Bay Area Air Quality Management District

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

Permit Evaluation
and
Statement of Basis
for
RENEWAL of

MAJOR FACILITY REVIEW PERMIT

for

Crockett Cogeneration, a California Limited Partnership
Facility #A8664

Facility Address:
550 Loring Avenue
Crockett, CA 94525

Mailing Address:
550 Loring Avenue
Crockett, CA 94525

Application Engineer: Dennis Jang
Site Engineer: Doug Hall

Application: 25420

June 2014

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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 a regulated air pollutant.

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

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

Each facility in the Bay Area is assigned a facility identifier that consists of a letter and a 4-digit number. This identifier is also considered to be the identifier for the permit. The identifier for this facility is A8664.

This facility received its initial Title V permit on March 7, 2001. The permit was renewed on November 18, 2008. This application is for the second permit renewal. Although the current permit expired on November 17, 2013, it continues in force until the District takes final action on the permit renewal because Crockett Cogeneration submitted a complete Title V application at least six months prior to the permit expiration date. The standard sections of the permit have been upgraded to include new standard language used in all Title V permits. The proposed permit shows all changes to the permit in strikeout/underline format.

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.

An administrative amendment to the Title V permit was issued on December 1, 2010 to change the Responsible Official and Facility Contact under application 22579. No other revisions have been made to the permit since the last renewal permit was issued on November 18, 2008.

B. Facility Description

This facility is a privately owned power plant located adjacent to the C&H Sugar refinery. The power generation configuration for the 240 MW net capacity facility consisting of a single power

block containing a gas-fired combustion turbine (S-201) in a single shaft arrangement with a single automatic extraction condensing steam turbine driving a single generator. The power block includes one heat recovery steam generator (HRSG) with duct burners (S-202) that can be fired with natural gas. The steam turbine exhausts into a roof mounted air-cooler condenser. The power plant is designed to accommodate the dispatch requirements of the power sales agreement with Pacific Gas & Electric (PG&E). Crockett Cogeneration is a Qualifying Facility and is therefore not covered under Title IV of the Federal Clean Air Act (Acid Rain). The cogeneration facility also contains three 249,000 lb/hr auxiliary boilers (S-203, S-204, and S-205) to provide steam to the sugar refinery when the cogeneration plant is off-line. Since the gas turbine is operated to supply electric power under the contract to PG&E and steam is supplied under contract to C&H Sugar refinery, the Crockett Cogeneration is dependent on these other external operations.

The operation of Crockett Cogeneration replaced the operation of older boilers at C&H Sugar refinery. At the time of construction and initial operation in 1996, Crockett Cogeneration met all Best Available Control Technology (BACT) requirements and was fully offset. The air pollution control system involves several components. The first is General Electric's dry, low-NOx 2.6 combustors on the combustion turbine (CT) and Coen low-NOx burners on the HRSG. Second, the facility incorporates post-combustion SCR and oxidizing catalysts to reduce NOx, CO, and organic compounds. Crockett Cogeneration uses utility grade natural gas exclusively. There is no open water cooling tower at the facility.

There are no significant changes in the process since the last Title V permit was issued.

The 2007 plant inventory emissions are as follows:

	Heat Input (therms/yr)	PM TPY	Organics TPY	NOx TPY	SO2 TPY	CO TPY	NH3 TPY	Benzene TPY	Formaldehyde TPY	Toluene TPY
S201	5.05E+07	11.92	4.53	44.31	2.03	18.52	64.22	0.0061	0.7129	0.0024
S202	2.27E+05	0.07	0.31	0.20	0.00	0.09	0.29	0.0001	0.0001	0.0020
S203	7.38E+06	2.10	0.86	3.50	0.29	2.81	3.11	0.0005	0.0042	0.0083
S204	7.52E+06	2.14	0.88	3.56	0.31	5.73	3.16	0.0005	0.0042	0.0084
S205	5.94E+06	1.70	0.69	2.81	0.24	2.26	2.50	0.0004	0.0033	0.0067
Total	7.16E+07	17.90	7.26	54.39	2.87	29.40	73.28	0.01	0.72	0.03

The 2013 plant inventory emissions are as follows:

	Heat Input (therms/yr)	PM TPY	Organics TPY	NOx TPY	SO2 TPY	CO TPY	NH3 TPY	Benzene TPY	Formaldehyde TPY	Toluene TPY
S201	1.25E+08	30.48	9.73	113.52	5.18	47.45	164.433	0.0155	1.825	0.0062
S202	7.99E+06	2.34	11.35	7.21	0.33	3.01	10.457	0.0045	0.0046	0.0739
S203	3.03E+06	0.89	0.36	1.48	0.29	1.19	1.314	0.0002	0.0017	0.0035
S204	2.86E+06	0.84	0.34	1.39	0.12	2.24	1.237	0.0002	0.0017	0.0033
S205	1.79E+06	0.52	0.21	0.87	0.12	0.70	0.774	0.0001	0.001	0.002
Total	1.40E+08	35.06	21.98	124.47	5.83	54.59	178.22	0.02	1.834	0.09

The change in plant inventory emissions between 2013 and 2007 are:

Pollutant	Change in Plant Emissions (tons/yr)
PM	+17.16
Organics	+14.72
NOx	+80.16
SO2	+2.96
CO	+25.19
NH3	+104.94
Benzene	+0.01
Formaldehyde	+1.11
Toluene	+0.06

It should be noted that these emissions are calculated using "worst-case" emission factors. For example, the NH3 emission rate shown is based upon the maximum allowable ammonia slip rate and the total natural gas combusted. The actual ammonia slip rate is significantly lower.

The increase in annual calculated emissions is due to increased fuel use caused by increased demand for steam at the C&H Sugar facility and demand for electricity from the grid. Crockett did not exceed any applicable permit conditions or other emission limits.

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 I.A 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., S-24).

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:

None

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:

- Table III has been updated by adding the following rules and standards to conform to current practice:
  - BAAQMD Regulation 2-1-429, Federal Emissions Statement
  - SIP Regulation 2-1-429, Federal Emissions Statement
  - SIP Regulation 8, Rule 3, Organic Compounds – Architectural Coatings
  - BAAQMD Regulation 8, Rule 4, Organic Compounds – General Solvent and Surface Coating Operations
  - SIP Regulation 8, Rule 15, Organic Compounds – Emulsified and Liquid Asphalts
  - California Health and Safety Code Section 93116, Airborne Toxic Control Measure for Diesel Particulate from Portable Engines Rated at 50 Horsepower of Greater
- 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

40 CFR Part 72, Acid Rain Program

Part 72, Subpart A, establishes general provisions and operating permit program requirements for sources and affected units under the Acid Rain program, pursuant to Title IV of the Clean Air Act. The facility is not subject to Title IV of the Clean Air Act (Acid Rain) because it meets the definition of "Qualifying Facility" given in 40 CFR 72.2. Specifically, it is a "qualifying cogeneration facility" within the meaning of section 3(18)(B) of the Federal Power Act.

40 CFR Part 75, Continuous Emission Monitoring

Because Crockett Cogeneration is not subject to the Acid Rain Permit requirements of 40 CFR Part 72, it is not subject to the CEM requirements of 40 CFR Part 75.

CAA Section 112(j)

The facility is not subject to 112(j) of the Clean Air Act because it is not a major source of hazardous air pollutants. The facility's potential to emit for HAPs is shown below. The total combined HAP PTE for this facility is 11.4 tons per year. The highest PTE for any single HAP is 7.88 tpy for formaldehyde. These emission rates do not exceed the 112(j) trigger levels of 10 tpy for any single HAP or 25 tpy for any combination of HAPs. Therefore, 40 CFR 63, Subpart YYYY, the NESHAP for Stationary Combustion Turbines does not apply to S-201 Gas Turbine.

Facility HAP Potential to Emit

Hazardous Air Pollutant*	AP-42 Emission Factor**	Potential to Emit***	
	(lb/MM Btu)	Pounds/year	Tons/year
1,3-Butadiene	< 4.3 E-07	9.54	0.00
Acetaldehyde	4.0 E-05	887.52	0.44
Acrolein	6.4 E-06	142.00	0.07
Benzene	1.2 E-05	266.26	0.13
Ethylbenzene	3.2 E-05	710.02	0.36
Formaldehyde	7.1 E-04	15753.48	7.88
Hexane	1.3 E-06	28.84	0.01
Naphthalene	2.2 E-06	48.81	0.02
Polycyclic Aromatic Hydrocarbons	< 2.9 E-05	643.45	0.32
Propylene Oxide	1.3 E-04	2884.44	1.44
Toluene	6.4 E-05	1420.03	0.71
Xylenes	< 4.3 E-07	9.54	0.00
Total Combined HAP		22803.94	**11.40**

*per CAA, Title I, Part A, Section 112(b)(1)

**Table 3.1-3 Emission Factors for Hazardous Air Pollutants from Natural Gas-Fired Stationary Gas Turbines

***based upon permit condition firing rate limit of 15,613,000 MM Btu/yr for S-201 Gas Turbine and S-202 HRSG combined
and permit condition firing rate limit of 6,575,000 MM BTU/yr for S-203, S-204, and S-205 Auxiliary Boilers combined

40 CFR Part 60, Subpart GG

This regulation applies to S-201 Gas Turbine because it has a rated heat input greater than 10 MM BTU/hour and it was constructed after October 3, 1977.

60.332(a)(1) has a nominal NO_x concentration limit of 75 ppm. S-201Gas Turbine is subject to and complies with a permit limit of 5.0 ppmv, dry @ 15% O_2 and therefore complies with the applicable Subpart GG NO_x limit.

Section 60.333(a) requires an owner/operator of stationary turbines to demonstrate compliance with either one of the following two conditions:

- Discharge SO_2 at less than or equal to 0.015% by volume at 15% oxygen on a dry basis (150 ppmv) **or**
- Combust fuel with sulfur content less than or equal to 0.8% by weight (8000 ppmw).

The typical annual average sulfur concentration of the PUC quality natural gas combusted in the turbines is 0.25 grains/100 scf. PG&E natural gas typically has a sulfur concentration of 1 grain/100 scf pursuant to PG&E Gas Rule 21, Section C. The SO_2 content in the natural gas can be compared to Section 60.333(a) as follows:

lb S/MMBtu = (1 grain/100 scf)(lb/7000 grain)(scf/1020 BTU)(1 E06 BTU/MM BTU)

lb S/MMBtu = 1.4 E-03

lb SO_2/MMBtu = (1.4 E-03 lb/MM BTU)((64 lb SO_2/lb-mol)/(32 lb S/lb-mol))

lb SO_2/MMBtu = 2.8 E-03

SO_2 lb/hour = (2.8 E-03 lb/MM BTU)(1780 MM BTU/hour) = 5 lb/hr

SO_2 ppm = (2.8 E-03 lb SO2/MM BTU)(385.3 dscf/lb-mol)(10 E06)(lb-mol/64 lb SO2)(MM BTU/8600 dscf)
= 1.96 ppmvd SO2 @ 0% O2

This converts to:

SO_2 ppm = (1.96 ppmvd)(20.95 – 15)/20.95
= 0.6 ppm @ 15% O_2

This is much less than the Section 60.333(a) limit of 150 ppmv.

40 CFR Part 60, Subpart Db, "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units"

This regulation does not apply to S-202 Heat Recovery Steam Generator pursuant to 40 CFR 60.40b(i) because S-202 is associated with a combined-cycle gas turbine and it meets the applicability requirements of 40 CFR 60, Subpart GG.

40 CFR Part 98, Mandatory Greenhouse Gas Reporting

The facility is expected to meet the federal greenhouse gas reporting requirements. This requirement is not cited in the Title V permit because it does not meet the definition of "applicable requirement" is stated in 40 CFR Part 70.2.

Title 17 California Code of Regulations, Subchapter 10, Article 2

The facility is expected to meet the state greenhouse gas reporting requirements.

40 CFR Part 64 - Compliance Assurance Monitoring (CAM)

S-201 Gas Turbine meets the general applicability requirements of CAM (as specified in 40 CFR 64.2(a)) because it has pre-abatement emissions of CO and NOx in excess of 100 tons per year per pollutant, is subject to federally-enforceable emission limits for CO and NOx, and utilizes control devices (oxidation catalyst and selective catalytic reduction system) to achieve compliance with those limits. However, S-201 is exempt from CAM per 40 CFR 64.2(b)(vi) because S-201 utilizes a continuous compliance determination method specified in a Title V permit. Crockett utilizes continuous emission monitors for CO and NOx to directly monitor those emissions at the stack of S-201.

S-203, S-204, and S-205 Auxiliary Boilers each meet the general applicability requirements of CAM (as specified in 40 CFR 64.2(a)) because each have potential pre-abatement emissions of CO and NOx in excess of 100 tons per year per pollutant, are subject to federally-enforceable emission limits for CO and NOx, and utilize control devices (oxidation catalysts and selective catalytic reduction systems) to achieve compliance with those limits. However, S-203, S-204, and S-205 are exempt from CAM per 40 CFR 64.2(b)(vi) because S-203, S-204, and S-205 utilize a continuous compliance determination method specified in a Title V permit. Crockett utilizes continuous emission monitors for CO and NOx to directly monitor those emissions at the stack of S-203, S-204, and S-205.

Changes to permit:

The Part IV and Part VII tables have been combined to eliminate redundancy and improve the accessibility and accuracy of the permit. Accordingly, the title of the part IV tables has been changed as follows:

"Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements"

Two columns have been added to the combined part IV and VII tables that were not present in either table before. One column concerns recordkeeping is labeled "R". If regular recordkeeping is required for a given standard or limit, then "Y" is entered in the "R" column. If not, the column entry is blank.

The second new column concerns reporting and is labeled "Reporting Frequency". It should be noted that the reporting frequency entries do not include the annual compliance certification described in section IG of the Title V permit or the semi-annual monitoring reporting requirement described in section IF of the Title V permit.

Table IV-A, S-201, Gas Turbine
No new applicable requirements have been added to this table and none have been deleted. If applicable, future effective dates that have elapsed have been deleted.

S-202, Heat Recovery Steam Generator
No new applicable requirements have been added to this table and none have been deleted. If applicable, future effective dates that have elapsed have been deleted.

S203, S204, and S205, Auxiliary Steam Boilers
No new applicable requirements have been added to this table and none have been deleted. If applicable, future effective dates that have elapsed have been deleted.

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:
None.

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.

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:
None

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.

Changes to permit:
As stated earlier, the part VII tables have been consolidated with the part IV tables for each permitted source. Accordingly, the existing part VII tables will be deleted.

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:
None

IX. Permit Shield:

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

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

This facility has the second type of permit shield.

Changes to permit:
None

X. Glossary

Changes to permit:
None

D. Alternate Operating Scenarios:

No alternate operating scenario has been requested for this facility.

E. Compliance Status:

The responsible official for Crockett Cogeneration submitted a signed Certification Statement form dated April 10, 2014. On this form, the responsible official certified that the following four statements are true:

Based on information and belief formed after reasonable inquiry, the source(s) identified in the Applicable Requirements and Compliance Summary form that is(are) in compliance will continue to comply with the applicable requirement(s);

Based on information and belief formed after reasonable inquiry, the source(s) identified in the Applicable Requirements and Compliance Summary form will comply with future-effective applicable requirement(s), on a timely basis;

Based on information and belief formed after reasonable inquiry, information on application forms, all accompanying reports, and other required certifications is true, accurate, and complete;

All fees required by Regulation 3, including Schedule P have been paid.

F. Differences between the Application and the Proposed Permit:

There are no major differences between the Application and the Proposed Permit.

The Title V renewal permit application was submitted on May 16, 2013. This version is the basis for constructing the proposed renewal Title V permit.

APPENDIX A

GLOSSARY

ACT
Federal Clean Air Act

APCO
Air Pollution Control Officer

ARB
Air Resources Board

BAAQMD
Bay Area Air Quality Management District

BACT
Best Available Control Technology

Basis
The underlying authority which allows the District to impose requirements.

CAA
The federal Clean Air Act

CAAQS
California Ambient Air Quality Standards

CAPCOA
California Air Pollution Control Officers Association

CEC
California Energy Commission

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)

NOx
Oxides of nitrogen.

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

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

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

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

POC
Precursor Organic Compounds

PM
Particulate Matter

PM10
Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

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

PUC
Public Utilities Commission

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

TBACT
Best Available Control Technology for Toxics

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