

Bay Area Air Quality Management District

375 Beale Street, Suite 600
San Francisco, CA 94105
(415) 771-6000

Final

MAJOR FACILITY REVIEW PERMIT

Issued To:

**Martinez Cogen Limited Partnership
Facility #A1820**

Facility Address:

550 Solano Way
Martinez, CA 94553

Mailing Address:

550 Solano Way
Martinez, CA 94553

Responsible Official

Michael Kromer, Plant Manager
(925) 313-0800 ext. 201

Facility Contact

Brian Walker
(925) 313-0800 ext. 205

Type of Facility: Cogeneration Facility, 99.9 MW BAAQMD Engineering Division Contact:
Robert T. Hull

Primary SIC: 4911

Product: Cogeneration of electricity and steam

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Signed by Pamela J. Leong _____
Pamela J. Leong, Director of Engineering Division

January 22, 2019
Date

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I. STANDARD CONDITIONS

A. Administrative Requirements

The permit holder shall comply with all applicable requirements in the following regulations:

BAAQMD Regulation 1 - General Provisions and Definitions

(as amended by the District Board on 5/4/11);

SIP Regulation 1 - General Provisions and Definitions

(as approved by EPA through 6/28/99);

BAAQMD Regulation 2, Rule 1 - Permits, General Requirements

(as amended by the District Board on 4/18/12);

SIP Regulation 2, Rule 1 - Permits, General Requirements

(as approved by EPA through 1/26/99);

BAAQMD Regulation 2, Rule 2 - Permits, New Source Review

(as amended by the District Board on 6/15/05);

SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration

(as approved by EPA through 1/26/99);

BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking

(as amended by the District Board on 12/19/12);

BAAQMD Regulation 2, Rule 5 – New Source Review of Toxic Air Contaminants

(as amended by the District Board on 1/6/10)

SIP Regulation 2, Rule 4 - Permits, Emissions Banking

(as approved by EPA through 1/26/99);

BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review

(as amended by the District Board on 4/16/03);

SIP Regulation 2, Rule 6 – Permits, Major Facility Review

(as approved by EPA through 6/23/95)

BAAQMD Regulation 2, Rule 9 – Interchangeable Emission Reduction Credits

(as amended by the District Board on 6/15/05)

B. Conditions to Implement Regulation 2, Rule 6, Major Facility Review

1. This Major Facility Review Permit was issued on May 5, 2016 and expires on May 4, 2021. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than November 4, 2020 and no earlier than May 4, 2020. **If a complete application for renewal has not been submitted in accordance with these deadlines, the facility may not operate after May 4, 2021.** If the permit renewal has not been issued by May 4, 2021, 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. (Regulation 2-6-307, 404.2, 407, & 409.6; MOP Volume II, Part 3, §4.2)
2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)

I. Standard Conditions

3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)
4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)
5. The filing of a request by the facility for a permit modification, revocation and re-issuance, or termination, or the filing of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
6. This permit does not convey any property rights of any sort, or any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
8. Any records required to be maintained pursuant to this permit which the permittee considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B - Public Information, Confidentiality of Business Information. (40 CFR Part 2)
10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)
11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility. (Regulation 2-6-409.20, MOP Volume II, Part 3, §4.11)
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)

I. Standard Conditions

C. Requirement to Pay Fees

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P. (Regulation 2-6-402 & 409.13, Regulation 3; MOP Volume II, Part 3, §4.12)

D. Inspection and Entry

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment which is subject to this permit to the APCO and/or to his or her designee. (Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

E. Records

1. The permit holder must provide any information, records, and reports requested or specified by the APCO. (Regulation 1-441, Regulation 2-6-409.4)
2. Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of entry. (Regulation 2-6-501, Regulation 3; MOP Volume II, Part 3, §4.7)

F. Monitoring Reports

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. The reporting periods for this permit shall be June 1st to November 30th and December 1st to May 31st. Each report is due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

Director of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
Attn: Title V Reports

(Regulation 2-6-502; MOP Volume II, Part 3, §4.7)

G. Compliance Certification

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification period will be December 1st through November 30th. The certification shall be submitted by December 31 of each year. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The certification should be directed to the District's Compliance and Enforcement Division at the

I. Standard Conditions

address above, and a copy of the certification should be sent to the Environmental Protection Agency at the following address:

Director
Enforcement Division, TRI & Air Section (ENF-2-1)
USEPA Region 9
75 Hawthorne Street
San Francisco, California 94105

(MOP Volume II, Part 3, §4.5 and 4.15)

H. Emergency Provisions

1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)
2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. (MOP Volume II, Part 3, §4.8)
3. The granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement unless the Major Facility Review Permit has been modified pursuant to Regulation 2, Rule 6. (MOP Volume II, Part 3, §4.8)

I. Severability

In the event that any provision of this permit is invalidated by a court or tribunal of competent jurisdiction, or by the Administrator of the EPA, all remaining portions of the permit shall remain in full force and effect. (Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

J. Miscellaneous Conditions

The maximum capacity for each source as shown in Table II-A is the maximum allowable capacity. Exceedance of the maximum allowable capacity for any source is a violation of Regulation 2, Rule 1, Section 301. (Regulation 2-1-301)

II. EQUIPMENT LIST

Table II-A

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition J and Regulation 2-1-301.

| S-# | Description | Make or Type | Model | Capacity |
|-----|---|--------------------|-----------------------|------------------|
| 1 | Sludge Drying Operation | Carver Greenfield | Custom | 0.71 dry tons/hr |
| 2 | Product Silo | Custom | Custom | 1200 cubic feet |
| 5 | Sludge Feed Storage Tank | Custom | Custom | 2000 gal |
| 10 | Gas Turbine (natural gas, refinery gas) | John Brown PG6551B | Frame 6 | 500 MM Btu/hr |
| 11 | Gas Turbine (natural gas, refinery gas) | John Brown PG6551B | Frame 6 | 500 MM Btu/hr |
| 12 | Diesel IC Engine for Gas Turbine Start | Detroit Diesel | 7123-7300, V-71 Turbo | 750 BHP |
| 13 | Diesel IC Engine for Gas Turbine Start | Detroit Diesel | 7123-7300, V-71 Turbo | 750 BHP |
| 14 | Diesel IC Engine for Emergency Power Generation | Caterpillar | 3406 Turbo | 375 BHP |

Table II-B – Abatement Devices

| A-# | Description | Source(s) Controlled | Applicable Requirement | Operating Parameters | Limit or Efficiency |
|-----|-----------------|----------------------|------------------------|----------------------|---------------------|
| 1 | Carbon Adsorber | 1 | BAAQMD 7-301 | None | N/A |
| 2 | Baghouse Filter | 2 | BAAQMD 6-310 | None | 0.15 gr/dscf |

Table II C – Significant Sources

The following source is exempt from the requirement to obtain an authority to construct and permit to operate, but is defined as a significant source pursuant to BAAQMD Regulation 2-6-239.

| S-# | Description | Make or Type | Model | Capacity |
|-----|---------------|--------------|-------|------------|
| N/A | Cooling Tower | Unknown | N/A | 23,000 GPM |

III. GENERALLY APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements would not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit. This section also contains provisions that may apply to temporary sources.

The dates in parentheses in the Title column identify the versions of the regulations being cited and are, as applicable:

1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board of Directors.
2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date.

The full language of SIP requirements is on EPA Region 9's website. The address is: <http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions>.

NOTE:

There are differences between current BAAQMD rules and versions of the rules in the SIP. All sources must comply with both versions of a rule until the U.S. EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

**Table III
 Generally Applicable Requirements**

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) |
|-------------------------------|---|------------------------------------|
| BAAQMD Regulation 1 | General Provisions and Definitions (5/4/11) | N |
| SIP Regulation 1 | General Provisions and Definitions (6/28/99) | Y |
| BAAQMD Regulation 2, Rule 1 | General Requirements (4/18/12) | N |
| BAAQMD 2-1-429 | Federal Emissions Statement (12/21/04) | N |
| SIP Regulation 2, Rule 1 | General Requirements (1/26/99) | Y |
| SIP Regulation 2-1-429 | Federal Emissions Statement (4/3/95) | Y |
| BAAQMD Regulation 2, Rule 5 | New Source Review of Toxic Air Contaminants (1/6/10) | N |
| BAAQMD Regulation 4 | Air Pollution Episode Plan (3/20/91) | N |

III. Generally Applicable Emission Requirements

Table III
Generally Applicable Requirements

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) |
|---|--|------------------------------------|
| SIP Regulation 4 | Air Pollution Episode Plan (8/06/90) | Y |
| BAAQMD Regulation 6, Rule 1 | Particulate Matter, General Requirements (12/5/07) | N |
| SIP Regulation 6 | Particulate Matter and Visible Emissions (9/4/98) | Y |
| BAAQMD Regulation 7 | Odorous Substances (3/17/82) | N |
| BAAQMD Regulation 8, Rule 1 | Organic Compounds - General Provisions (6/15/94) | Y |
| BAAQMD Regulation 8, Rule 2 | Organic Compounds – Miscellaneous Operations (7/20/05) | N |
| SIP Regulation 8, Rule 2 | Organic Compounds – Miscellaneous Operations (3/22/95) | Y |
| BAAQMD Regulation 8, Rule 3 | Organic Compounds - Architectural Coatings (7/1/09) | N |
| SIP Regulation 8, Rule 3 | Organic Compounds - Architectural Coatings (1/2/04) | Y |
| BAAQMD Regulation 8, Rule 4 | Organic Compounds – General Solvent and Surface Coating Operations (10/16/02) | Y |
| BAAQMD Regulation 8, Rule 16 | Organic Compounds - Solvent Cleaning Operations (10/16/02) | Y |
| BAAQMD Regulation 8, Rule 40 | Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05) | N |
| SIP Regulation 8, Rule 40 | Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/19/01) | Y |
| BAAQMD Regulation 8, Rule 47 | Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (6/15/05) | N |
| SIP Regulation 8, Rule 47 | Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (4/26/95) | Y |
| BAAQMD Regulation 8, Rule 49 | Organic Compounds - Aerosol Paint Products (12/20/95) | N |
| SIP Regulation 8, Rule 49 | Organic Compounds - Aerosol Paint Products (3/22/95) | Y |
| BAAQMD Regulation 8, Rule 51 | Organic Compounds - Adhesive and Sealant Products (7/17/02) | N |
| SIP Regulation 8, Rule 51 | Organic Compounds - Adhesive and Sealant Products (2/26/02) | Y |
| BAAQMD Regulation 11, Rule 2 | Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (10/7/98) | N |
| BAAQMD Regulation 12, Rule 4 | Miscellaneous Standards of Performance - Sandblasting (7/11/90) | N |
| SIP Regulation 12, Rule 4 | Miscellaneous Standards of Performance - Sandblasting (9/2/81) | Y |
| California Health and Safety Code Section 41750 et seq. | Portable Equipment | N |

III. Generally Applicable Emission Requirements

**Table III
 Generally Applicable Requirements**

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) |
|---|---|------------------------------------|
| California Health and Safety Code Section 44300 et seq. | Air Toxics “Hot Spots” Information and Assessment Act of 1987 | N |
| California Health and Safety Code Title 17, Section 93115 | Airborne Toxic Control Measure for Stationary Compression Ignition Engines | N |
| California Health and Safety Code Title 17, Section 93116 | Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater | N |
| 40 CFR Part 61, Subpart M | National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (7/20/04) | Y |

IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. The requirements cited in the following tables apply in a specific manner to the indicated source(s).

The dates in parentheses in the Title column identify the versions of the regulations being cited and are, as applicable:

1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board of Directors.
2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date.

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. Additionally, where an applicable requirement is a SIP requirement, the full language of the SIP requirement is on EPA Region 9's website. The address is: <http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions>. All other text may be found in the regulations themselves.

Table IV-A
Source-Specific Applicable Requirements
S-1 Sludge Drying Operation & S-2 Product Silo

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|------------------------------------|---|-----------------------------|-----------------------|
| BAAQMD Regulation 6, Rule 1 | Particulate Matter and Visible Emissions (12/5/07) | | |
| 6-1-301 | Ringelmann Number 1 Limitation | N | |
| 6-1-305 | Visible Particles | N | |
| 6-1-310 | Particulate Weight Limitation | N | |
| 6-1-311 | Process Weight Limitation | N | |
| 6-1-401 | Appearance of Emissions | N | |
| SIP Regulation 6 | Particulate Matter and Visible Emissions (9/4/98) | | |
| 6-301 | Ringelmann Number 1 Limitation | Y | |
| 6-305 | Visible Particles | Y | |
| 6-310 | Particulate Weight Limitation | Y | |
| 6-311 | Process Weight Limitation | Y | |

IV. Source-Specific Applicable Requirements

**Table IV-A
 Source-Specific Applicable Requirements
 S-1 Sludge Drying Operation & S-2 Product Silo**

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|------------------------------|--|-----------------------------|-----------------------|
| 6-401 | Appearance of Emissions | Y | |
| BAAQMD Condition #390 | | | |
| Part 1 | Objectionable odors (basis: BAAQMD Regulation 7) | N | |

**Table IV-B
 Source-Specific Applicable Requirements
 S-5: Sludge Feed Storage Tank**

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|------------------------------|--|-----------------------------|-----------------------|
| BAAQMD Condition #390 | | | |
| Part 1 | Objectionable odors (basis: BAAQMD Regulation 7) | N | |

**Table IV-C
 Source-Specific Applicable Requirements
 S-10, S-11: Gas Turbines**

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|----------------------------|--|-----------------------------|-----------------------|
| BAAQMD Regulation 1 | General Provisions and Definitions (5/4/11) | | |
| 1-208 | Breakdown (malfunction) | Y | |
| 1-431 | Breakdown Report | Y | |
| 1-432 | Written Breakdown Report | Y | |

IV. Source-Specific Applicable Requirements

Table IV-C
Source-Specific Applicable Requirements
S-10, S-11: Gas Turbines

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|------------------------------------|---|------------------------------------|------------------------------|
| 1-433 | Determination of Breakdown | Y | |
| 1-520 | Continuous Emission Monitoring | Y | |
| 1-520.8 | Monitors as required by Regulation 10, 12 and Section 2-1-403 | Y | |
| 1-522 | Continuous Emission Monitoring and Recordkeeping Procedures | N | |
| 1-522.1 | Plans and Specifications | Y | |
| 1-522.2 | Installation Scheduling | Y | |
| 1-522.3 | Performance Testing | Y | |
| 1-522.4 | Periods of Inoperation Greater Than 24 Hours | Y | |
| 1-522.5 | Calibration | Y | |
| 1-522.6 | Accuracy | Y | |
| 1-522.7 | Excesses | N | |
| 1-522.8 | Monthly Reports | Y | |
| 1-522.9 | Records | Y | |
| 1-522.10 | Monitors Required by Sections 1-521 or 2-1-403 | Y | |
| 1-602 | Area and Continuous Emission Monitoring Requirements | Y | |
| SIP Regulation 1 | General Provisions and Definitions (6/28/99) | | |
| 1-522 | Continuous Emission Monitoring and Recordkeeping Procedures | Y | |
| 1-522.7 | Emission limit exceedance reporting requirements | Y | |
| BAAQMD Regulation 2, Rule 1 | Regulation 2, Rule 1 - Permits, General Requirements (4/18/2012) | | |
| 2-1-501 | Monitors | Y | |
| BAAQMD Regulation 6, Rule 1 | Particulate Matter, General Requirements (12/5/07) | | |
| 6-1-301 | Ringelmann Number 1 Limitation | N | |
| 6-1-305 | Visible Particles | N | |
| 6-1-310 | Particulate Weight Limitation | N | |
| 6-1-401 | Appearance of Emissions | N | |
| SIP Regulation 6 | Particulate Matter and Visible Emissions (9/4/98) | | |
| 6-301 | Ringelmann Number 1 Limitation | Y | |
| 6-305 | Visible Particles | Y | |

IV. Source-Specific Applicable Requirements

Table IV-C
Source-Specific Applicable Requirements
S-10, S-11: Gas Turbines

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|------------------------------------|--|------------------------------------|------------------------------|
| 6-310 | Particulate Weight Limitation | Y | |
| 6-401 | Appearance of Emissions | Y | |
| BAAQMD Regulation 9, Rule 1 | Inorganic Gaseous Pollutants- Sulfur Dioxide (3/15/95) | | |
| 9-1-301 | Limitations on Ground Level Concentrations | Y | |
| 9-1-302 | General Emission Limitations | Y | |
| BAAQMD Regulation 9, Rule 2 | Inorganic Gaseous Pollutants- Hydrogen Sulfide (10/6/99) | | |
| 9-2-301 | Limitations on Ground Level Concentrations | N | |
| 9-2-501 | Area Monitoring Requirements | N | |
| BAAQMD Regulation 9, Rule 9 | Inorganic Gaseous Pollutants- Nitrogen Oxides from Stationary Gas Turbines (12/6/06) | Y | |
| 9-9-113 | Exemption- Inspection and Maintenance | N | |
| 9-9-114 | Exemption- Start-up and Shutdown | N | |
| 9-9-115 | Limited Exemption, Minor Inspection and Maintenance Work | N | |
| 9-9-120 | Interchangeable Emission Reduction Credits | N | |
| 9-9-301 | Emission Limits, General | N | |
| 9-9-301.2 | Emission Limits, Turbines > 250 – 500 MM Btu/hr | N | |
| 9-9-301.3 | If Turbine Burns Mixture of Fuels, Emission Limits Shall Be the Highest of the Limits Applicable to Any of the Fuel Mixtures | N | |
| 9-9-301.4 | Violation of Either of the Alternative Standards in Section 301.2 Shall Create a Rebuttable Presumption | N | |
| 9-9-401 | Efficiency Certification | N | |
| | | | |
| 9-9-406 | Other Useful Heat Recovery | N | |
| 9-9-501 | Monitoring and Recordkeeping requirements | N | |
| 9-9-605 | Compliance with Output Based NOx Emission Standards | N | |
| SIP Regulation 9, Rule 9 | Inorganic Gaseous Pollutants- Nitrogen Oxides from Stationary Gas Turbines (12/15/97) | Y | |
| 9-9-113 | Exemption- Inspection and Maintenance | Y | |

IV. Source-Specific Applicable Requirements

Table IV-C
Source-Specific Applicable Requirements
S-10, S-11: Gas Turbines

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|--|--|------------------------------------|------------------------------|
| 9-9-114 | Exemption- Start-up and Shutdown | Y | |
| 9-9-301 | Emission Limits, General | Y | |
| 9-9-301.2 | Emission Limits, Turbines over 10.0 MW w/o SCR | Y | |
| 9-9-401 | Efficiency Certification | Y | |
| 9-9-501 | Monitoring and Recordkeeping requirements | Y | |
| BAAQMD Manual of Procedures, Volume V | Continuous Emission Monitoring Policy and Procedures (1/20/82) | Y | |
| 40 CFR 60 Subpart A | Standards of Performance for New Stationary Sources - General Provisions (4/4/14) | Y | |
| 60.7 | Notification and record keeping | | |
| 60.7(a)(4) | Written notification of physical or operational changes | Y | |
| 60.7(b) | Records | Y | |
| 60.8 | Performance Tests | Y | |
| 60.9 | Availability of Information | Y | |
| 60.11 | Compliance with standards and maintenance requirements | Y | |
| 60.11(a) | Compliance with standards and maintenance requirements | Y | |
| 60.11(d) | Minimizing emissions | Y | |
| 60.12 | Circumvention | Y | |
| 60.19 | General notification and reporting requirements | Y | |
| 40 CFR Part 60 Subpart GG | Standards of Performance for Stationary Gas Turbines (2/27/14) | | |
| 60.332 | Standard for nitrogen oxides | Y | |
| 60.332 (a)(1) | NOx Performance Standard | Y | |
| 60.333 | Standard for sulfur oxides | Y | |
| 60.333 (b) | Fuel sulfur limit | Y | |
| 60.334 | Monitoring of operations | Y | |
| 60.334 (c) | Excess emissions | Y | |
| 60.334 (h) | Fuel sulfur content | Y | |
| 60.334 (h)(3) | Fuel sulfur content monitoring not required for "natural gas" firing | Y | |
| 60.335 | Test methods and procedures | Y | |

IV. Source-Specific Applicable Requirements

Table IV-C
Source-Specific Applicable Requirements
S-10, S-11: Gas Turbines

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|---|---|-----------------------------|-----------------------|
| BAAQMD Condition #13422 | | | |
| part 1 | Fuel usage rate and fuel type limitations (basis: Cumulative Increase) | Y | |
| part 2 | Emissions limits: PM, Hydrocarbons, NOx, SO ₂ , CO, fuel limits (basis: Cumulative Increase) | Y | |
| part 2 | Emissions limits: NOx (basis: Regulation 9, Rule 9/Banking Certificate) | Y | |
| part 3 | NOx concentration limit (basis: Regulation 9, Rule 9) | Y | |
| part 4 | H ₂ S concentration limit in fuel (basis: Cumulative Increase) | Y | |
| part 4A | H ₂ S recordkeeping requirement – natural gas operation (basis: NSPS, Cumulative Increase) | Y | |
| part 4B | H ₂ S monitoring and recordkeeping requirement – fuel gas operation (basis: NSPS, Cumulative Increase) | Y | |
| part 5 | Monitoring and Recordkeeping requirements (basis: Cumulative Increase, Offsets) | Y | |
| part 6 | Deleted | | |
| parts 7- through 9 | Monitoring and Recordkeeping requirements (basis: Banking Certificate) | Y | |
| part 10 | Recordkeeping requirements (Basis: Regulation 2-6-501) | Y | |
| part 11 | Annual source test for CO (Basis: Regulation 2-6-409.2) | Y | |
| part 12 | Inspections for hydrogen sulfide leaks (Basis: Regulation 9, Rule 2) | N | |
| part 13 | Reporting of NOx exceedances (Basis: Regulation 9-9-301.4) | N | |
| BAAQMD Condition #21109 PSD Permit | | | |
| III. | Facilities Operation | Y | |
| V. | Right of Entry | Y | |
| VI. | Transfer of Ownership | Y | |
| VII. | Severability | Y | |
| VIII. | Other Applicable Regulations | Y | |
| IX.C. | NOx Emission Limits | Y | |
| IX.D. | Performance Tests | Y | |

IV. Source-Specific Applicable Requirements

**Table IV-C
 Source-Specific Applicable Requirements
 S-10, S-11: Gas Turbines**

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|---|------------------------------------|------------------------------|
| IX.E.1.b | Stack Volumetric Flow Rates | Y | |
| IX.E.3.e | Excess Emissions | Y | |
| IX.F. | Fuel Usage | Y | |
| X.C. | Agency Notifications | Y | |

**Table IV – D
 Source-Specific Applicable Requirements
 S-12, S-13 DIESEL IC ENGINES FOR GAS TURBINE START**

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|------------------------------------|---|------------------------------------|------------------------------|
| BAAQMD Regulation 6, Rule 1 | Particulate Matter, General Requirements (12/5/07) | | |
| 6-1-303 | Ringelmann No. 2 Limitation | N | |
| 6-1-303.1 | Internal combustion engines below 1500 cubic inches displacement or standby engines | N | |
| 6-1-305 | Visible Particles | N | |
| 6-1-310 | Particulate Weight Limitation | N | |
| 6-1-401 | Appearance of Emissions | N | |
| SIP Regulation 6 | Particulate Matter and Visible Emissions (9/4/98) | | |
| 6-301 | Ringelmann Number 1 Limitation | Y | |
| 6-303.1 | Internal combustion engines below 1500 cubic inches displacement or standby engines | Y | |
| 6-305 | Visible Particles | Y | |
| 6-310 | Particulate Weight Limitation | Y | |
| 6-401 | Appearance of Emissions | Y | |
| BAAQMD Regulation 9, Rule 1 | Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95) | | |
| 9-1-301 | Limitations on Ground Level Concentrations | Y | |
| 9-1-304 | Liquid and Solid Fuels | Y | |

IV. Source-Specific Applicable Requirements

Table IV – D
Source-Specific Applicable Requirements
S-12, S-13 DIESEL IC ENGINES FOR GAS TURBINE START

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|------------------------------------|--|------------------------------------|------------------------------|
| BAAQMD Regulation 9, Rule 8 | Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (7/25/07) | | |
| 9-8-304 | NOx, CO Emission limits, CI engines | N | |
| 9-8-401 | Compliance schedule, compliance with 9-8-304 | N | |
| 9-8-501 | Initial demonstration of compliance with 9-8-304 | N | |
| 9-8-502.3 | Recordkeeping. Records of quarterly compliance required under 9-8-503 | | |
| 9-8-503 | Quarterly demonstration of compliance | N | |
| | | | |
| SIP Regulation 9, Rule 8 | Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (12-15-97) | | |
| 9-8-110.2 | Exemption, liquid fueled engines | Y | |
| 9-8-111.1 | Limited exemption for low usage, less than 200 hours | Y | |
| 9-8-502 | Recordkeeping, low usage exemption | Y | |
| CCR Title 17, Section 93115 | Airborne Toxic Control Measure for Stationary Compression Ignition Engines (5/19/2011) | | |
| 93115.3 (j) | Exemption from emissions standards, low-use prime engines outside of school boundaries | N | |
| 93115.5(a) | Fuel requirements, prime CI engines | N | |
| 93115.10 | Recordkeeping, Reporting, and Monitoring Requirements | N | |
| | | N | |
| 93115.10(c) | Notification of loss of exemption | N | |
| 40 CFR Part 60 Subpart III | Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (6/28/2011) | | |
| 60.4200(a)(2) | Applicability: Not subject. Installed prior to 7/11/2005 | Y | |
| 40 CFR Part 63 Subpart ZZZZ | NESHAPs for Stationary Reciprocating Internal Combustion Engines (01/30/2013) | | |
| 63.6585 | Applicability | Y | |
| 63.6585(a) | Applicable to stationary RICE; and | Y | |
| 63.6585(b) | Applicable to major source of HAPS (within boundary of Tesoro Refinery) | Y | |
| 63.6590(a)(1)(i) | Existing stationary RICE: >500 BHP, installed prior to 12/19/2002 | Y | |

IV. Source-Specific Applicable Requirements

Table IV – D
Source-Specific Applicable Requirements
S-12, S-13 DIESEL IC ENGINES FOR GAS TURBINE START

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|--------------------------------|--|-----------------------------|-----------------------|
| 63.6590(b)(3) (iv) | Limited use (<100 hrs/yr): not subject to requirements of subpart ZZZZ | Y | |
| BAAQMD Condition #18843 | | | |
| part 1 | Exemption from emissions standards; Hours of operation (basis: CCR 93115.3 (j), Cumulative Increase) | Y | |
| part 2 | CARB diesel fuel requirement (basis: CCR 93115.5(a)) | Y | |
| part 3 | Recordkeeping (basis: Cumulative Increase,, CCR 93115.3(j), CCR 93115.10(a)) | Y | |

Table IV – E
Source-Specific Applicable Requirements
S-14 DIESEL IC ENGINE FOR EMERGENCY POWER GENERATION

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|------------------------------------|---|-----------------------------|-----------------------|
| BAAQMD Regulation 6, Rule 1 | Particulate Matter, General Requirements (12/5/07) | | |
| 6-1-303 | Ringelmann No. 2 Limitation | N | |
| 6-1-303.1 | Internal combustion engines below 1500 cubic inches displacement or standby engines | N | |
| 6-1-305 | Visible Particles | N | |
| 6-1-310 | Particulate Weight Limitation | N | |
| 6-1-401 | Appearance of Emissions | N | |
| SIP Regulation 6 | Particulate Matter and Visible Emissions (9/4/98) | | |
| 6-303 | Ringelmann No. 2 Limitation | Y | |
| 6-303.1 | Internal combustion engines below 1500 cubic inches displacement or standby engines | Y | |
| 6-305 | Visible Particles | Y | |
| 6-310 | Particulate Weight Limitation | Y | |
| 6-401 | Appearance of Emissions | Y | |

IV. Source-Specific Applicable Requirements

Table IV – E
Source-Specific Applicable Requirements
S-14 DIESEL IC ENGINE FOR EMERGENCY POWER GENERATION

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|------------------------------------|---|------------------------------------|------------------------------|
| BAAQMD Regulation 9, Rule 1 | Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95) | | |
| 9-1-301 | Limitations on Ground Level Concentrations | Y | |
| 9-1-304 | Liquid and Solid Fuels | Y | |
| BAAQMD Regulation 9, Rule 8 | Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (7/25/07) | | |
| 9-8-110.5 | Exemption, Emergency Standby Engines | N | |
| 9-8-330 | Emergency Standby Engines, hours of operation | N | |
| 9-8-502.1 | Recordkeeping, demonstration of emergency standby status | N | |
| 9-8-530 | Emergency Standby Engines, Monitoring and Recordkeeping; non-resettable totalizing meter | N | |
| CCR Title 17, Section 93115 | Airborne Toxic Control Measure for Stationary Compression Ignition Engines (5/19/2011) | | |
| 93115.5(b) | Fuel requirements, in-use emergency standby diesel CI engines | N | |
| 93115.6(b)(3)(A)(1)(a) | Limited to 20 hours of operating per year for maintenance and testing purposes | N | |
| 93115.10 | Recordkeeping, Reporting, and Monitoring Requirements | N | |
| 93115.10(d)(1) | Non-resettable totalizing hour meter | N | |
| 93115.10(f) | Reporting requirements for emergency standby engines | N | |
| 40 CFR Part 60 Subpart III | Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (6/28/2011) | | |
| 60.4200(a)(2) | Applicability: Not subject. Installed prior to 7/11/2005 | Y | |
| 40 CFR Part 63 Subpart ZZZZ | NESHAPs for Stationary Reciprocating Internal Combustion Engines (01/30/2013) | | |
| 63.6585 | Applicability | Y | |
| 63.6585(a) | Applicable to stationary RICE; and | Y | |
| 63.6585(b) | Applicable to major source of HAPS (within boundary of Tesoro Refinery) | Y | |
| 63.6590(a)(1)(ii) | Existing stationary RICE: ≤500 BHP, installed prior to 6/12/2006 | Y | |
| 63.6602 | Inspection and maintenance requirements for existing emergency stationary RICE: ≤500 BHP, installed prior to 6/12/2006 (Table 2c, part 1) | Y | |
| 63.6604(b) | Fuel requirements: by reference to 40 CFR 80.510(b) | Y | |

IV. Source-Specific Applicable Requirements

Table IV – E
Source-Specific Applicable Requirements
S-14 DIESEL IC ENGINE FOR EMERGENCY POWER GENERATION

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|--------------------------------|--|------------------------------------|------------------------------|
| 80.510(b)(1)(i) | Sulfur content \leq 15 ppm | Y | |
| 80.510(b)(2) | Cetane index or aromatic content as follows: (i) a minimum cetane index of 40; or (ii) a maximum aromatic content of 35% by volume | Y | |
| 63.6640(a) | Continuous compliance with Table 2c, part 1 requirements | Y | |
| 63.6640(b) | Reporting of non-compliance with Table 2c, part 1 requirements | Y | |
| BAAQMD Condition #18844 | | | |
| part 1 | CARB diesel fuel requirement (basis: CCR 93115.5(b)) | Y | |
| part 2 | Hours of operation for reliability-related activities (basis: CCR 93115.6(b)(A)(1)(a)) | Y | |
| part 3 | Emergency conditions defined (basis 9-8-231) | Y | |
| part 4 | Reliability-related activities defined (basis 9-8-232) | Y | |
| part 5 | Non-resettable totalizing meter (basis CCR 93115.10(d)(1)) | Y | |
| part 6 | Recordkeeping (basis: Cumulative Increase, Regulation 9-8-530, 1-441, CCR 93115.10(f)) | Y | |

IV. Source-Specific Applicable Requirements

Table IV - F
Source-specific Applicable Requirements
COOLING TOWER

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|------------------------------------|---|------------------------------------|------------------------------|
| BAAQMD Regulation 6, Rule 1 | Particulate Matter, General Requirements (12/5/07) | | |
| 6-1-301 | Ringelmann No. 1 Limitation | N | |
| 6-1-305 | Visible Particulates | N | |
| 6-1-310 | Particulate Weight Limitation | N | |
| 6-1-401 | Appearance of Emissions | N | |
| SIP Regulation 6 | Particulate Matter and Visible Emissions (9/4/98) | | |
| 6-301 | Ringelmann Number 1 Limitation | Y | |
| 6-305 | Visible Particles | Y | |
| 6-310 | Particulate Weight Limitation | Y | |
| 6-401 | Appearance of Emissions | Y | |

V. SCHEDULE OF COMPLIANCE

The permit holder shall continue to comply with all applicable requirements cited in this permit. The permit holder shall also comply with applicable requirements that become effective during the term of this permit on a timely basis.

VI. PERMIT CONDITIONS

Any condition that is preceded by an asterisk is not federally enforceable.

A. Source Specific Permit Conditions

Condition #390

For: S-1, Sludge Drying Operation
S-2, Product Silo
S-5, Sludge Feed Storage Tank

- *1. In the event the APCO determines that a source/s in the operation creates objectionable odors, such source/s shall have added controls to abate these odors. (Basis: Regulation 7)

Condition #13422

For S-10, S-11: Gas Turbines

1. The total fuel usage rate at each of the gas turbines S-10 and S-11 shall not exceed 500 million BTU/hr (operating day average). The turbines shall be fired on natural gas or refinery gas exclusively. (Basis: Cumulative Increase)
2. The combined emissions from the two turbines shall not exceed the following:

| | |
|-----------------|---|
| Particulate | 240 lbs/day and 43.8 TPY (Basis: Cumulative Increase) |
| NMHC | 210 lbs/day and 35 TPY (Basis: Cumulative Increase) |
| Sulfur Dioxides | 550 lbs/day and 36 TPY (Basis: Cumulative Increase) |
| Carbon Monoxide | 1,248 lbs/day and 228 TPY (Basis: Cumulative Increase) |
| Nitrogen Oxides | 1,512 lbs/day and 198.5 TPY (Basis: Offsets, Cumulative Increase) |

If the emissions of sulfur dioxide emissions in a calendar year reach 36 tons, these turbines shall be fired exclusively on natural gas for the remainder of the year. (Basis: Cumulative Increase)

3. The oxides of nitrogen (NO_x) concentration in the gas turbine exhaust shall not exceed the applicable limits in Regulation 9, Rule 9, Section 301.2 for turbines with input ratings of >250 – 500 MMBTU. Compliance with these limits shall be determined in accordance with Part 13. These limits shall not apply during the start-up, which is not to exceed three hours, or during the shutdown procedure, which is not to exceed one hour. (Basis: Regulation 9, Rule 9)

VI. Permit Conditions

4. The concentration of hydrogen sulfide (H₂S) in the fuel gas to both turbines shall not exceed 62 ppm annual average. This average shall not include periods when both turbines are not operating. The annual average shall be determined by summing daily averages and dividing by the number of days that at least one turbine was operating. H₂S reports shall be submitted to the District on a monthly basis. (Basis: Cumulative Increase)
 - 4A. When firing natural gas at S-10 and S-11, the owner/operator shall use PG&E specification or equivalent pipeline quality natural gas and shall maintain records from the supplier that show the total sulfur content of the gas. The supplier provided sulfur content shall be used to determine compliance with the H₂S limit in Part 4 and with the sulfur dioxide limits in Part 2. (basis: NSPS, Cumulative Increase)
 - 4B. Prior to firing refinery gas at S-10 and S-11, the owner/operator shall install, calibrate, and operate a District approved monitor for H₂S. (basis: NSPS, Cumulative Increase)
5. The operator shall install, calibrate and operate District-approved monitors for NO_x, oxygen, fuel gas usage, and electricity production. The monitoring system shall be designed to calculate and record NO_x mass emissions from S-10 and S-11 on an hourly, daily, monthly, and rolling 12 month basis, as well as demonstrating 3-hour average compliance with the applicable Regulation 9, Rule 9 NO_x limits. Compliance with these limits shall be determined in accordance with Part 13. Emissions reports shall be submitted to the District on a monthly basis. (Basis: Cumulative Increase, Offsets)
 - 5A. When firing natural gas at S-10 and S-11, the owner/operator shall use PG&E specification or equivalent pipeline quality natural gas and shall maintain records from the supplier showing the higher heating value (HHV) of the gas. The HHV value recorded shall be updated once a month. The HHV shall be used to estimate fuel gas usage. (Basis: Cumulative Increase)
 - 5B. Prior to firing refinery gas at S-10 and S-11, the owner/operator shall install, calibrate, and operate a District-approved monitor for fuel gas heating value to estimate fuel gas usage. (Basis: Cumulative Increase)
6. Deleted.
7. In order to demonstrate NO_x mass reductions for banked emissions credits during periods of monitor downtime, the owner/operator of the gas turbines S-10 and S-11 shall substitute average hourly NO_x mass emissions for the missing period with the higher of the following: (Basis: Offsets)
 - 1) Previous month average NO_x mass emission rate.

VI. Permit Conditions

- 2) Average of the NO_x mass emission rates for the hour before and the hour after the missing period.
In the event that such data is not available, the highest allowable NO_x mass emission rate (i.e. 31.5 lb/hour per turbine) shall be substituted for the missing period.
8. Data shall be substituted on an average hourly basis each time NO_x mass emissions can not be measured because a monitor is out of service. Substituted emissions data shall be added to the monthly reports and shall include: (Basis: Offsets)
 - a. monthly total hours of substituted data resulting from monitor downtime
 - b. substituted NO_x mass emissions and method of substitution for each downtime period during the month
 - c. monthly total of substituted NO_x mass emissions
 - d. rolling 12 month total of substituted NO_x mass emissions
9. In the event that NO_x mass emissions from S-10 and S-11 exceed 198.5 tons in any calendar year, the facility owner/operator shall apply for a modification of their permit to operate and shall reimburse the District with emission reduction credits for the amount of the exceedance. All emission credit reimbursements shall be permanent until such time that the facility owner/operator reapplies for and is granted credits by the District. (Basis: Offsets)
10. Copies of all continuous emission monitor and data substitution records shall be kept on site and be made available for inspection by District personnel upon request for a period of 5 years from the date that a record is made.
(Basis: Regulation 2-6-501)
11. The facility owner/operator shall ensure that an annual performance test is conducted on each turbine in accordance with the District test procedures to demonstrate compliance with the CO limit. The owner/operator may submit an alternative monitoring plan to the District for approval. If the alternative monitoring plan is approved, the plan shall supersede the annual source test requirement. Approvals shall be processed using the permit modification procedure contained in Regulation 2, Rule 6. (Basis: Regulation 2-6-409.2)
- *12. The owner or operator shall conduct weekly hydrogen sulfide leak equipment inspection either visually, or by audible or olfactory detection methods. Hydrogen sulfide leaks as indicated by visual, audible, or olfactory methods, shall be repaired as soon as practicable, but no later than 7 days after the leak is detected. The owner or operator shall monitor and record the following information:
 - a. For each inspection during which a leak is detected, a record of the date, operator name, and identification of the equipment where the leak occurred.
 - b. For each inspection during which no leak is detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

VI. Permit Conditions

(Basis: Regulation 9, Rule 2)

13. For the purposes of demonstrating compliance with Regulation 9 Rule 9 Section 301.4 and for Title V compliance certification, the permit holder is considered to be in compliance with Section 301.2, if either the NO_x corrected concentration or the output based NO_x emission calculations in Section 9-9-605 are below the limits in 301.2. The permit holder shall identify an exceedance only if both the NO_x corrected concentration and the output based NO_x calculated emission rate exceed the standards in 9-9-301.2. An exceedance of both standards will be reported to the BAAQMD using the compliance procedures specified in the Title V permit. (Basis: Regulation 9-9-301.4)

Condition #18843

For S-12, S-13: Diesel IC Engines for Gas Turbine Start

1. The Diesel Engines S-12 and S-13 have been granted exemption by the BAAQMD from the emission reduction requirements of CCR Section 93115.7(b). The engines shall each be limited to 190 hours per year of operation. (basis: Cumulative Increase, CCR 93115.3(j))
2. Only CARB Diesel fuel or approved alternative shall be combusted at S-12 and S-13. The maximum sulfur content of the fuel shall be demonstrated by vendor certification. (basis:: CCR 93115.5(a))
3. In order to demonstrate compliance with the above requirements, the operator of S-12 and S-13 shall keep the following records in a District approved log. These records shall be updated on at least a monthly basis, kept on-site, and be available for District inspection for at least 5 years from the date on which a record was made. (basis: Cumulative Increase, CCR Section 93115.3(j), CCR 93115.10(a))
 - a. operating hours for S-12 and S-13
 - b. vendor certified fuel sulfur content

Condition #18844

For S-14: Diesel IC Engine for Emergency Power Generation

1. Only CARB Diesel fuel or approved alternative shall be combusted at S-14. The maximum sulfur content of the fuel shall be demonstrated by vendor certification. (basis: CCR 93115.5(b))
2. S-14 shall only be operated to mitigate emergency conditions or for reliability-related activities. Operation for reliability-related activities shall not exceed 20

VI. Permit Conditions

hours in any calendar year. Operation while mitigating emergency conditions is unlimited. (basis: CCR 93115.6(b)(3)(A)(1)(a))

3. “Emergency Conditions” is defined as any of the following:
 - a. Failure of regular electric power supply.
 - b. Flood mitigation.
 - c. Sewage overflow mitigation.
 - d. Fire.
 - e. Failure of a primary motor, but only for such time as needed to repair or replace the primary motor. (basis: Regulation 9-8-231.

4. “Reliability-related activities” is defined as any of the following:
 - a. Operation of an emergency standby engine to test its ability to perform for an emergency use.
 - b. Operation of an emergency standby engine during maintenance of a primary motor.
 - c. Operation of an emergency standby engine after notification by the utility that involuntary curtailment is imminent but before the actual curtailment. (basis: Regulation 9-8-232)

5. The emergency standby engine S-14 shall be equipped with a non-resettable totalizing meter that measures and records the hours of operation for the engine. This meter shall have a minimum display capability of 9,999 hours. (basis: CCR 93115.10(e)(1))

6. The following monthly records shall be maintained for the emergency standby engine S-14 in a District approved log. Records shall be kept for at least 5 years and shall be made available for District inspection upon request:
 - a. Total hours of operation.
 - b. Hours of operation under emergency conditions and a description of the nature of each emergency condition.
 - c. Fuel usage. (basis: Regulations 9-8-530, 1-441, CCR 93115.10(g))

B. Facility-wide Conditions

Condition #21109

PSD conditions

Following are the PSD conditions imposed by EPA and modified by the District in Application #25830.

- I. Deleted Application #25820.

VI. Permit Conditions

II. Deleted Application #25820.

III. Facilities Operation

All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Permit to Operate shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. (PSD)

IV. Deleted Application #25820.

V. Right to Entry

The EPA Regional Administrator, the head of the California Air Resources Board, the APCO of the District, and/or their authorized representatives, upon the presentation of credentials, shall be permitted:

A. to enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this Permit to Operate; and

B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Permit to Operate; and

C. to inspect any equipment, operation, or method required in this Permit to Operate; and

D. to sample emissions from the source. (PSD)

VI. Transfer of Ownership

In the event of any changes in control or ownership of facilities to be constructed or modified, this Permit to Operate shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Permit to Operate and its conditions by letter, a copy of which shall be forwarded to the Regional Administrator and the State and local Air Pollution Control Agency. (PSD)

VII. Severability

The provisions of this Permit to Operate are severable, and, if any provision of this Permit to Operate is held invalid, the remainder of this Permit to Operate shall not be affected thereby. (PSD)

VI. Permit Conditions

VIII. Other Applicable Regulations

The owner and operator of the project shall construct and operate the stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations other than those monitoring requirements that have been subsumed by the permit shield. (PSD)

IX. Special Conditions

- A. deleted Application #25830.
- B. deleted Application #25830.
- C. Emission Limits for NOx.

MCLP shall not discharge or cause the discharge into the atmosphere from the exhaust stack of any turbine, the following pollutants in excess of the following limits:

| Pollutant | Mass Emission Limit | Concentration Emission Limit |
|--------------|------------------------|---------------------------------|
| NOx (as NO2) | 81.0 #/hr/turbine | 45.0 ppm @ 15% O2 |

The above emission limits shall be measured on a 3-hr average, for the purpose of source tests (but not during a 3-hr period following commencement of startup or a 1-hr period preceding completion of shutdown). Averaging times for continuous emission monitors shall be as specified in E, below. (PSD)

D. Performance Tests

1. MCLP shall conduct or cause to be conducted performance for nitrogen oxides (NOx) at such times as may be specified by the District or by EPA.

MCLP shall furnish the Bay Area Air Quality Management District—a written report of each such test. All performance tests shall be conducted at the maximum operating capacity of the unit being tested. (PSD)

2. Performance tests for the emissions of NOx shall be conducted and results reported in accordance with the test methods set forth in 40 CFR 60 Appendix A, and 40 CFR 60.8. The following test methods shall be used:

VI. Permit Conditions

- a. Performance tests for the emission of NO_x shall be conducted using EPA Method 20. (PSD)
3. At least 30 days prior to actual testing, MCLP shall submit to the District's Source Test Section (1) a quality assurance project plan detailing methods and procedures to be used and (2) a written quality assurance test plan. Such a plan shall conform to EPA guidelines for developing project plans. A test plan or QA plan that does not have District approval may be grounds to invalidate any test and require a retest. (PSD)

E. Continuous Monitoring

1. NO_x Continuous Monitoring:
 - a. Condition IX.E.1a subsumed by Application #25820.
 - b. Stack gas volumetric flow rates shall be calculated using the F-factor method in EPA Method 19. (PSD)
2. Deleted Application #25820.
3. Report of excess emissions:
 - a. Condition IX.E.3a subsumed by Application #25820.
 - b. Condition IX.E.3b subsumed by Application #25820.
 - c. Condition IX.E.3c subsumed by Application #25820.
 - d. Condition IX.E.3d subsumed by Application #25820.
 - e. Excess emissions shall be defined as: any consecutive 3-hour period (but not during a 3-hr period following commencement of startup or a 1-hr period preceding completion of shutdown) during which the mass emissions of NO_x or the NO_x concentration, as measured by the continuous monitoring system, exceeds the maximum emission limits set in IX.C above.

Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit. (PSD)

4. deleted Application #25830.
5. deleted Application #25830.
6. Condition IX.E.6 subsumed by Application #25820.

F. Fuel Use

VI. Permit Conditions

MCLP shall not consume more than 500.0 MMBTU/hr per turbine on a one hour average. MCLP shall measure and record the heating value of the fuel consumed in the turbine on at least a monthly basis. Refinery gas or natural (pipeline) gas shall be the only fuels consumed. (PSD)

X. Agency Notifications

All correspondence as required by this Permit to Operate shall be forwarded to:

- A. Deleted Application #25820.
- B. Deleted Application #25820.
- C. Air Pollution Control Officer
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included only to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown, either annual (A), quarterly (Q), monthly (M), daily (D), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

This section is only a summary of the limits and monitoring requirements. In the case of a conflict with any requirement in Sections I-VI, the preceding sections take precedence over Section VII.

**Table VII-A
 Applicable Limits and Compliance Monitoring Requirements
 S-1 Sludge Drying Operation & S-2 Product Silo**

| Limit or Pollutant | Emission Limit Citation | FE Y/N | Future Effective Date | Emission Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|--------------------|-----------------------------------|--------|-----------------------|---|---------------------------------|------------------------------|-----------------|
| Opacity | BAAQMD 6-1-301 SIP 6-301 | Y | | Ringelmann No. 1 for 3 minutes in any hour | | N | |
| FP | BAAQMD 6-1-310 SIP 6-310 | Y | | 0.15 grain/dscf | | N | |
| FP | BAAQMD 6-1-311 SIP 6-311 | Y | | 3.4 lb/hr (throughput = 0.71 tons/hr) | | N | |

VII. Applicable Limits & Compliance Monitoring Requirements

Table VII-B
Applicable Limits and Compliance Monitoring Requirements
S-10, S-11: Gas Turbines

| Limit or Pollutant | Emission Limit Citation | FE Y/N | Future Effective Date | Emission Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|--------------------|--------------------------------------|--------|-----------------------|---|---|------------------------------|-----------------|
| NOx | SIP 9-9-301.2 9-9-401 | Y | | 17.1 ppmv dry @15% O ₂ , 3-hr average excluding startup and shutdown periods (includes efficiency adjustment) | SIP 9-9-501 | C | CEM |
| NOx | BAAQMD 9-9-301.2 | N | | 0.43 lbs/MWhr or 9 ppmv dry @15% O ₂ , 3-hr average excluding startup and shutdown periods | BAAQMD 9-9-501, 9-9-605 and BAAQMD Condition 13422, part 13 | C | CEM |
| NOx | BAAQMD Condition 13422, part 2 | Y | | 1,512 lbs/day and 198.5 tons/yr | BAAQMD Condition 13422, parts 5 and 7 through 10 | C | CEM |
| NOx | BAAQMD Condition 13422, part 3 | Y | | 0.43 lbs/MWhr or 9 ppmv dry @15% O ₂ , 3-hr average excluding startup period not to exceed 3 hrs and shutdown periods not to exceed 1 hr | BAAQMD Condition 13422, part 5 and part 13 | C | CEM |
| NOx | NSPS Subpart GG, 60.332 (a)(1) | Y | | 85.2 ppmv, @ 15% O ₂ , dry, 3 hour average excluding startup and shutdown periods | Monitoring requirement subsumed by Regulation 9, Rule 9 monitoring. See Permit Shield. | N | |

VII. Applicable Limits & Compliance Monitoring Requirements

Table VII-B
Applicable Limits and Compliance Monitoring Requirements
S-10, S-11: Gas Turbines

| Limit or Pollutant | Emission Limit Citation | FE Y/N | Future Effective Date | Emission Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|--------------------|--------------------------------|--------|-----------------------|--|--|------------------------------|-----------------|
| NOx | PSD Permit Condition IX, C | Y | | 81.0 lbs/hr/turbine, 3 hour average except for 3 hours following commencement of turbine startup and 1-hour preceding completion of turbine shutdown | Monitoring requirement subsumed by Regulation 9, Rule 9 monitoring. See Permit Shield. | N | |
| NOx | PSD Permit Condition IX,C | Y | | 45.0 ppm @15% O ₂ , 3 hour average except for 3 hours following commencement of turbine startup and 1-hour preceding completion of turbine shutdown | Monitoring requirement subsumed by Regulation 9, Rule 9 monitoring. See Permit Shield. | N | |
| SO ₂ | BAAQMD Condition 13422, part 2 | Y | | 550 lbs/day and 36 tons/yr | BAAQMD Condition 13422, part 5 | C | CMS |
| | BAAQMD 9-1-301 | Y | | GLC ¹ of 0.5 ppm for 3 consecutive minutes., or 0.25 ppm averaged over 60 consecutive minutes, or 0.05 ppm averaged over 24 hours 24 hours | | N | |
| SO ₂ | BAAQMD 9-1-302 | Y | | 300 ppm (dry) | | N | |
| SO ₂ | NSPS Subpart GG, 60.333(b) | Y | | Sulfur content of fuel < 0.8% by weight | Subsumed by BAAQMD Cond #13422, parts 4 and 5 | N | |

VII. Applicable Limits & Compliance Monitoring Requirements

Table VII-B
Applicable Limits and Compliance Monitoring Requirements
S-10, S-11: Gas Turbines

| Limit or Pollutant | Emission Limit Citation | FE Y/N | Future Effective Date | Emission Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|--------------------|--------------------------------|--------|-----------------------|---|---|------------------------------|--------------------|
| SO ₂ | BAAQMD Condition 13422, part 4 | Y | | ≤ 62 ppm H ₂ S in combusted fuel, annual average, (not emission limit) | BAAQMD Condition 13422, part 4A Natural gas operations | P/D | Records |
| SO ₂ | BAAQMD Condition 13422, part 4 | Y | | ≤ 62 ppm H ₂ S in combusted fuel, annual average, (not emission limit) | BAAQMD Condition 13422, part 4B Refinery gas operations | C | CMS |
| CO | BAAQMD Condition 13422, part 2 | Y | | 1,248 lbs/day and 228 tons/yr | | P/A | annual source test |
| NMHC | BAAQMD Condition 13422, part 2 | Y | | 210 lbs/day and 35 tons/yr | | N | |
| PM ₁₀ | BAAQMD Condition 13422, part 2 | Y | | 240 lbs/day and 43.8 tons/yr | | N | |
| Opacity | BAAQMD 6-1-301 SIP 6-301 | Y | | Ringelmann No. 1 for more than 3 minutes in any hour | | N | |
| FP | BAAQMD 6-1-310 SIP 6-310 | Y | | 0.15 grain/dscf @ 6% O ₂ | | N | |
| H ₂ S | BAAQMD 9-2-301 | N | | GLC ¹ of 0.06 ppm 3 min. average, or 0.03 ppm 60 min. average | BAAQMD Condition 13422, part 12 | P/W | weekly inspection |

VII. Applicable Limits & Compliance Monitoring Requirements

Table VII-B
Applicable Limits and Compliance Monitoring Requirements
S-10, S-11: Gas Turbines

| Limit or Pollutant | Emission Limit Citation | FE Y/N | Future Effective Date | Emission Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|--------------------|--------------------------------|--------|-----------------------|--------------------------|---------------------------------|------------------------------|-----------------|
| Fuel Usage | BAAQMD Condition 13422, part 1 | Y | | 500 MMBtu/hr per turbine | BAAQMD Condition 13422, part 5 | C | records |
| Fuel Usage | PSD Permit Condition IX, F. | Y | | 500 MMBtu/hr per turbine | PSD Permit Condition VII, F. | C | records |

¹ Ground Level Concentration

VII. Applicable Limits & Compliance Monitoring Requirements

Table VII-C
Applicable Limits and Compliance Monitoring Requirements
S-12, S-13 DIESEL IC ENGINES FOR GAS TURBINE START

| Type of Limit | Citation of Limit | FE Y/N | Future Effective Date | Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|--------------------|--|--------|-----------------------|--|---------------------------------|------------------------------|---------------------------|
| Opacity | BAAQMD Regulation 6-1-303 SIP 6-303 | Y | | Ringelmann 2.0 for more than 3 minutes in any hour | | N | |
| FP | BAAQMD Regulation 6-1-310 SIP 6-310 | Y | | 0.15 grain/dscf | | N | |
| SO2 | BAAQMD Regulation 9-1-301 | N | | GLC ¹ : 0.5 ppm for 3 consecutive minutes, 0.25 ppm averaged over 60 consecutive minutes, 0.05 ppm averaged over 24 hours | Condition #18843, part 2 | P/E | Vendor fuel certification |
| SO2 | BAAQMD Regulation 9-1-304 | Y | | 0.5% sulfur limit for liquid fuel | Condition #18843, part 2 | P/E | Vendor fuel certification |
| SO2 | CCR 93115.5(a), Condition #18843, part 2 | N | | Sulfur content of fuel: CARB Diesel (or equivalent) | Condition #18843, part 2 | P/E | Vendor fuel certification |
| Hours of operation | CCR 93115.3(j), Condition #18843, part 1 | Y | | Low-use prime engine exemption. BAAQMD limit: 190 hours per year, each engine | Condition #18843, part 3 | P/E | Recordkeeping |

¹ Ground Level Concentration

VII. Applicable Limits & Compliance Monitoring Requirements

**Table VII-D
 Applicable Limits and Compliance Monitoring Requirements
 S-14 DIESEL IC ENGINE FOR EMERGENCY POWER GENERATION**

| Type of Limit | Citation of Limit | FE Y/N | Future Effective Date | Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|--------------------|-------------------------------------|--------|-----------------------|--|---------------------------------|------------------------------|---------------------------|
| Opacity | BAAQMD Regulation 6-1-303 SIP 6-303 | Y | | Ringelmann 2.0 for more than 3 minutes in any hour | | N | |
| FP | BAAQMD Regulation 6-1-310 SIP 6-310 | Y | | 0.15 grain/dscf | | N | |
| SO2 | BAAQMD Regulation 9-1-301 BAAQMD | N | | GLC ¹ : 0.5 ppm for 3 consecutive minutes, 0.25 ppm averaged over 60 consecutive minutes, 0.05 ppm averaged over 24 hours | Condition #18844, part 1 | P/E | Vendor fuel certification |
| SO2 | BAAQMD Regulation 9-1-304 | Y | | 0.5% sulfur limit for liquid fuel | Condition #18844, part 1 | P/E | Vendor fuel certification |
| SO2 | Condition #18844, part 1 | N | | Sulfur content of fuel: CARB Diesel (or equivalent) | Condition #18844, part 1 | P/E | Vendor fuel certification |
| Hours of operation | Condition #18844, part 2 | Y | | reliability-related activities not to exceed 20 hours in any consecutive 12-month period | Condition #18844, part 6 | P/E | Recordkeeping |

¹ Ground Level Concentration

VII. Applicable Limits & Compliance Monitoring Requirements

Table VII - E
Applicable Limits and Compliance Monitoring Requirements
COOLING TOWER

| Type of Limit | Citation of Limit | FE Y/N | Future Effective Date | Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|---------------|-------------------------------------|--------|-----------------------|--|---------------------------------|------------------------------|-----------------|
| Opacity | BAAQMD Regulation 6-1-301 SIP 6-301 | Y | | < Ringelmann 1 for more than 3 minutes in any hour | | N | |
| FP | BAAQMD Regulation 6-1-310 SIP 6-310 | Y | | 0.15 grains per dscf | | N | |

VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally found in Section 600 et seq. of the regulation. The following table indicates only the test methods associated with the emission limits referenced in Section IV - Source-Specific Applicable Requirements.

**Table VIII
 Test Methods**

| Applicable Requirement | Description of Requirement | Acceptable Test Methods |
|-------------------------------|--|---|
| BAAQMD 6-301 | Ringelmann No. 1 Limitation | Manual of Procedures, Volume I, Evaluation of Visible Emissions |
| BAAQMD 6-310 | Particulate Weight Limitation | Manual of Procedures, Volume IV, ST-15 or Particulates Sampling or EPA Method 5, Determination of Particulate Matter Emissions from Stationary Sources |
| BAAQMD 6-311 | General Operations | Manual of Procedures, Volume IV, ST-15 or Particulates Sampling or EPA Method 5, Determination of Particulate Matter Emissions from Stationary Sources |
| BAAQMD 9-1-302 | General Emission Limitation | Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling |
| BAAQMD 9-1-304 | Fuel Sulfur Content | Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oil |
| BAAQMD 9-9-301.2 | Emission Limits- Turbines Rated \geq 10 MW w/o SCR | Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling or ST-14, Oxygen, Continuous Sampling |
| PSD permit, part IX.C. | NO _x Emission Limits | EPA Method 7,-Determination of Nitrogen Oxide Emissions from Stationary Sources EPA Method 20-Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines |
| NSPS 40 CFR 60.332(a)(1) | NO _x Emission Limits | EPA Method 7,-Determination of Nitrogen Oxide Emissions from Stationary Sources EPA Method 20-Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines |
| NSPS 40 CFR 60.333(b) | Fuel Sulfur Content | ASTM D 1072-80, Standard Method for Total Sulfur in Fuel Gases ASTM D 3031-81, Standard Test Method for Total Sulfur in Natural Gas by Hydrogenation |

VIII. Test Methods

**Table VIII
 Test Methods**

| Applicable Requirement | Description of Requirement | Acceptable Test Methods |
|---------------------------------------|---------------------------------|--|
| BAAQMD Permit Condition #13422 | | |
| Part 2 | NOx Emission Limits | Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling or ST-14, Oxygen, Continuous Sampling |
| Part 2 | SO ₂ Emission Limits | Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling |
| Part 2 | CO Emission Limit | Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling |
| Part 2 | NMHC Emission Limit | Manual of Procedures, Volume IV, ST-7, Non-Methane Organic Carbon Sampling |
| Part 2 | PM10 Emission Limit | Manual of Procedures, Volume IV, ST-15, Particulates Sampling |
| Part 3 | NOx Emission Limits | Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling or ST-14, Oxygen, Continuous Sampling |
| Part 4 | H ₂ S Fuel Limit | Manual of Procedures, Volume IV, ST-28, Hydrogen Sulfide, Integrated Sampling |

IX. PERMIT SHIELD

A. NON-APPLICABLE REQUIREMENTS

Pursuant to District Regulations 2-6-233 and 2-6-409.12, the federally enforceable regulations and/or standards cited in the following table[s] are not applicable to the source or group of sources identified at the top of the table[s]. Enforcement actions and litigation may not be initiated against the source or group of sources covered by this shield based on the regulatory and/or statutory provisions cited.

**Table IX-A
 Facility Wide**

| Citation | Title or Description (Reason not applicable) |
|------------------------------------|--|
| BAAQMD Regulation 8, Rule 18 | Equipment Leaks (Facility is not a petroleum refinery, chemical plant, bulk plant, or bulk terminal) |
| BAAQMD Regulation 8, Rule 22 | Valves and Flanges at Chemical Plants (Facility is not a chemical plant) |
| SIP Regulation 8, Rule 25 | Pump and Compressor Seals at Petroleum Refineries, Chemical Plants, Bulk Plants and Bulk Terminals (Facility is not a petroleum refinery, chemical plant, bulk plant, or bulk terminal) |
| BAAQMD Regulation 8, Rule 28 | Pressure Relief Valves at Petroleum Refineries and Chemical Plants (Facility is not a petroleum refinery or chemical plant) |
| SIP Regulation 8, Rule 28 | Pressure Relief Valves at Petroleum Refineries and Chemical Plants (Facility is not a petroleum refinery or chemical plant) |

IX. Permit Shield

B. SUBSUMED REQUIREMENTS

Pursuant to District Regulations 2-6-233 and 2-6-409.12, as of the date this permit is issued, the federally enforceable “subsumed” regulations and/or standards cited in the following table are not applicable to the source or group of sources identified at the top of the table. The District has determined that compliance with the “streamlined” requirements listed below and elsewhere in this permit will assure compliance with the substantive requirements of the “subsumed” regulations and/or standards. Enforcement actions and litigation may not be initiated against the source or group of sources covered by this shield based on the “subsumed” regulatory and/or statutory provisions cited.

**Table IX-B
 S-10, S-11: Gas Turbines**

| Subsumed Requirement Citation | Title or Description | Streamlined Requirements | Title or Description |
|--------------------------------------|---|----------------------------------|---|
| NSPS Subpart A | | | |
| 60.13 | Monitoring Requirements | BAAQMD Cond #13422, Part 5 | Monitoring Requirements |
| NSPS Subpart GG | Standards of Performance for Stationary Gas Turbines | | |
| 60.334(h)(1) | Fuel Sulfur Limit Monitoring | BAAQMD Cond #13422, Part 4 | Fuel H2S Concentration Limit/Monitoring |
| 60.334(h)(2) | Fuel Nitrogen Monitoring | BAAQMD Regulation 9-9-501 | Monitoring and Recordkeeping Requirements |
| 60.334(c) | Periods of excess NOx emissions | BAAQMD Regulation 9-9-501 | Monitoring and Recordkeeping Requirements |
| PSD Condition IX.E.1.a | NOx monitoring systems | BAAQMD Regulation 9-9-501 | Monitoring and Recordkeeping Requirements |

IX. Permit Shield

Table IX-B
S-10, S-11: Gas Turbines

| Subsumed Requirement Citation | Title or Description | Streamlined Requirements | Title or Description |
|--------------------------------------|--|---------------------------------|---|
| PSD Condition IX.E.3.a | Magnitude of Excess Emissions | BAAQMD Regulation 9-9-501 | Monitoring and Recordkeeping Requirements |
| PSD Condition IX.E.3.b | Periods of Excess Emissions | BAAQMD Regulation 9-9-501 | Monitoring and Recordkeeping Requirements |
| PSD Condition IX.E.3.c | CEM Downtime | BAAQMD Regulation 9-9-501 | Monitoring and Recordkeeping Requirements |
| PSD Condition IX.E.3.d | Reports | BAAQMD Regulation 9-9-501 | Monitoring and Recordkeeping Requirements |
| PSD Condition IX.E.6 | Records | BAAQMD Regulation 9-9-501 | Monitoring and Recordkeeping Requirements |
| BAAQMD Regulation 2-6-409.2 | Periodic Monitoring for NOx limit in NSPS Subpart GG, 60.332(a)(1) | BAAQMD Regulation 9-9-501 | Monitoring and Recordkeeping Requirements |

X. MAJOR FACILITY REVIEW PERMIT HISTORY

| | |
|--|--------------------------|
| Title V Initial Issuance (Application #25820): | December 18, 1998 |
| Title V Renewal (Application #7713) | July 15, 2004 |
| Title V Renewal (Application #19496) | June 8, 2010 |
| Administrative Amendment (Application #23486) <ul style="list-style-type: none">• Allows daily averaging for maximum fuel usage requirement for the Gas Turbines S-10 and S-11.• Updates BAAQMD Regulation 9, Rule 9 NO_x requirements.• Removes H₂S monitoring requirements when firing only natural gas. | January 23, 2012 |
| Title V Renewal (Application #26809) | May 5, 2016 |
| Administrative Amendment (Application #27903) <ul style="list-style-type: none">• Correct BAAQMD address on title page and in Section 1.F.• Clarify monitoring and record keeping procedures for heat content of fuel gases fired in Gas Turbines S-10 and S-11. | January 22, 2019 |

XI. GLOSSARY

ACT

Federal Clean Air Act

APCO

Air Pollution Control Officer

API

American Petroleum Institute

ARB

Air Resources Board

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

BARCT

Best Available Retrofit Control Technology

C5

An Organic chemical compound with five carbon atoms

C6

An Organic chemical compound with six carbon atoms

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

XI. Glossary (continued)

CEM

A "continuous emission monitor" is a monitoring device that provides a continuous direct measurement of some pollutant (e.g. NO_x concentration) in an exhaust stream.

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

CO₂

Carbon Dioxide

Cumulative Increase

The sum of permitted emissions from each new or modified source since a specified date. Used to determine whether threshold-based requirements are triggered.

District

The Bay Area Air Quality Management District

dscf

Dry Standard Cubic Feet

dscm

Dry Standard Cubic Meter

E 6, E 9, E 12

Very large or very small number values are commonly expressed in a form called scientific notation, which consists of a decimal part multiplied by 10 raised to some power. For example, 4.53 E 6 equals $(4.53) \times (10^6) = (4.53) \times (10 \times 10 \times 10 \times 10 \times 10 \times 10) = 4,530,000$. Scientific notation is used to express large or small numbers without writing out long strings of zeros.

EGT

Exhaust Gas Temperature

EPA

The federal Environmental Protection Agency.

Excluded

Not subject to any District Regulations.

XI. Glossary (continued)

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 (HAP), and Part 72 (Permits Regulation, Acid Rain), and also 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.

FR

Federal Register

GDF

Gasoline Dispensing Facility

GLC

Ground level concentration.

GLM

Ground Level Monitor

grains

1/7000 of a pound

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 both 40 CFR Part 63, and District Regulation 2, Rule 5.

H₂S

Hydrogen Sulfide

HHV

Higher Heating Value. The quantity of heat evolved as determined by a calorimeter where the combustion products are cooled to 60F and all water vapor is condensed to liquid.

LHV

Lower Heating Value. Similar to the higher heating value (see HHV) except that the water produced by the combustion is not condensed but retained as vapor at 60F.

XI. Glossary (continued)

Major Facility

A facility with potential emissions of regulated air pollutants greater than 100 tons per year, greater than or equal to 10 tons per year of any single hazardous air pollutant, and/or greater than or equal to 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity 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 Act and implemented by District Regulation 2, Rule 6.

MOP

The District's Manual of Procedures.

MSDS

Material Safety Data Sheet

MW

Megawatts

NA

Not Applicable

NAAQS

National Ambient Air Quality Standards

NESHAPS

National Emission Standards for Hazardous Air Pollutants. Contained in 40 CFR Part 61.

NMHC

Non-methane Hydrocarbons

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 Act, and implemented by both 40 CFR Part 60 and District Regulation 10.

XI. Glossary (continued)

NSR

New Source Review. A federal program for preconstruction review and permitting of new and modified sources of air pollutants for which the District is classified "non-attainment". Mandated by Title I of the Clean Air Act and implemented by 40 CFR Parts 51 and 52 as well as District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

O₂

The chemical name for naturally-occurring oxygen gas.

Offset Requirement

A New Source Review requirement to provide federally enforceable emission offsets at a specified ratio for the emissions from a new or modified source and any pre-existing cumulative increase minus any onsite contemporaneous emission reduction credits. 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 by virtue of certain other characteristics (defined in Regulation 2, Rule 6) is subject to Titles IV and V of the Clean Air Act.

POC

Precursor Organic Compounds

PM

Total Particulate Matter

PM₁₀

Particulate matter with aerodynamic equivalent diameter of less than 10 microns

PSD

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

SCR

A "selective catalytic reduction" unit is an abatement device that reduces NO_x concentrations in the exhaust stream of a combustion device. SCRs utilize a catalyst, which operates at a specific temperature range, and injected ammonia to promote the conversion of NO_x compounds to nitrogen gas.

XI. Glossary (continued)

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

SO₂ Bubble

An SO₂ bubble is an overall cap on the SO₂ emissions from a defined group of sources, or from an entire facility. SO₂ bubbles are sometimes used at refineries because combustion sources are typically fired entirely or in part by "refinery fuel gas" (RFG), a waste gas product from refining operations. Thus, total SO₂ emissions may be conveniently quantified by monitoring the total amount of RFG that is consumed, and the concentration of H₂S and other sulfur compounds in the RFG.

SO₃

Sulfur trioxide

THC

Total Hydrocarbons (NMHC + Methane)

therm

100,000 British Thermal Unit

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)

TRMP

Toxic Risk Management Plan

TSP

Total Suspended Particulate

TVP

True Vapor Pressure

VOC

Volatile Organic Compounds

XI. Glossary (continued)

Units of Measure:

| | | |
|----------------|---|----------------------------------|
| bhp | = | brake-horsepower |
| Btu | = | British Thermal Unit |
| g | = | grams |
| gal | = | gallon |
| hp | = | horsepower |
| hr | = | hour |
| lb | = | pound |
| in | = | inches |
| max | = | maximum |
| m ² | = | square meter |
| min | = | minute |
| MM | = | million |
| 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 |

Symbols:

| | | |
|---|---|--------------------------|
| < | = | less than |
| > | = | greater than |
| ≤ | = | less than or equal to |
| ≥ | = | greater than or equal to |