78	220.3	319.0
7/24/2004	621.43	218.8	316.8
7/25/2004	598.58	210.8	305.1
7/26/2004	617.68	217.5	314.8
7/27/2004	626.33	220.5	319.3
7/28/2004	625.5	220.2	318.8
7/29/2004	625.06	220.1	318.6
7/30/2004	623.76	219.6	317.9
7/31/2004	623.9	219.7	318.0
8/1/2004	626.14	220.5	319.2
8/2/2004	625.43	220.2	318.8
8/3/2004	625.23	220.1	318.7
8/4/2004	626.33	220.5	319.3
8/5/2004	625.5	220.2	318.8
8/6/2004	624.22	219.8	318.2
8/7/2004	617.3	217.3	314.7
8/8/2004	611.6	215.3	311.7
8/9/2004	623.3	219.5	317.7

	Processing Weight	Emissions	s (lb/d)
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
8/10/2004	544.3	191.6	277.4
8/11/2004	545.2	192.0	277.9
8/12/2004	632.37	222.7	322.3
8/13/2004	647.55	228.0	330.1
8/14/2004	654.76	230.5	333.7
8/15/2004	665.65	234.4	339.3
8/16/2004	645.45	227.3	329.0
8/17/2004	623.55	219.5	317.8
8/18/2004	622.15	219.1	317.1
8/19/2004	618.85	217.9	315.4
8/20/2004	624.06	219.7	318.1
8/21/2004	623.93	219.7	318.0
8/22/2004	624.85	220.0	318.5
8/23/2004	624.68	219.9	318.4
8/24/2004	625.03	220.1	318.6
8/25/2004	625.28	220.2	318.7
8/26/2004	626.33	220.5	319.3
8/27/2004	621.93	219.0	317.0
8/28/2004	625.2	220.1	318.7
8/29/2004	625.3	220.2	318.7
8/30/2004	622.66	219.2	317.4
8/31/2004	617.8	217.5	314.9
9/1/2004	624.56	219.9	318.4
9/2/2004	624	219.7	318.1
9/3/2004	595.34	209.6	303.5
9/4/2004	609.1	214.5	310.5
9/5/2004	613.3	215.9	312.6
9/6/2004	619.8	218.2	315.9
9/7/2004	597.2	210.3	304.4
9/8/2004	598	210.6	304.8
9/9/2004	606	213.4	308.9
9/10/2004	617.96	217.6	315.0
9/11/2004	624.65	219.9	318.4
9/12/2004	621.96	219.0	317.0
9/13/2004	620.25	218.4	316.2
9/14/2004	624.35	219.8	318.2
9/15/2004	623.55	219.5	317.8
9/16/2004	598.15	210.6	304.9
9/17/2004	623.3	219.5	317.7
9/18/2004	567.83	199.9	289.4
9/19/2004	625.5	220.2	318.8
9/20/2004	625.65	220.3	318.9
9/21/2004	625.8	220.3	319.0
9/22/2004	625.41	220.2	318.8
9/23/2004	624.36	219.8	318.3
9/24/2004	624.86	220.0	318.5
9/25/2004	536.9	189.0	273.7

	Processing Weight	Emissions	; (lb/d)
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
9/26/2004	583.4	205.4	297.4
9/27/2004	612.9	215.8	312.4
9/28/2004	610.44	214.9	311.2
9/29/2004	623.95	219.7	318.0
9/30/2004	623.07	219.4	317.6
10/1/2004	624.55	219.9	318.3
10/2/2004	614.26	216.3	313.1
10/3/2004	618.07	217.6	315.0
10/4/2004	613.95	216.2	312.9
10/5/2004	614.9	216.5	313.4
10/6/2004	624.2	219.8	318.2
10/7/2004	625.87	220.4	319.0
10/8/2004	622.77	219.3	317.4
10/9/2004	620.35	218.4	316.2
10/10/2004	624.85	220.0	318.5
10/11/2004	519.01	182.7	264.6
10/12/2004	323.28	113.8	164.8
10/13/2004	618.72	217.8	315.4
10/14/2004	624.05	219.7	318.1
10/15/2004	624.83	220.0	318.5
10/16/2004	623.43	219.5	317.8
10/17/2004	361.9	127.4	184.5
10/18/2004	0	0.0	0.0
10/19/2004	0	0.0	0.0
10/20/2004	77	27.1	39.2
10/21/2004	611.6	215.3	311.7
10/22/2004	624.2	219.8	318.2
10/23/2004	623.39	219.5	317.8
10/24/2004	625.4	220.2	318.8
10/25/2004	624.76	220.0	318.5
10/26/2004	624.77	220.0	318.5
10/27/2004	622.64	219.2	317.4
10/28/2004	617.7	217.5	314.9
10/29/2004	612.2	215.6	312.1
10/30/2004	617.74	217.5	314.9
10/31/2004	619.41	218.1	315.7
11/1/2004	615.7	216.8	313.8
11/2/2004	609.8	214.7	310.8
11/3/2004	609.46	214.6	310.7
11/4/2004	613.58	216.0	312.8
11/5/2004	615.85	216.8	313.9
11/6/2004	621.85	219.0	317.0
11/7/2004	623.45	219.5	317.8
11/8/2004	623.35	219.5	317.7
11/9/2004	621.95	219.0	317.0
11/10/2004	624.28	219.8	318.2
11/11/2004	624.89	220.0	318.5

	Processing Weight	Emissions	(lb/d)
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
11/12/2004	621.57	218.9	316.8
11/13/2004	624.85	220.0	318.5
11/14/2004	624.55	219.9	318.3
11/15/2004	623.76	219.6	317.9
11/16/2004	623.29	219.5	317.7
11/17/2004	625.03	220.1	318.6
11/18/2004	621.77	218.9	316.9
11/19/2004	625.32	220.2	318.7
11/20/2004	612.57	215.7	312.2
11/21/2004	617.06	217.3	314.5
11/22/2004	612.9	215.8	312.4
11/23/2004	613.4	216.0	312.7
11/24/2004	611.4	215.3	311.6
11/25/2004	621.76	218.9	316.9
11/26/2004	611.3	215.2	311.6
11/27/2004	619.66	218.2	315.9
11/28/2004	614.47	216.4	313.2
11/29/2004	620.1	218.3	316.1
11/30/2004	610.27	214.9	311.1
12/1/2004	603.8	212.6	307.8
12/2/2004	620.3	218.4	316.2
12/3/2004	625.35	220.2	318.8
12/4/2004	624.95	220.0	318.6
12/5/2004	623.15	219.4	317.6
12/6/2004	560.56	197.4	285.7
12/7/2004	525.05	184.9	267.6
12/8/2004	526.8	185.5	268.5
12/9/2004	528.6	186.1	269.4
12/10/2004	529.23	186.3	269.8
12/11/2004	527.35	185.7	268.8
12/12/2004	528.96	186.2	269.6
12/13/2004	575.46	202.6	293.3
12/14/2004	624.75	220.0	318.4
12/15/2004	620.33	218.4	316.2
12/16/2004	625.6	220.3	318.9
12/17/2004	624.8	220.0	318.5
12/18/2004	627.23	220.8	319.7
12/19/2004	626.24	220.5	319.2
12/20/2004	625.66	220.3	318.9
12/21/2004	624.06	219.7	318.1
12/22/2004	626.26	220.5	319.2
12/23/2004	623.8	219.6	318.0
12/24/2004	613.76	216.1	312.8
12/25/2004	615.84	216.8	313.9
12/26/2004	614.36	216.3	313.2
12/27/2004	612.18	215.5	312.0
12/28/2004	621.66	218.9	316.9

	Processing Weight	Emissions	s (lb/d)
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
12/29/2004	624.75	220.0	318.4
12/30/2004	615.5	216.7	313.7
12/31/2004	619.05	218.0	315.5
1/1/2005	625.15	220.1	318.7
1/2/2005	625.47	220.2	318.8
1/3/2005	623.67	219.6	317.9
1/4/2005	619.28	218.0	315.7
1/5/2005	625.12	220.1	318.6
1/6/2005	622.65	219.2	317.4
1/7/2005	624.18	219.8	318.2
1/8/2005	394.95	139.1	201.3
1/9/2005	0	0.0	0.0
1/10/2005	0	0.0	0.0
1/11/2005	0	0.0	0.0
1/12/2005	70.5	24.8	35.9
1/13/2005	604.95	213.0	308.4
1/14/2005	604.95	213.0	308.4
1/15/2005	609.4	214.6	310.6
1/16/2005	623.36	219.5	317.7
1/17/2005	612.43	215.6	312.2
1/18/2005	622.76	219.3	317.4
1/19/2005	625.56	220.3	318.9
1/20/2005	625.36	220.2	318.8
1/21/2005	623.05	219.4	317.6
1/22/2005	624.81	220.0	318.5
1/23/2005	623.24	219.4	317.7
1/24/2005	623.35	219.5	317.7
1/25/2005	615.46	216.7	313.7
1/26/2005	610.98	215.1	311.4
1/27/2005	611.29	215.2	311.6
1/28/2005	626.05	220.4	319.1
1/29/2005	613.1	215.9	312.5
1/30/2005	624.08	219.7	318.1
1/31/2005	623.5	219.5	317.8
2/1/2005	624.82	220.0	318.5
2/2/2005	624.3	219.8	318.2
2/3/2005	623.7	219.6	317.9
2/4/2005	624.9	220.0	318.5
2/5/2005	625.4	220.2	318.8
2/6/2005	621.48	218.8	316.8
2/7/2005	619.75	218.2	315.9
2/8/2005	624.99	220.1	318.6
2/9/2005	612.32	215.6	312.1
2/10/2005	615	216.5	313.5
2/11/2005	616.02	216.9	314.0
2/12/2005	615.2	216.6	313.6
2/13/2005	614.7	216.4	313.3

	Processing Weight	Emissions	(lb/d)
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
2/14/2005	623.67	219.6	317.9
2/15/2005	624.19	219.8	318.2
2/16/2005	606.1	213.4	308.9
2/17/2005	625.55	220.3	318.9
2/18/2005	625.34	220.2	318.8
2/19/2005	623.82	219.6	318.0
2/20/2005	625.8	220.3	319.0
2/21/2005	623.61	219.6	317.9
2/22/2005	615.1	216.6	313.5
2/23/2005	620.32	218.4	316.2
2/24/2005	615.2	216.6	313.6
2/25/2005	623	219.4	317.6
2/26/2005	625.2	220.1	318.7
2/27/2005	624.8	220.0	318.5
2/28/2005	625.44	220.2	318.8
3/1/2005	625.62	220.3	318.9
3/2/2005	625.62	220.3	318.9
3/3/2005	624.01	219.7	318.1
3/4/2005	624.9	220.0	318.5
3/5/2005	623.44	219.5	317.8
3/6/2005	625.4	220.2	318.8
3/7/2005	622.26	219.1	317.2
3/8/2005	622.34	219.1	317.2
3/9/2005	623.1	219.4	317.6
3/10/2005	625.7	220.3	318.9
3/11/2005	624.6	219.9	318.4
3/12/2005	618.32	217.7	315.2
3/13/2005	614.72	216.4	313.3
3/14/2005	617.5	217.4	314.8
3/15/2005	623.46	219.5	317.8
3/16/2005	627.46	220.9	319.8
3/17/2005	623.56	219.6	317.8
3/18/2005	625.07	220.1	318.6
3/19/2005	621.22	218.7	316.6
3/20/2005	625.07	220.1	318.6
3/21/2005	625.62	220.3	318.9
3/22/2005	615.9	216.9	313.9
3/23/2005	620.6	218.5 214.7	316.3
3/24/2005	609.9		310.9 317.5
3/25/2005	622.8	219.3	
3/26/2005	623.9	219.7	318.0 319.0
3/27/2005	625.8	220.3 212.6	319.0 307.8
3/28/2005	603.9 621.35	212.0	316.7
3/29/2005 3/30/2005	621.35 617.93	217.6	315.0
		217.6	318.1
3/31/2005	624.09 625.53	219.7	318.8
4/1/2005	625.53	220.2	510.0

	Processing Weight	Emissions	(lb/d)
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
4/2/2005	626.15	220.5	319.2
4/3/2005	608.95	214.4	310.4
4/4/2005	586.15	206.4	298.8
4/5/2005	526.7	185.4	268.5
4/6/2005	625	220.1	318.6
4/7/2005	619.7	218.2	315.9
4/8/2005	611.8	215.4	311.8
4/9/2005	524.4	184.6	267.3
4/10/2005	613.1	215.9	312.5
4/11/2005	621.6	218.9	316.8
4/12/2005	621.23	218.7	316.7
4/13/2005	606.64	213.6	309.2
4/14/2005	614.26	216.3	313.1
4/15/2005	623.27	219.5	317.7
4/16/2005	618.26	217.7	315.1
4/17/2005	616.07	216.9	314.0
4/18/2005	622.43	219.2	317.3
4/19/2005	620.1	218.3	316.1
4/20/2005	615.92	216.9	313.9
4/21/2005	608.84	214.4	310.3
4/22/2005	623.13	219.4	317.6
4/23/2005	624.36	219.8	318.3
4/24/2005	625.36	220.2	318.8
4/25/2005	623.72	219.6	317.9
4/26/2005	621.78	218.9	316.9
4/27/2005	624.77	220.0	318.5
4/28/2005	590.72	208.0	301.1
4/29/2005	560.35	197.3	285.6
4/30/2005	665	234.1	339.0
5/1/2005	674.15	237.4	343.6
5/2/2005	639.3	225.1	325.9
5/3/2005	624.9	220.0	318.5
5/4/2005	626.07	220.4 220.2	319.1 318.7
5/5/2005	625.26	220.2	309.1
5/6/2005	606.46	213.5	317.4
5/7/2005	622.77	219.5	318.4
5/8/2005	624.67 617.35	219.9	314.7
5/9/2005 5/10/2005		220.1	314.7
5/10/2005	625.19 625.69	220.1	318.9
5/12/2005	599.85	211.2	305.8
5/13/2005	623.5	219.5	317.8
5/14/2005	624.59	219.9	318.4
5/15/2005	621.48	218.8	316.8
5/16/2005	625.6	220.3	318.9
5/17/2005	622.3	219.1	317.2
5/18/2005	627.45	220.9	319.8
5,10,2005	027.75		0.010

	Processing Weight	Emissions	; (lb/d)
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
5/19/2005	614.15	216.2	313.0
5/20/2005	625.41	220.2	318.8
5/21/2005	625.12	220.1	318.6
5/22/2005	625.3	220.2	318.7
5/23/2005	625.62	220.3	318.9
5/24/2005	625.08	220.1	318.6
5/25/2005	625.8	220.3	319.0
5/26/2005	623.06	219.4	317.6
5/27/2005	626.25	220.5	319.2
5/28/2005	617.04	217.3	314.5
5/29/2005	522.2	183.9	266.2
5/30/2005	626.05	220.4	319.1
5/31/2005	621.76	218.9	316.9
6/1/2005	626.25	220.5	319.2
6/2/2005	626.34	220.5	319.3
6/3/2005	618.25	217.7	315.1
6/4/2005	613.02	215.8	312.5
6/5/2005	613.7	216.1	312.8
6/6/2005	567	199.6	289.0
6/7/2005	609.14	214.5	310.5
6/8/2005	619.1	218.0	315.6
6/9/2005	625.7	220.3	318.9
6/10/2005	624.28	219.8	318.2
6/11/2005	624.24	219.8	318.2
6/12/2005	625.2	220.1	318.7
6/13/2005	623.35	219.5	317.7
6/14/2005	607.29	213.8	309.5
6/15/2005	612.3	215.6	312.1
6/16/2005	617.4	217.4	314.7
6/17/2005	569.97	200.7	290.5
6/18/2005	587.44	206.8	299.4
6/19/2005	625.47	220.2	318.8
6/20/2005	624.9	220.0	318.5
6/21/2005	620.41	218.4	316.2
6/22/2005	624.36	219.8	318.3
6/23/2005	624.16	219.8	318.1
6/24/2005	625.05	220.1	318.6
6/25/2005	625.3	220.2	318.7
6/26/2005	622.55	219.2	317.3
6/27/2005	623.63	219.6	317.9
6/28/2005	625.3	220.2	318.7
6/29/2005	623.3	219.5	317.7
6/30/2005	624.6	219.9	318.4
7/1/2005	617.89	217.6	315.0
7/2/2005	620.22	218.4	316.1
7/3/2005	614.74	216.4	313.3
7/4/2005	615.22	216.6	313.6

	Processing Weight	Emissions	; (lb/d)
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
7/5/2005	625.23	220.1	318.7
7/6/2005	624.55	219.9	318.3
7/7/2005	625.25	220.1	318.7
7/8/2005	624	219.7	318.1
7/9/2005	617.78	217.5	314.9
7/10/2005	622.79	219.3	317.5
7/11/2005	622.94	219.3	317.5
7/12/2005	618.4	217.7	315.2
7/13/2005	616	216.9	314.0
7/14/2005	615.9	216.9	313.9
7/15/2005	622.7	219.2	317.4
7/16/2005	623.79	219.6	318.0
7/17/2005	624.4	219.8	318.3
7/18/2005	614.5	216.4	313.2
7/19/2005	625.25	220.1	318.7
7/20/2005	629.04	221.5	320.6
7/21/2005	625.7	220.3	318.9
7/22/2005	623.48	219.5	317.8
7/23/2005	626.23	220.5	319.2
7/24/2005	625.88	220.4	319.0
7/25/2005	626.43	220.6	319.3
7/26/2005	56.9	20.0	29.0
7/27/2005	588.6	207.2	300.0
7/28/2005	625.6	220.3	318.9
7/29/2005	616.9	217.2	314.4
7/30/2005	615.4	216.7	313.7
7/31/2005	621.44	218.8	316.8
8/1/2005	617.64	217.5	314.8
8/2/2005	623.53	219.5	317.8
8/3/2005	631.52	222.4	321.9
8/4/2005	626.59	220.6	319.4
8/5/2005	624.7	220.0	318.4
8/6/2005	624.14	219.8	318.1
8/7/2005	622.6	219.2	317.4
8/8/2005	624.4	219.8	318.3
8/9/2005	614.88	216.5	313.4
8/10/2005	617.57	217.4	314.8
8/11/2005	590.4	207.9	300.9
8/12/2005	595.66	209.7	303.6
8/13/2005	599.8	211.2	305.7
8/14/2005	598.8	210.8	305.2
8/15/2005	598.45	210.7	305.0
8/16/2005	598.37	210.7	305.0
8/17/2005	597.83	210.5	304.7
8/18/2005	596.25	209.9	303.9
8/19/2005	597.4	210.3	304.5
8/20/2005	594.9	209.5	303.2

	Processing Weight	Emissions (lb/d)	
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
8/21/2005	600.48	211.4	306.1
8/22/2005	600.38	211.4	306.0
8/23/2005	601.4	211.8	306.5
8/24/2005	597.7	210.4	304.7
8/25/2005	600.5	211.4	306.1
8/26/2005	584.06	205.6	297.7
8/27/2005	598.44	210.7	305.0
8/28/2005	598.82	210.8	305.2
8/29/2005	587.54	206.9	299.5
8/30/2005	593.89	209.1	302.7
8/31/2005	600.96	211.6	306.3
9/1/2005	600.85	211.6	306.3
9/2/2005	597.35	210.3	304.5
9/3/2005	513.67	180.9	261.8
9/4/2005	599.55	211.1	305.6
9/5/2005	599.28	211.0	305.5
9/6/2005	594.48	209.3	303.0
9/7/2005	590.48	207.9	301.0
9/8/2005	596.78	210.1	304.2
9/9/2005	590.4	207.9	300.9
9/10/2005	591	208.1	301.2
9/11/2005	600.62	211.5	306.1
9/12/2005	599.99	211.3	305.8
9/13/2005	599.39	211.0	305.5
9/14/2005	599.05	210.9	305.3
9/15/2005	592.7	208.7	302.1
9/16/2005	600.9	211.6	306.3
9/17/2005	601.3	211.7	306.5
9/18/2005	600.6	211.5	306.1
9/19/2005	601.85	211.9	306.8
9/20/2005	601.4	211.8	306.5
9/21/2005	601.4	211.8	306.5
9/22/2005	600.39	211.4	306.0
9/23/2005	592.06	208.5	301.8
9/24/2005	0	0.0	0.0
9/25/2005	0	0.0	0.0
9/26/2005	0	0.0	0.0
9/27/2005	0	0.0	0.0
9/28/2005	0	0.0	0.0
9/29/2005	0	0.0	0.0
9/30/2005	0	0.0	0.0
10/1/2005	279.17	98.3	142.3
10/2/2005	598.84	210.8	305.2
10/3/2005	629.98	221.8	321.1
10/4/2005	644.66	227.0	328.6
10/5/2005	660.77	232.7	336.8
10/6/2005	578.8	203.8	295.0

	Processing Weight	Emissions	s (lb/d)
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
10/7/2005	621	218.7	316.5
10/8/2005	521.9	183.8	266.0
10/9/2005	555.9	195.7	283.4
10/10/2005	620.7	218.5	316.4
10/11/2005	622.89	219.3	317.5
10/12/2005	623.37	219.5	317.7
10/13/2005	622.21	219.1	317.2
10/14/2005	624.36	219.8	318.3
10/15/2005	623.28	219.5	317.7
10/16/2005	622.69	219.2	317.4
10/17/2005	619.96	218.3	316.0
10/18/2005	624.8	220.0	318.5
10/19/2005	623.9	219.7	318.0
10/20/2005	587.27	206.8	299.3
10/21/2005	570.3	200.8	290.7
10/22/2005	575.6	202.7	293.4
10/23/2005	570.4	200.8	290.7
10/24/2005	563.3	198.3	287.1
10/25/2005	593.21	208.9	302.4
10/26/2005	622.55	219.2	317.3
10/27/2005	626.06	220.4	319.1
10/28/2005	621.79	218.9	316.9
10/29/2005	622.4	219.1	317.3
10/30/2005	594.3	209.3	302.9
10/31/2005	507.5	178.7	258.7
11/1/2005	536.6	188.9	273.5
11/2/2005	623.52	219.5	317.8
11/3/2005	623.9	219.7	318.0
11/4/2005	654.2	230.3	333.5
11/5/2005	623.1	219.4	317.6
11/6/2005	574.2	202.2	292.7
11/7/2005	432.4	152.2	220.4
11/8/2005	400.79	141.1	204.3
11/9/2005	403.56	142.1	205.7
11/10/2005	427.22	150.4	217.8
11/11/2005	657.69	231.6	335.2
11/12/2005	606.2	213.4	309.0
11/13/2005	576.8	203.1	294.0
11/14/2005	574	202.1	292.6
11/15/2005	577.2	203.2	294.2
11/16/2005	577	203.2	294.1
11/17/2005	599.8	211.2	305.7
11/18/2005	622.85	219.3	317.5
11/19/2005	494.47	174.1	252.0
11/20/2005	621.61	218.9	316.8
11/21/2005	611.57	215.3	311.7
11/22/2005	575.48	202.6	293.3

	Processing Weight	Emissions (lb/d)	
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
11/23/2005	554.65	195.3	282.7
11/24/2005	577.2	203.2	294.2
11/25/2005	572.57	201.6	291.9
11/26/2005	553.42	194.9	282.1
11/27/2005	474.04	166.9	241.6
11/28/2005	526.78	185.5	268.5
11/29/2005	573.9	202.1	292.5
11/30/2005	569.5	200.5	290.3
12/1/2005	498.36	175.5	254.0
12/2/2005	576.13	202.9	293.7
12/3/2005	576.6	203.0	293.9
12/4/2005	492.7	173.5	251.1
12/5/2005	244.83	86.2	124.8
12/6/2005	320.8	113.0	163.5
12/7/2005	379.4	133.6	193.4
12/8/2005	355.22	125.1	181.1
12/9/2005	323.84	114.0	165.1
12/10/2005	381.65	134.4	194.5
12/11/2005	383.56	135.0	195.5
12/12/2005	383.3	135.0	195.4
12/13/2005	481.64	169.6	245.5
12/14/2005	625.4	220.2	318.8
12/15/2005	625.3	220.2	318.7
12/16/2005	617.05	217.3	314.5
12/17/2005	618.55	217.8	315.3
12/18/2005	614.3	216.3	313.1
12/19/2005	612.55	215.7	312.2
12/20/2005	620.9	218.6	316.5
12/21/2005	621.9	219.0	317.0
12/22/2005	624.2	219.8	318.2
12/23/2005	594.96	209.5	303.3
12/24/2005	591.76	208.4	301.6
12/25/2005	181.9	64.0	92.7
12/26/2005	0	0.0	0.0
12/27/2005	326.1	114.8	166.2
12/28/2005	606.19	213.4	309.0
12/29/2005	615.56	216.7	313.8
12/30/2005	622.86	219.3	317.5
12/31/2005	624.5	219.9	318.3
1/1/2006	616.8	217.2	314.4
1/2/2006	614.63	216.4	313.3
1/3/2006	620.85	218.6	316.5
1/4/2006	624.38	219.8	318.3
1/5/2006	624.11	219.7	318.1
1/6/2006	624.17	219.8	318.2
1/7/2006	625.15	220.1	318.7
1/8/2006	569.6	200.6	290.3

	Processing Weight	Emissions	(lb/d)
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
1/9/2006	607.85	214.0	309.8
1/10/2006	624.9	220.0	318.5
1/11/2006	624.28	219.8	318.2
1/12/2006	624.35	219.8	318.2
1/13/2006	555.88	195.7	283.3
1/14/2006	434.6	153.0	221.5
1/15/2006	612.5	215.7	312.2
1/16/2006	605.6	213.2	308.7
1/17/2006	625.6	220.3	318.9
1/18/2006	625.68	220.3	318.9
1/19/2006	625.7	220.3	318.9
1/20/2006	621.88	219.0	317.0
1/21/2006	619.98	218.3	316.0
1/22/2006	612.88	215.8	312.4
1/23/2006	615.78	216.8	313.9
1/24/2006	615.7	216.8	313.8
1/25/2006	615.6	216.8	313.8
1/26/2006	613.6	216.0	312.8
1/27/2006	626.06	220.4	319.1
1/28/2006	625.02	220.1	318.6
1/29/2006	625.31	220.2	318.7
1/30/2006	624.96	220.0	318.6
1/31/2006	613.16	215.9	312.5
2/1/2006	624.88	220.0	318.5
2/2/2006	624.44	219.9	318.3
2/3/2006	594.21	209.2	302.9
2/4/2006	621.21	218.7	316.6
2/5/2006	621.78	218.9	316.9
2/6/2006	617.9	217.6	315.0
2/7/2006	624.55	219.9	318.3
2/8/2006	624.16	219.8	318.1
2/9/2006	622.1	219.0	317.1
2/10/2006	613.58	216.0	312.8
2/11/2006	499.39	175.8	254.6
2/12/2006	554.13	195.1	282.5
2/13/2006	563.44	198.4	287.2
2/14/2006	572.6	201.6	291.9
2/15/2006	570.8	201.0	290.9
2/16/2006	551.2	194.1	281.0
2/17/2006	575.03	202.5	293.1
2/18/2006	576.74	203.1	294.0
2/19/2006	575.78	202.7	293.5
2/20/2006	565.16	199.0	288.1
2/21/2006	362.54	127.6	184.8
2/22/2006	565.72	199.2	288.4
2/23/2006	568.19	200.1	289.6
2/24/2006	547.78	192.9	279.2

	Processing Weight	Emissions (lb/d)	
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
2/25/2006	576.48	203.0	293.8
2/26/2006	574.7	202.3	292.9
2/27/2006	574.09	202.1	292.6
2/28/2006	574.55	202.3	292.9
3/1/2006	576.03	202.8	293.6
3/2/2006	571.92	201.4	291.5
3/3/2006	576.28	202.9	293.7
3/4/2006	575.58	202.7	293.4
3/5/2006	538.83	189.7	274.7
3/6/2006	575.19	202.5	293.2
3/7/2006	575	202.5	293.1
3/8/2006	575.94	202.8	293.6
3/9/2006	455.4	160.3	232.1
3/10/2006	573.92	202.1	292.5
3/11/2006	569.42	200.5	290.2
3/12/2006	564.86	198.9	287.9
3/13/2006	564.05	198.6	287.5
3/14/2006	564.05	198.6	287.5
3/15/2006	576.65	203.0	293.9
3/16/2006	574.39	202.2	292.8
3/17/2006	574.98	202.4	293.1
3/18/2006	574.63	202.3	292.9
3/19/2006	574.27	202.2	292.7
3/20/2006	572.83	201.7	292.0
3/21/2006	567.72	199.9	289.4
3/22/2006	565.45	199.1	288.2
3/23/2006	566.47	199.5	288.7
3/24/2006	570.46	200.9	290.8
3/25/2006	471.21	165.9	240.2
3/26/2006	1.6	0.6	0.8
3/27/2006	0	0.0	0.0
3/28/2006	0	0.0	0.0
3/29/2006	0	0.0	0.0
3/30/2006	0	0.0	0.0
3/31/2006	0	0.0	0.0
4/1/2006	0	0.0	0.0
4/2/2006	510.86	179.9	260.4
4/3/2006	465.7	164.0	237.4
4/4/2006	382.56	134.7	195.0
4/5/2006	407.97	143.6	208.0
4/6/2006	496.99	175.0	253.3
4/7/2006	576.75	203.1	294.0
4/8/2006	575.38	202.6	293.3
4/9/2006	575.58	202.7	293.4
4/10/2006	565.71	199.2	288.4
4/11/2006	528.25	186.0 185.7	269.3 268.8
4/12/2006	527.41	185.7	268.8

	Processing Weight	Emissions (lb/d)	
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
4/13/2006	512.95	180.6	261.5
4/14/2006	576.38	202.9	293.8
4/15/2006	576.57	203.0	293.9
4/16/2006	576.38	202.9	293.8
4/17/2006	574.08	202.1	292.6
4/18/2006	545.5	192.1	278.1
4/19/2006	576.8	203.1	294.0
4/20/2006	567.2	199.7	289.1
4/21/2006	553.4	194.8	282.1
4/22/2006	406.5	143.1	207.2
4/23/2006	577	203.2	294.1
4/24/2006	576.9	203.1	294.1
4/25/2006	572.18	201.5	291.7
4/26/2006	574.88	202.4	293.0
4/27/2006	576.02	202.8	293.6
4/28/2006	576.9	203.1	294.1
4/29/2006	576.9	203.1	294.1
4/30/2006	576.9	203.1	294.1
5/1/2006	577.55	203.4	294.4
5/2/2006	572.4	201.5	291.8
5/3/2006	571.5	201.2	291.3
5/4/2006	577	203.2	294.1
5/5/2006	560.47	197.3	285.7
5/6/2006	569.4	200.5	290.2
5/7/2006	567.2	199.7	289.1
5/8/2006	565.8	199.2	288.4
5/9/2006	575	202.5	293.1
5/10/2006	572.65	201.6	291.9
5/11/2006	577.65	203.4	294.4
5/12/2006	569.63	200.6	290.4
5/13/2006	577.02	203.2	294.1
5/14/2006	576.01	202.8	293.6
5/15/2006	543.77	191.5	277.2
5/16/2006	569.47	200.5	290.3
5/17/2006	567.46	199.8	289.2
5/18/2006	563.02	198.2	287.0
5/19/2006	575.42	202.6	293.3
5/20/2006	574.64	202.3	292.9
5/21/2006	577.46	203.3	294.3
5/22/2006	566.64	199.5	288.8
5/23/2006	586.64	206.6	299.0
5/24/2006	612.61	215.7	312.3
5/25/2006	589.1	207.4	300.3
5/26/2006	570	200.7	290.5
5/27/2006	570.66	200.9	290.9
5/28/2006	570.34	200.8	290.7
5/29/2006	576.9	203.1	294.1

	Processing Weight	Emissions (lb/d)	
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
5/30/2006	233.9	82.4	119.2
5/31/2006	577	203.2	294.1
6/1/2006	576.82	203.1	294.0
6/2/2006	568.86	200.3	290.0
6/3/2006	567.08	199.7	289.1
6/4/2006	568.18	200.1	289.6
6/5/2006	505.85	178.1	257.8
6/6/2006	521.3	183.5	265.7
6/7/2006	577	203.2	294.1
6/8/2006	574.3	202.2	292.7
6/9/2006	576.65	203.0	293.9
6/10/2006	570.38	200.8	290.7
6/11/2006	575.84	202.8	293.5
6/12/2006	577.46	203.3	294.3
6/13/2006	573.85	202.1	292.5
6/14/2006	570.09	200.7	290.6
6/15/2006	569.88	200.7	290.5
6/16/2006	577.58	203.4	294.4
6/17/2006	577.28	203.3	294.3
6/18/2006	576.99	203.2	294.1
6/19/2006	576.92	203.1	294.1
6/20/2006	576.97	203.1	294.1
6/21/2006	574.77	202.4	293.0
6/22/2006	574.97	202.4	293.1
6/23/2006	577.1	203.2	294.2
6/24/2006	576.81	203.1	294.0
6/25/2006	577.55	203.4	294.4
6/26/2006	577	203.2	294.1
6/27/2006	576.49	203.0	293.9
6/28/2006	576.81	203.1	294.0
6/29/2006	569.65	200.6	290.4
6/30/2006	545.5	192.1	278.1
7/1/2006	545.23	192.0	277.9
7/2/2006	542.22	190.9	276.4
7/3/2006	540.06	190.2	275.3
7/4/2006	552.05	194.4	281.4
7/5/2006	357.2	125.8	182.1
7/6/2006	0	0.0	0.0
7/7/2006	299.76	105.5	152.8
7/8/2006	547.52	192.8	279.1
7/9/2006	558.68	196.7	284.8
7/10/2006	576.48	203.0	293.8
7/11/2006	570	200.7	290.5
7/12/2006	572.3	201.5	291.7
7/13/2006	577	203.2	294.1
7/14/2006	540.73	190.4	275.6
7/15/2006	577.83	203.5	294.5

	Processing Weight	Emissions	; (lb/d)
	ton/day	Front 1/2 Only	Total PM10
Date	Kiln 2	Kiln 2	Kiln2
7/16/2006	577.63	203.4	294.4
7/17/2006	576.53	203.0	293.9
7/18/2006	576.38	202.9	293.8
7/19/2006	576.38	202.9	293.8
7/20/2006	573.38	201.9	292.3
7/21/2006	577.35	203.3	294.3
7/22/2006	575.9	202.8	293.5
7/23/2006	388.82	136.9	198.2
7/24/2006	0	0.0	0.0
7/25/2006	185.73	65.4	94.7
7/26/2006	577.46	203.3	294.3
7/27/2006	575.46	202.6	293.3
7/28/2006	558.85	196.8	284.9
7/29/2006	515.75	181.6	262.9
7/30/2006	576.75	203.1	294.0
7/31/2006	532.88	187.6	271.6
8/1/2006			_
	Kiln 2	Kiln 2	
8/03 - 7/04	600.0	38.7	56.0
8/04 - 7/05	601.6	38.7	56.0
8/05 - 7-06	540.7	34.7	50.3
3-yr			
average	580.8	37.4	54.1