

Bay Area Air Quality Management District

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Permit Evaluation and Statement of Basis for RENEWAL of

MAJOR FACILITY REVIEW PERMIT

for
C & H Sugar Company, Inc.
Facility # B1911

Facility Address:
830 Loring Avenue
Crockett, CA 94525

Mailing Address:
Same as above

Application Engineer: Nancy Yee
Site Engineer: Hari Doss

Application: 13852

TABLE OF CONTENTS

A. Background.....	3
B. Facility Description.....	4
C. Permit Content	5
I. Standard Conditions	5
II. Equipment	6
III. Generally Applicable Requirements	7
IV. Source-Specific Applicable Requirements	9
V. Schedule of Compliance	12
VI. Permit Conditions	13
VII. Applicable Limits and Compliance Monitoring Requirements	15
VIII. Test Methods	24
IX. Permit Shield:	25
X. Glossary:	25
D. Alternate Operating Scenarios:.....	25
E. Compliance Status:	25
F. Differences between the Application and the Proposed Permit:.....	26
Appendix A - BAAQMD Compliance Report.....	27
Appendix B - Engineering Evaluation, Application No. 4650 & 5542	28
Appendix C - Applicability Criteria and CAM Plan for S250.....	29
Appendix D - CAM Assessment for all Sources	30
Appendix E - Glossary.....	31

Permit Evaluation/Statement of Basis For Renewal of Major Facility Review Permit

A. Background

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

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

Pursuant to Regulation 2, Rule 6, section 416, the District has reviewed the terms and conditions of this Major Facility Review permit and determined that they are still valid and correct. This review included an analysis of applicability determinations for all sources, including those that have been modified or permitted since the issuance of the initial Major Facility Review Permit. The review also included an assessment of all monitoring in the permit for sufficiency to determine compliance.

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 B1911. On September 13, 2005, the American Sugar Refining Company became C&H Sugar’s parent company.

C & H Sugar received its initial Title V permit on June 12, 2001. Although the current permit expired on May 31, 2006, the current permit continued to be valid until the District takes final action on the permit renewal. This application is for a permit renewal. The standard sections of the permit have been updated to include new standard language used in all Title V permits. The proposed permit shows all changes to the permit in strikeout/underline format.

The Responsible Official has changed to Kim Merritt, Refinery Manager at 510-787-4301 and the Facility Contact has changed to Tanya Akkerman, Environmental Compliance Manager at 510-787-4352.

The facility has submitted two applications (# 4650 and #5542) since the Major Facility Minor Revision permit was issued on August 14, 2002. Application # 4650 was issued for two emergency gasoline engine generators (loss of exemption). The engines have been in operation

since 1975 and were thus installed before May 17, 2000 when Regulation 1 and Regulation 2-1 were modified to require engines >50 HP to require permits. Permit conditions (#19080) for the two generators were added. Application # 5542 was issued for the replacement of a cyclone (A257) and a wet scrubber (A258) with two baghouses (A314 & A315) in parallel. The abatement devices control emissions from four sources (S246, S247, S248, & S249). As a result, the four sources were removed from Condition # 17425 and added to Condition # 17430. Permit Condition # 20383 for Source S-250, Char Furnace, was omitted from the original Title V and has been added.

The facility has requested removal of the following sources: S330, S331, S332, S333, S334, S335, S336, S337, S338, S340, S341, S342, S343, S344, S345 and S346 (Rotex Screens). These sources are totally enclosed devices used to screen the sugar by particle size and are located indoors. However, C& H Sugar had these sources permitted in July 2000 because after the screening process, the particles were aspirated through A312 (AAF Skimmer) and A313 (Rotoclone). This process resulted in some particulate emissions. In 2005, C& H determined that the screening process is adversely affected by the aspiration. They disconnected all the rotex screens from A312 & A313. Without aspiration and being totally enclosed, the rotex screens are exempted from permits as per Regulation 2-1-103. These sources are also removed from Permit Condition # 17461 as well as A312 & A313.

The facility also removed S206, S223, S270 and S272 permanently from service.

The District proposes to renew the permit. The permit will include modifications requested by the permittee, as well as other modifications by the District, and it will incorporate earlier permit revisions and modifications. The standard sections of the permit have been updated to include new standard language used in all Title V permits and new requirements applicable to all Title V facilities. Also, various other corrections have been made to the permit. The proposed permit shows all changes to the permit in strikeout/underline format.

B. Facility Description

C & H Sugar is a cane sugar manufacturer. They refine, package, and market all of the output from Hawaii's sugar factories. The C&H brand is one of the leading sugar brands in the company's markets (where it is not the de facto leader), largely due to advertisements stressing their exclusive use of [cane sugar](#), believed by some to be superior to sugar from the [sugar beet](#). C & H Sugar receives raw cane sugar by ship at the Crockett refinery. After unloading and storage, the sugar is refined into white or brown sugar. The raw sugar first enters the affination process, where a thin film of syrup is removed from the sugar crystals. After the sugar is dissolved, the clarification process is used to remove insoluble material. Char and carbon are used to remove color, other organics and mineral salts. The liquor is then filtered before it is boiled and recrystallized. White sugar is then dried in granulators, screened to segregate grain sizes, and distributed to various packing lines and to storage for bulk equipment. Brown sugar follows a process similar to the white sugar, but instead of being dried or screened after it is crystallized, it is cured in a special cooling process before being conveyed to packing lines. All sugar types are conveyed to a warehouse for palletizing, storage and shipment.

The major pollutants emitted at the facility are particulate matter and visible emissions from the unloading, storage and sugar refining processes.

There have been no significant changes in process or regulation since the issuance of the initial Title V permit.

Table A shows the 2002 and 2009 plant inventory emissions. Table B shows the change in plant emissions between 2002 and 2009.

Table A

Year	PM (TPY)	ORGANICS (TPY)	NO_x (TPY)	SO₂ (TPY)	CO (TPY)
2001	48.3	12.5	7.5	0	62.0
2009	40.6	12.7	6.7	0	58.5

Table B

Change in Plant Emissions (TPY)	-7.7	+0.2	-0.8	0	-1.5
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C. Permit Content

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

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

Changes to Permit

- The dates of adoption and approval of rules in Standard Condition 1.A have been updated.
- The word “Basis” has been added to each citation for clarity.
- The dates of each regulation’s most recent version have been changed to the MM/DD/YYYY format.
- SIP Regulation 2, Rule 4 - Permits, Emissions banking and BAAQMD Regulation 2, Rule 6 Permits, Major Facility Review has been added to Standard Condition I.A.
- The following language was added to Standard Condition I.B.1: “If the permit renewal has not been issued by [APPLICABLE DATE], but a complete application for renewal has been submitted in accordance with the above deadlines, the existing permit will continue in force

until the District takes final action on the renewal application.” This is the “application shield” pursuant to BAAQMD Regulation 2-6-407.

- The following language was added to Standard Condition I.B.2: “reopening the permit for cause prior to the end of the term and terminating, revoking and reissuing, or modifying the permit” to satisfy Regulation 2-6-409.8, which requires the District to specify the conditions under which the permit may be reopened for cause and modified, revoked, reissued, or terminated, prior to the end of the term.
- Standard Condition I.B.11, which requires the responsible official to certify all documents submitted, was added to conform to changes in Regulation 2, Rule 6.
- The following language was added as Standard Condition I.B.12: "The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307)." The purpose is to reiterate that the Permit Holder is responsible for ensuring that all activities at the facility comply with all applicable requirements.
- Standard Condition I.E.1 requiring the permit holder to provide any information, records, and reports requested or specified by the APCO, was added because it was omitted in error.
- The dates of the reporting periods and reporting deadlines have been added to Standard Conditions I.F and I.G for additional clarity.
- The first sentence of Standard Condition I.F has been changed from " All required monitoring reports must be submitted to the District at least once every six months." to " Reports of all required monitoring must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. " to conform more closely to BAAQMD Regulation 2-6-409.18.
- Standard Condition I.H was modified to conform to the current standard.
- Standard Condition I.J has been added to clarify that the capacity limits shown in Table II-A are enforceable limits.
- The dates in Subsection A “Administrative Requirements” have been updated.

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., A-24). If a source is also an abatement device, such as when an engine controls VOC emissions, it will be listed in the abatement device table but will have an “S” number. An

abatement device may also be a source (such as a thermal oxidizer that burns fuel) of secondary emissions. If the primary function of a device is to control emissions, it is considered an abatement (or “A”) device. If the primary function of a device is a non-control function, the device is considered to be a source (or “S”).

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-A has been updated because the following recently exempted sources: S330, S331, S332, S333, S334, S335, S336, S337, S338, S340, S341, S342, S343, S344, S345 and S346 (Rotex Screens). These sources are no longer abated by A312 & A313. These sources will be removed from Table II-A. Related permit condition # 17461 is removed.
- S206, S223, S270, & S272 were removed from service in 09/2006. All references to those sources and associated permit conditions have been deleted.
- Naming configurations for S218, S219, & S220 were changed based on a marketing strategy.
- Table II-A was further updated because S350 and S351 (Gasoline fueled emergency standby fire pump engines) were permitted through application # 4650.
- Table II-B has been updated because A257, cyclone and A258, wet scrubber were replaced by A314 and A315, baghouses through Application # 5542 in 2003. The sources abated are S246, S247, S248 and S249. Related permit condition # 17530 was removed and replaced by condition # 17425.
- A216 (abating S223), A275 (abating S270) and A277 (abating S272) were removed.
- BAAQMD Regulation 6, Rule 1 has been added since the District modified the labeling from Regulation 6 to Regulation 6, Rule 1.

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:

- Language has been added to Section III to clarify that this section contains requirements that may apply to temporary sources. This provision allows contractors that have “portable” equipment permits that require them to comply with all applicable requirements to work at the facility on a temporary basis, even if the permit does not specifically list the temporary source. Examples are temporary sand-blasting or soil-vapor extraction equipment.
- Language has been added to Section III to say that SIP standards are now found on EPA's website and are not included as part of the permit.
- The note regarding SIP information from the Rule Development Section has been deleted since the SIP standards are now found on EPA's website.
- Table III has been updated by adding the following rules and standards to conform to current practice:
 - BAAQMD Regulation 2, Rule 1, General Requirements
 - SIP Regulation 2, Rule 1, General Requirements
 - BAAQMD Regulation 2, Rule 2, Permits, New Source Review
 - SIP Regulation 2, Rule 2 Permits, New Source Review
 - BAAQMD Regulation 2, Rule 3, Permits, Power Plants
 - BAAQMD Regulation 2, Rule 4, Permits, Emissions Banking
 - SIP Regulation 2, Rule 4, Permits, Emissions Banking
 - BAAQMD Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
 - BAAQMD Regulation 2, Rule 6, Permits, Major Facility Review
 - SIP Regulation 2, Rule 6, Permits, Major Facility Review
 - BAAQMD Regulation 2, Rule 9, Permits, Interchangeable Emission Reduction Credits
 - BAAQMD Regulation 3, Fees
 - SIP Regulation 3, Fees
 - SIP Regulation 5, Open Burning
 - BAAQMD Regulation 6, Rule 1, Particulate Matter
 - SIP Regulation 6, Particulate Matter and Visible Emissions
 - BAAQMD Regulation 8, Rule 2, Miscellaneous Operations
 - SIP Regulation 8, Rule 2, Miscellaneous Operations
 - BAAQMD Regulation 8, Rule 40 Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks
 - BAAQMD Regulation 8, Rule 47, Organic Compounds -Air Stripping and Soil Vapor Extraction Operations
 - SIP Regulation 8, Rule 47, Organic Compounds -Air Stripping and Soil Vapor Extraction Operations
 - SIP Regulation 8, Rule 51, Adhesive and Sealant Products
 - BAAQMD Regulation 9, Rule 1, Sulfur Dioxide
 - SIP Regulation 9, Rule 1, Sulfur Dioxide
 - SIP Regulation 12, Rule 4, Miscellaneous Standards of Performance - Sandblasting

- California Health and Safety Code Section 41750 et seq., Portable Equipment
- California Health and Safety Code Section 44300 et seq., Air Toxics “Hot Spots” Information and Assessment Act of 1987
- California Health and Safety Code Section 93115 et seq., Airborne Toxic Control Measure for Stationary Compression Ignition Engines
- 40 CFR Part 61, Subpart M, National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos
- 40 CFR Part 82.161 and 86.166 Recycling and Emissions Reductions - Technician Certification and - Reporting and Recordkeeping Provisions - descriptions have been updated
- 40 CFR 82, Subpart H Protection of Stratospheric Ozone; Halon Emissions Reduction
- Title 40 Part 82 Subpart H 82.270(b) Prohibitions, Halon
- The dates of adoption or approval of the rules and their “federal enforceability” status in Table III have also been updated.

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.

Complex Applicability Determinations:

Compliance Assurance Monitoring: CAM

S-250 Herreschoff Char Furnace abated by A-259 Char Furnace Wet Scrubber:

Applicability of 40 CFR 64, Compliance Assurance Monitoring (CAM)

Per 40 CFR 64.2(a), emission units (as defined in 40 CFR parts 64.1 and 70) may be subject to 40 CFR 64, Compliance Assurance Monitoring, if the units are subject to a federally enforceable requirement for a pollutant, the pollutant is controlled by an abatement device, and the emissions of the pollutant before abatement are more than 100% of the major source thresholds.

Compliance Assurance Monitoring: The applicability of compliance assurance monitoring (CAM) must be considered at a facility if the facility uses an emission control device to achieve compliance with a federally enforceable emission limit. Because the facility has determined that the pre-abatement emissions for PM10 will be >100 TPY, the facility has opted to achieve compliance with the emission limit by CAM for a wet scrubber, identified as source A-259. The wet scrubber controls particulate matter from the S-250, Herreshoff Char Furnace that is subject to the requirements of Regulation 6, Rule 310 & 311 (0.15 gr/dscf).

To comply with 40 CFR 64.3, the following CAM approach will be followed:

Table 1 – Monitoring Approach

	Indicator No. 1	Indicator No. 2
I. Indicator	Scrubber water flow rate.	Scrubber pressure drop.
Measurement Approach	Water flow into the scrubber is measured with two gauges.	Differential pressure across scrubber is measured using a magnehelic gauge
II. Indicator Range	Total water flow to the scrubber 200 gpm or greater.	Pressure drop across the scrubber of at least 0.5 in. H ₂ O.
III. Performance Criteria		
A. Data Representativeness	The flow meters are located between the pumps and the inlet to the scrubber. Estimated accuracy: ±10%.	The connections for the differential pressure gauge are located upstream and downstream of the scrubber in the air ducting. Estimated accuracy: ±10%.
B. Verification of Operational Status	NA – existing equipment	NA – existing equipment
C. QA/QC Practices and Criteria	Meter inspected annually according to preventive maintenance program.	Gauge inspected annually according to preventive maintenance program.
D. Monitoring Frequency	Water flow is monitored continuously.	Differential pressure is monitored continuously.
Data Collection Procedures	Flow will be recorded at least once per 24-hr period when the source is operating.	Differential pressure will be recorded at least once per 24-hr period when the source is operating.

The monitoring plan in Table 1 has been incorporated into Permit Condition# 17430.

Appendix C contains the CAM applicability criteria for S250. The plan is currently in place and includes the following items:

- a. The approved monitoring approach, including the indicators - or the means to measure the indicators - to be monitored;
- b. A definition of excursions;

- c. The duty to conduct monitoring;
- d. Minimum data availability

Appendix D contains a list of all the permitted sources, throughput (actual, and potential), the associated abatement equipment, abatement efficiency, abated pollutant, emissions (actual and PTE) and the CAM assessment.

The following is a list of sources with potential pre-control PM10 emissions greater than 100 TPY. These sources are not subject to CAM because their abatement devices are inherent process equipment as defined in 40CFR 64.1 and are necessary for the proper or safe functioning of the process and/or used for sugar recovery. These devices are installed and operated primarily for purposes other than compliance with air pollution regulations.

S# & Description	Function	Abatement Equipment
S209 - S214: Powdered/Fondant Sugar Pulverizers	Equipment used to grind granulated sugar into powdered sugar	Baghouses: A205, A206, A207, A208, A209, A210
S215: Starch Unloading	Unloading system designed to transfer starch material from a railcar to our silo	Baghouses: A211
S216: Starch Conveying	Conveying system to transfer starch material from the silo to the starch bin	Baghouses: A212
S228: Drivert Production	Sugar processing equipment	Baghouses: A227, A268, A269, A270
S230 - S236: Granulators	Equipment used to dry processed sugar prior to the screening process	Rotoclones: A237, A240 A250, A254 A295, A297, A299, A302, A303, A304, A313
S240: Screened Sugar Distribution	Conveying equipment and storage bins which are used to hold processed sugar which has been separated based on sugar crystal size	Rotoclones: A312, A313

S# & Description	Function	Abatement Equipment
S242: Small Packed Sugar Distribution	Conveying equipment and storage bin used to hold processed sugar which is distributed to packaging machines which are used to package items	Rotoclones: A313
S265, S266: Airveyor	Equipment used to transport processed sugar from the refinery to the powder mill area	Baghouses: A272, A273
S268, S269: 6/10 Hesser Packing Stations	Packaging equipment used to package processed sugar into 10 pound consumer packages	Cyclone: A228, Rotoclones: A274

Changes to permit:

- Section IV has been modified to say that SIP standards are now found on EPA's website and are not included as part of the permit.
- The dates of adoption or approval of the rules and their “federal enforceability” status have been updated.
- BAAQMD Regulation 6, Rule 1 has been added since the District modified the labeling from Regulation 6 to Regulation 6, Rule 1.
- S206 with all the applicable requirements was deleted from Table C.
- Permit Condition # 17430 was removed from Table U and replaced by Permit Condition # 17425.
- Permit Condition # 17430 was modified to incorporate CAM monitoring requirements for A259
- S330, S331, S332, S333, S334, S335, S336, S337, S338, S340, S341, S342, S343, S344, S345, and S346 (Rotex Screens) with all the applicable requirements were deleted from Table TT.
- S350 & S351 with all the applicable requirements were added to Table UU.

V. Schedule of Compliance

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

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

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

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

Changes to permit:

- The phrase “on a timely basis” has been added to the Schedule of Compliance so that the wording follows the federal requirements more closely.

VI. Permit Conditions

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

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

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

The existing permit conditions 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. Permit conditions may also be derived from periodic monitoring requirements pursuant to BAAQMD Regulation 2-5-503, Monitoring.

Each permit condition is identified with a unique numerical identifier, up to five digits. Each part of the condition is also identified by a part number and each subpart is identified by a letter (for example, Condition 789, part 1a).

Conditions that are obsolete or that have no regulatory basis have been deleted from the permit.

Conditions have also been deleted due to the following:

- Redundancy in recordkeeping requirements.
- Redundancy in other conditions, regulations and rules.
- The condition has been superseded by other regulations and rules.
- The equipment has been taken out of service or is exempt.
- The event has already occurred (i.e. initial or start-up source tests).

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

- BACT: This term is used for a condition imposed by the Air Pollution Control Officer (APCO) to ensure compliance with the Best Available Control Technology in Regulation 2-2-301.
- Cumulative Increase: This term is used for a condition imposed by the APCO which limits a source's operation to the operation described in the permit application pursuant to BAAQMD Regulation 2-1-403.
- Offsets: This term is used for a condition imposed by the APCO to ensure compliance with the use of offsets for the permitting of a source or with the banking of emissions from a source pursuant to Regulation 2, Rules 2 and 4.
- PSD: This term is used for a condition imposed by the APCO to ensure compliance with a Prevention of Significant Deterioration permit issued pursuant to Regulation 2, Rule 2.
- TRMP: This term was used for a condition imposed by the APCO to ensure compliance with limits that arise from the District's Toxic Risk Management Policy, but has been replaced by BAAQMD Regulation 2, Rule 5, New Source Review for Toxic Air Contaminants.

Changes to permit:

- The language of the permit conditions has been changed to "The owner/operator shall..." and the sentence structure has been changed accordingly.
- S206 was deleted from Condition # 17425.
- S246, S247, S248, & S249 were deleted from Condition # 17430 and added to Condition # 17425.
- S330, S331, S332, S333, S334, S335, S336, S337, S338, S340, S341, S342, S343, S344, S345, and S346 (Rotex Screens) are now exempt sources and were deleted from Permit Condition # 17461.

- Permit Condition # 17430 was modified to incorporate CAM monitoring requirements for A259.
- Condition # 19080 was added for S350 & S351.
- Condition # 20383 was added for S250.

VII. Applicable Limits and Compliance Monitoring Requirements

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

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

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

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 requirements only when it can support a conclusion that existing monitoring is inadequate.

PM Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S221 Melt Tank, S271: Warehouse/PSS Melt System	BAAQMD Regulation 6-301	Ringelmann 1.0	None – emits inside a building; negligible emissions observed
S222: Confectioners Dryer, S288: Spent Char Handling System	BAAQMD Regulation 6-301	Ringelmann 1.0	None- abated by Rotoclone
S279: Tailings Melt Tanks	BAAQMD Regulation 6-301	Ringelmann 1.0	Visible emissions monitoring
S280, S281, S282: Diatomaceous Earth System	BAAQMD Regulation 6-301	Ringelmann 1.0	None- abated by dust collectors
S-215, S216 Starch Unloading, S217 Paper Baler,	BAAQMD Regulation 6-1-310	0.15 gr/dscf	None- abated by baghouse
S229 Scrap Paper Recovery, S278: Carpenter Shop	BAAQMD Regulation 6-1-310	0.15 gr/dscf	None- abated by Cyclone
S284: Lime Unloading Station – Refinery	BAAQMD Regulation 6-310	0.15 gr/dscf	None – abated by Bin Vent Filter
S284: Lime Unloading Station – Refinery	BAAQMD Regulation 6-310	0.15 gr/dscf	None – abated by Bin Vent Filter

PM Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S224: Bulk Sugar Loading, S225: Steel Silos Conveying to Bulk Loadout, S226, S227: Concrete Silos, Conveying, Bulk Loadout, S230,S231, S230, S231, S232, S233, S234, S235, S236: Grandulators, S240, S241, S242: 5 th Floor Distribution, S252, S253, S254: Bulk Bins, S257, S258, S259, S260: Bulk Granulated Silos, S261: Vibro Conveying/Storage, S268, S269: 6/10 Hesser Packaging Stations, S273, S274, S275: Bulk Granulated Elevators, S276: Custom Products Station, S288: Spent Char Handling System, S307: Lime Unloading Station – Filter Cake	BAAQMD Regulation 6-1-310	0.15 gr/dscf	None- abated by Rotoclone
S221:Melt Tank, S222:Confectioners Dryer , S279: Tailings Melt Tanks	BAAQMD Regulation 6-310	0.15 gr/dscf	None – uses Natural Gas

PM Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S-215, S216: Starch Unloading, S217: Paper Baler, S221: Melt Tank, S222: Confectioners Dryer, S225: Steel Silos Conveying to Bulk Loadout, S226, S227: Concrete Silos, Conveying, Bulk Loadout, S230, S231, S230, S231, S232, S233, S234, S235, S236: Granulators, S240, S241, S242: 5 th Floor Distribution, S252, S253, S254: Bulk Bins, S257, S258, S259, S260: Bulk Granulated Silos	BAAQMD Regulation 6-311	S215: 32.5 lb/hr (throughput = 21.0 tons/hr) S216: 14.1 lb/hr (throughput = 6.0 tons/hr) S221: 22.4 lb/hr (throughput = 12.0 tons/hr) S222: 12.9 lb/hr (throughput = 5.3 tons/hr) S225: 40.0 lb/hr (throughput = 90.0 tons/hr) S226: 40.0 lb/hr (throughput = 120.0 tons/hr) S227: 40.0 lb/hr (throughput = 120.0 tons/hr) S230: 27.9 lb/hr (throughput = 16.7 tons/hr) S231: 27.9 lb/hr (throughput = 16.7 tons/hr) S232: 27.9 lb/hr (throughput = 16.7 tons/hr) S233: 27.9 lb/hr (throughput = 16.7 tons/hr) S234: 40.0 lb/hr (throughput = 37.5 tons/hr) S235: 27.9 lb/hr (throughput = 16.7 tons/hr) S236: 40.0 lb/hr (throughput = 31.3 tons/hr) S240: 40.0 lb/hr (throughput = 170.0 tons/hr) S241: 19.8 lb/hr (throughput = 10.0 tons/hr) S242: 40.0 lb/hr (throughput = 85.0 tons/hr) S252: 31.5 lb/hr (throughput = 20.0 tons/hr) S253: 31.5 lb/hr (throughput = 20.0 tons/hr) S254: 36.6 lb/hr (throughput = 25.0 tons/hr) S288: 32.9 lb/hr (throughput = 21.3 tons/hr)	Records

PM Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S257, S258, S259, S260: Bulk Granulated Silos, S261: Vibro Conveying/Storage, S268, S269: 6/10 Hesser Packaging Stations, S271: Warehouse/PSS Melt System, S273, S274, S275: Bulk Granulated Elevators, S276: Custom Products Station, S279: Tailings Melt Tanks, S280, S281, S282: Diatomaceous Earth System, S284: Lime Unloading Station – Refinery, S288: Spent Char Handling System, S307: Lime Unloading Station – Filter Cake	BAAQMD Regulation 6-311	S257: 40.0 lb/hr (throughput = 62.5 tons/hr) S258: 40.0 lb/hr (throughput = 40.0 tons/hr) S259: 40.0 lb/hr (throughput = 62.5 tons/hr) S260: 40.0 lb/hr (throughput = 62.5 tons/hr) S261: 7.2lb/hr (throughput = 2.2 tons/hr) S268: 24.2 lb/hr (throughput = 13.5 tons/hr) S269: 24.2 lb/hr (throughput = 13.5 tons/hr) S271: 9.6 lb/hr (throughput = 3.4 tons/hr) S273: 20.8 lb/hr (throughput = 10.8 tons/hr) S274: 20.8 lb/hr (throughput = 10.8 tons/hr) S275: 7.8 lb/hr (throughput = 2.5 tons/hr) S276: 4.2 lb/hr (throughput = 1.0 tons/hr) S279: 32.5 lb/hr (throughput = 21.0 tons/hr) S280: 24.8 lb/hr (throughput = 14.0 tons/hr) S281: 8.8 lb/hr (throughput = 3.0 tons/hr) S282: 8.8 lb/hr (throughput = 3.0 tons/hr) S284: 26.0 lb/hr (throughput = 15.0 tons/hr) S307:26.0 lb/hr (throughput = 15.0 tons/hr)	Recordkeeping

PM Discussion:

BAAQMD Regulation 6 “Particulate Matter and Visible Emissions”

Visible Emissions

BAAQMD Regulation 6-301 limits visible emissions to no darker than 1.0 on the Ringelmann Chart (except for periods or aggregate periods less than 3 minutes in any hour). Visible emissions are normally not associated with combustion of gaseous fuels, such as natural gas. S221, S222 and S279 burn natural gas exclusively, therefore, per the EPA's June 24, 1999 agreement with CAPCOA and ARB entitled "Summary of Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP" no monitoring is required to assure compliance with this limit for these source.

When a source is equipped with an abatement device, the abatement equipment must be properly operated and maintained at all times when the source is in operation, to insure on-going compliance with the visible emissions standard of Regulation 6.

Particulate Weight Limitation

BAAQMD Regulation 6-310 limits filterable particulate (FP) emissions from any source to 0.15 grains per dry standard cubic foot (gr/dscf) of exhaust volume. Section 310.3 limits filterable particulate emissions from “heat transfer operations” to 0.15 gr/dscf @ 6% O₂. These are the “grain loading” standards.

Permit conditions requiring proper operating practices and proper maintenance of all abatement equipment have been imposed on all sources and abatement equipment to insure on-going compliance with the grain loading standard of Regulation 6.

Exceedances of the grain loading standards are normally not associated with combustion of gaseous fuels, such as natural gas. S221, S222 and S279 burn natural gas exclusively. Therefore, per the EPA's July 2001 agreement with CAPCOA and ARB entitled "CAPCOA/CARB/EPA Region IX Recommended Periodic Monitoring for Generally Applicable Grain Loading Standards in the SIP: Combustion Sources: Summary of Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP" no monitoring is required to assure compliance with this limit for this source.

BAAQMD Regulation 6-311 limits the particulate matter mass emission rate from a subject source as a function of process weight. Record keeping is required to ensure that all the sources comply with this requirement based upon the maximum hourly processing rate of each unit. Therefore, no monitoring is required to assure compliance with this limitation.

SO₂ Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S250: Char Furnace S286: Carbon Regeneration Furnace	BAAQMD 9-1-301	Ground level concentrations of SO ₂ shall not exceed: 0.5 ppm for 3 consecutive minutes AND 0.25 ppm averaged over 60 consecutive minutes AND 0.05 ppm averaged over 24 hours	None
S250: Char Furnace S286: Carbon Regeneration Furnace	BAAQMD 9-1-302	300 ppm (dry)	None

SO₂ Discussion:

BAAQMD Regulation 9-1-301

Area monitoring to demonstrate compliance with the ground level SO₂ concentration requirements of Regulation 9-1-301 is at the discretion of the APCO (per BAAQMD Regulation 9-1-501). This facility does not have equipment that emits large amounts of SO₂ and therefore is not required to have ground level monitoring by the APCO.

All facility combustion sources are subject to the SO₂ emission limitations in District Regulation 9, Rule 1 (ground-level concentration and emission point concentration). In EPA's June 24, 1999 agreement with CAPCOA and ARB entitled "Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP" EPA has agreed that natural-gas-fired combustion sources do not need additional monitoring to verify compliance with Regulation 9, Rule 1, since violations of the regulation are unlikely. Therefore, no monitoring is necessary for this requirement for S-250 and S286 because they are fired exclusively on natural gas.

Sulfur Dioxide (SO₂) is generated when sulfur in fuel is burned. A small amount of sulfur dioxide is generated from the combustion of natural gas. All of the combustion sources burn natural gas, since no other gas is available at the site.

The general emission limit for SO₂ pursuant to Regulation 9-1-302 is 300 ppm, dry. The specification for utility-grade natural gas is 5 grains per standard cubic foot of natural gas, which is equivalent to about 170-ppm sulfur as hydrogen sulfide (H₂S) in the gas. One molecule of SO₂ is generated for each molecule of H₂S.

About 8.7 cubic feet of combustion gases are generated for each cubic foot of natural gas burned, but the amount of sulfur in the gas remains constant. Therefore, if the concentration of sulfur in the natural gas is 170-ppm, the concentration in the combustion gases will be 20 ppm or less. Since the concentration in the combustion gases will be less than 10% of the limit, there is no need to perform monitoring for SO₂ at this facility.

VOC Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S250: Char Furnace, S286: Carbon Regeneration Furnace	BAAQMD Regulation 8-2-301	Not to exceed 300 ppm total carbon (dry) and 15 lb/day	None

VOC Discussion:

S250 is a natural gas fired and operated to process spent char. Char is also known as bone black animal charcoal. It is carbonaceous, granular, black material used as a filter by C&H Sugar in its sugar manufacturing during a wet adsorption process to remove sugar colorants, impurities, and naturally occurring minerals. At S250, during heat treatment, impurities in the Char are driven off of the material, regenerating it to a useful form.

Source tests were conducted on May 31, 2001 & April 21, 2009 on S250 measuring total organic carbon emissions. The following table shows the total organic carbon emissions (includes methane) for each source test in PPMV as C₁.

No monitoring is required since the margin of compliance is high, as shown by the results of the source tests listed below. To clarify, as long as the total carbon emission concentration does not exceed 300 ppmv, dry, the source is in compliance, even if the total carbon mass emissions exceed 15 lb/day. Therefore, S-250 is expected to comply with Regulation 8-2-301 since the total carbon concentration is significantly less than 300 ppmv, dry.

Source Test Date	Total Organic Carbon (includes CH₄) emissions PPMV as C₁	Federally-Enforceable Emission Limit
May 31, 2001	116	Not to exceed 300 ppm (dry) and 15 lb/day, total carbon
April 21, 2009	51	Not to exceed 300 ppm (dry) and 15 lb/day, total carbon

CO Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S250: Char Furnace	BAAQMD Condition #20383, Part 3	2169.5 PPMV@3% O ₂	Annual Source Test

CO Discussion:

Natural gas usage is limited at the facility by permit conditions and/or maximum firing rate. The facility is required to keep records of the quantity of natural gas that is burned. CO mass emission rates are dependent on the amount of natural gas burned.

Source tests were conducted on March 25, 2005 & April 21, 2009 on S250 measuring CO emissions. The following table show the CO emissions rate for each source test in PPMV @3% O₂, correction. The regulated limit for CO for C&H Sugar is 2170 PPMV@ 3% O₂.

Source Test Date	Average Natural Gas usage (CFH)	CO emissions PPMV@ 3% O₂	Federally Enforceable Emission Limit
March 25, 2005	14,500	2170	2169.5
April 21, 2009	21,000	759	2169.5

A permit condition (# 20383, Part 5) has been imposed requiring S250 to be source tested annually to verify compliance with the CO emission concentration limit.

NOX Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S250: Char Furnace	BAAQMD Condition #20383, Part 2	77.5 TPY	Annual Source Test

NOx Discussion:

Natural gas usage is limited at the facility by permitting conditions and/or maximum firing rate. The facility is required to keep records of the quantity of natural gas that is burned. NOx emissions are dependent on the amount of natural gas burned.

Source tests were conducted on April 21, 2009 on S250 measuring NO_x emissions. The following table show the NO_x emissions rate for each source test in PPMV @3% O₂, correction. The regulated limit for NO_x for C&H Sugar is 77.5 PPMV @ 3% O₂.

Source Test Date	Average Natural Gas usage (CFH)	NO _x emissions PPMV@ 3% O ₂	Federally Enforceable Emission Limit
April 21, 2009	21,000	144.9	77.5
June 22, 2009*	21,000	64	77.5

*Retest to demonstrate compliance

A permit condition (# 20383, Part 5) has been imposed requiring S250 to be source tested annually to verify compliance with the NO_x emission concentration limit.

Changes to permit:

- A note has been added at the beginning of the section to clarify that this section is a summary of the limits and monitoring, and that in the case of a conflict between Sections I-VI and Section VII, the preceding sections take precedence.
- The headings at the top of the tables have been updated. “Emission Limit Citation” has been changed to “Citation of Limit” since not every limit is an emission limit. “Emission Limit” has been changed to “Limit” since not every limit is an emission limit.
- BAAQMD Regulation 6, Rule 1 has been added since the District modified the labeling from Regulation 6 to Regulation 6, Rule 1.
- S-206 was deleted from Table VII - C.
- Condition # 17430 was deleted from Table VII - U and replaced by Condition # 17425. The compliance monitoring requirements were also changed.
- Permit Condition # 17430 was modified to incorporate CAM monitoring requirements for A259.
- NO_x and CO applicable limits were added to Table VII- V for S250 Char Furnace
- Condition # 20383 Part 5 was added, requiring C&H to conduct annual source test to demonstrate compliance with the NO_x and CO limits for S250.
- Table VII-UU with the applicable limits and compliance monitoring requirements was added for S350 & S351.
- Regulation 6 has been renamed as “SIP Regulation 6”.

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:

- BAAQMD Regulation 6, Rule 1 has been added since the District modified the labeling from Regulation 6 to Regulation 6, Rule 1.

IX. Permit Shield:

The District rules allow two types of permit shields. The permit shield types are defined as follows: (1) A provision in a major facility review permit explaining that specific federally enforceable regulations and standards do not apply to a source or group of sources, or (2) A provision in a major facility review permit explaining that specific federally enforceable applicable requirements for monitoring, recordkeeping and/or reporting are subsumed because other applicable requirements for monitoring, recordkeeping, and reporting in the permit will assure compliance with all emission limits.

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

This facility has no permit shields.

X. Glossary

The glossary was updated with the following terms:

APCO, Air Pollution Control Officer

XI. Appendix A - State Implementation Plan

Changes to permit:

This section has been deleted. The address for EPA's website is now found in Sections III and IV.

D. Alternate Operating Scenarios

The facility has not requested any alternate operating scenario. Therefore, BAAQMD Regulation 2-6-409.7(d) does not apply. *See* BAAQMD Regulation 2-6-409.7(d) (requiring the permit to state that "the facility must keep a record in a contemporaneous log when the facility changes any aspect of its operations from one permitted scenario to another").

E. Compliance Status

As part of its evaluation of the Application for permit renewal, the District has reviewed C & H Sugar's compliance history for the five-year period 2004 through 2009. Based on this review, the District finds that C & H Sugar is in compliance with all permit requirements, and that there is no need to impose a compliance schedule.

The compliance record of C & H Sugar's facility (Site #B7315) was reviewed for the period January 1, 2005 through December 31, 2009. This review was initiated as part of the District evaluation of a Title V permit renewal. During the period subject to review, activities known to the District include:

- There were one Notices of Violation issued during this review period.
- The District received seven unconfirmed and one confirmed complaint
- The facility is not operating under a Variance or an Order of Abatement from the District Board.
- During this review period, there were no monitor excesses or equipment breakdowns reported or documented by District staff.

A memorandum describing the District's review and conclusions is attached as Appendix A to this permit evaluation and statement of basis. As noted in the memorandum, District Compliance and Enforcement Division staff reviewed the annual compliance certifications submitted by C & H Sugar for the period January 1, 2004, through December 31, 2009. The review revealed no instances of non-compliance during the five-year period.

Based on this compliance record, the District has determined that there is no reason to impose a compliance schedule in the renewed Title V permit.

F. Differences between the Application and the Proposed Permit

The significant differences between the application for renewal Title V permit (Application #16483, submitted by C & H Sugar on June 12, 2001) and the proposed renewal permit is the CAM plan for S250.

The Compliance Assurance Monitoring (CAM) Rule was effective November 21, 1997. Although the effective date of the CAM rule occurred prior to the issuance of their initial Title V permit, C & H Sugar was not required to address CAM until the renewal of their initial Title V permit pursuant to EPA guidance.

Other changes that were made at the facility after the initial Title V permit was issued, including the permitting of two standby gasoline generators due to loss of exemption pursuant to Application # 4650 and the replacement of a cyclone and a wet scrubber with two baghouses pursuant to Application # 5542. Appendix B contains a copy of the Engineering Evaluation from Application # 4650 & 5542. Appendix C contains the applicability criteria and the CAM monitoring plan for S250. This source's pre-abatement emissions for PM10 is >100 TPY. Appendix D contains the CAM assessment for all the permitted sources.

Appendix A
BAAQMD COMPLIANCE REPORT

Appendix B
Engineering Evaluation, Application No. 4650 & 5542

Appendix C
Applicability Criteria & CAM Plan for S250

Appendix D
CAM Assessment for all Sources

Appendix E

Glossary

ACT

Federal Clean Air Act

APCO

Air Pollution Control Officer

AP-42

EPA's Compilation of Air Pollutant Emission Factors

ARB

Air Resources Board

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

Basis

The underlying authority which allows the District to impose requirements.

CAA

The federal Clean Air Act

CAAQS

California Ambient Air Quality Standards

CAPCOA

California Air Pollution Control Officers Association

CEQA

California Environmental Quality Act

CFR

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

CO

Carbon Monoxide

Cumulative Increase

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

Cumulative increase is used to determine whether threshold-based requirements are triggered.

District

The Bay Area Air Quality Management District

dscf

Dry Standard Cubic Feet

EPA

The federal Environmental Protection Agency.

Excluded

Not subject to any District regulations.

Federally Enforceable, FE

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

FP

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

HAP

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

Major Facility

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

MFR

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

MOP

The District's Manual of Procedures.

NAAQS

National Ambient Air Quality Standards

NESHAPS

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

NMHC

Non-methane Hydrocarbons (Same as NMOC)

NMOC

Non-methane Organic Compounds (Same as NMHC)

NO_x

Oxides of nitrogen.

NSPS

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

NSR

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

Offset Requirement

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

Phase II Acid Rain Facility

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

POC

Precursor Organic Compounds

PM

Particulate Matter

PM₁₀

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

PSD

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

SIP

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

SO2

Sulfur dioxide

THC

Total Hydrocarbons (NMHC + Methane)

Title V

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

TOC

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

TPH

Total Petroleum Hydrocarbons

TRMP

Toxic Risk Management Plan

TSP

Total Suspended Particulate

VOC

Volatile Organic Compounds

Units of Measure:

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

yr = year