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| **Docket Number:** | 99-AFC-08C |
| **Project Title:** | Blythe Energy Project Compliance & Blythe Transmission Line Modification |
| **TN #:** | 204518 |
| **Document Title:** | Supplement to Petition to Amend |
| **Description:** | N/A |
| **Filer:** | Nancy Matthews |
| **Organization:** | Blythe Energy Inc./Sierra Research |
| **Submitter Role:** | Applicant Consultant |
| **Submission Date:** | 5/6/2015 4:04:11 PM |
| **Docketed Date:** | 5/6/2015 |

Blythe Energy Inc.

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May 6, 2015

Mary Dyas
Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Re: Blythe Energy Project (99-AFC-08C)
Supplement to Petition to Amend dated February 11, 2015

Dear Ms. Dyas:

Blythe Energy Inc. is proposing several supplementary changes in addition to those included in the Petition to Amend (PTA) for the Blythe Energy Project (BEP, 99-AFC-08C) that was docketed on February 11, 2015 (TN #203657). The requested changes are in response to comments submitted to the Mojave Desert Air Quality Management District (MDAQMD) by the U.S. EPA on April 9, 2015. The proposed changes include: additional emission limits; additional monitoring, recordkeeping, and reporting conditions; and clarifying amendments. All of these changes are intended to provide assurance that the annual emissions limits that were the subject of the February 11, 2015 PTA will be enforceable as a practical matter. We expect that the final permits issued by the District will also reflect these changes.

The following changes to the existing BEP license were proposed in the February 11, 2015 PTA:

- The addition of an annual average NOx concentration limit of 2.0 ppmvd @ 15% $O_2$ to the permitted emission limits; and
- A reduction in the annual limits for NOx, CO, and $PM_{10}$ to 97 tons, with compliance to be determined on a rolling 12-month total basis.

Additional information was provided to the CEC Staff, MDAQMD and U.S. EPA on April 28, 2015. Clarifications requested by CEC Staff on the PTA and the April 28 submittal were provided to Staff on March 20, 2015 and April 29, 2015, respectively. These responses are included here as Attachment A.

The changes requested by the U.S. EPA that are addressed in this supplement are as follows:

*Additional Emissions Limits*

- The addition of a new annual average CO mass emissions limit for the gas turbines of 10 lb/hr for non-startup/shutdown hours, applicable on a rolling 12-month average basis;
- The addition of a new annual average limit on pounds of CO per startup/shutdown event, applicable on a rolling 12-month average basis; and
- The addition of a new annual limit on total heat input to the gas turbines and duct burners, applicable on a rolling 12-month basis.

*Monitoring, Recordkeeping, and Reporting Requirements*

- Additional requirements to report monthly and 12-month rolling totals for the gas turbines, including:
    - NOx, CO and PM10 emissions and fuel use;
    - Average NOx concentration;
    - CO mass emissions; and
    - CO emissions from startups and shutdowns on a 12-month rolling basis;
- Addition of monthly fuel use to the list of information required to be maintained in the operations log for the emergency engines (in addition to annual fuel use); and
- Requirement to calculate monthly and rolling 12-month CO, NOx and $PM_{10}$ emissions from the emergency engines based on monthly fuel use and District-approved emission factors.

*Clarifications*

- Clarification that the annual limits apply to all of the emitting units at BEP;
- Clarification that the annual limits include emissions from the turbines/duct burners during startup, shutdown and malfunction;
- Clarification that emissions from the emergency generators must be accounted for and included in the totals; and
- Clarification that new 12-month rolling limits take effect 12 months after the effective date of the amendments.

The changes proposed by this supplement would modify additional Conditions of Certification (COC), beyond those affected by the original PTA, to make them consistent with the additional changes that are proposed for the MDAQMD permits. All of the modified Conditions of Certification are shown in Attachment B. The proposed amendments to the District's Title V operating permit and Statement of Basis are included as Attachment C. The additional changes proposed in this supplement would not result in any environmental impacts or inconsistency with any Laws, Ordinances, Regulations, or Standards (LORS). As previously indicated, approval of the amendment will ensure that emissions from the BEP project remain below those evaluated in the original licensing proceeding.

If you have any questions or require additional information regarding the additional changes proposed, please do not hesitate to contact Gary Rubenstein of Sierra Research at (916) 273-5126.

Sincerely,

Christopher J. Doyle
Vice President
Blythe Energy Inc.

Attachments

cc: C. Doyle, Blythe Energy Inc.
M. Foster, Stoel Rives LLP
G. Rubenstein, Sierra Research

**Attachment A**

**Responses to Questions by CEC Staff**

| | |
|---|---|
| **From:** | Susan Strachan |
| **To:** | Chris Doyle; Foster, Melissa A. |
| **Cc:** | Nancy Matthews; Gary Rubenstein; Sarah Madams |
| **Subject:** | FW: Blythe I - Data Request |
| **Date:** | Friday, March 20, 2015 11:39:08 AM |
| **Attachments:** | CEC Blythe 1 PTA AQ Data Response 031915.pdf |

Please find attached, Sierra's technical response to the CEC's Data Request, which was provided to the CEC.

Thanks,

Susan

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**From:** Susan Strachan <sstrachan@sierraresearch.com>
**Date:** Friday, March 20, 2015 at 11:00 AM
**To:** "Dyas, Mary@Energy" <Mary.Dyas@energy.ca.gov>
**Cc:** Susan Strachan <sstrachan@sierraresearch.com>
**Subject:** Re: Blythe I - Data Request

Hi Mary -

Please find attached, Sierra Research's response to Staff's March 17 data request. Sierra discussed the request with Gerry Beamis and the response reflects that discussion.

Please let me know if have further question.

Thanks,

Susan

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**From:** <Dyas>, "Mary@Energy" <Mary.Dyas@energy.ca.gov>
**Date:** Tuesday, March 17, 2015 at 12:08 PM
**To:** Susan Strachan <sstrachan@sierraresearch.com>
**Subject:** Blythe I - Data Request

Hi Susan,

Can you pass this on to whomever to get an answer?

Staff states that Blythe I has requested to reduce the annual mass emission limits, which are not directly measured by CEMS. CEMS can only measure the emission concentrations in parts per million (ppm). Then the annual mass emissions are calculated from the concentration. Therefore staff is requesting the description about how the annual emissions are derived from the concentrations measured by CEMS. A sample calculation should also be included. In other words, we want to verify that the proposed new annual mass limits are reasonable based on CEMS and source test data.

Thanks,
Mary

**MARY DYAS ¦** Compliance Project Manager
**Direct:(916) 651-8891 ¦ Fax:(916) 654-3882**
mary.dyas@energy.ca.gov
**Regular Contact Hours**: Monday-Thursday, 7:00 a.m. to 3:00 p.m.

**CALIFORNIA ENERGY COMMISSION**
**Siting, Transmission, & Environmental Protection Division**
1516 Ninth Street, Sacramento, CA 95814
www.energy.ca.gov

**Conversion of Monitored Stack Gas Concentrations to Mass Emission Rates**

The CEMS measures minute-by-minute NOx, CO and $O_2$ concentrations in the exhaust of each gas turbine. At the end of each hour, the DAHS calculates and stores 1-hour averages based on the 1-minute averages. Each CEMS has a dual-range analyzer with spans that are able to accurately measure NOx and CO concentrations during startups and shutdowns as well as during controlled gas turbine operations.

Fuel flow to each gas turbine is measured by a fuel meter. Metered fuel flow for each hour (measured in units of thousand cubic feet (Mscf)) is converted to heat input for each hour (in units of MMBtu/hr) using the gross calorific value of the fuel (in units of Btu/scf) and appropriate conversion factors.

$$H = Q \times GCV/10^3$$

Where

H = heat input for the hour in MMBtu/hr
Q = metered flow rate of fuel combusted during the hour, $10^3$ standard cubic feet
GCV = gross calorific value of the fuel, Btu/scf.
$10^3$ = conversion of Btu to MMBtu and $10^3$ standard cubic feet to standard cubic feet

Mass emissions for each hour are calculated by the DAHS as follows:

1. Calculate emission rate for the hour, E, in lb/MMBtu

$$E = C_d \times F_d \times K \times MW \times (20.9/[20.9 - O_2\%])$$

Where

$C_d$ = measured pollutant concentration in ppmvd (averaged over the hour)
$F_d$ = natural gas fuel F-factor, dscf/MMBtu
K = constant, $2.59 \times 10^{-9}$ lb-mol/(dscf-ppmvd)
MW = molecular weight of the pollutant (46 lb/lb-mol for $NO_2$ and 28 lb/lb-mol for CO)
$O_2$ = measured $O_2$ concentration in ppmvd (averaged over the hour)

2. Calculate mass emissions for the hour, M, in lb/hr

$$M = E \times H$$

Where

E = emission rate in lb/MMBtu
H = heat input for hour in MMBtu/hr

The DAHS sums hourly mass emissions to calculate total mass emissions for each day; sums daily mass emissions to calculate total mass emissions for each month; sums monthly mass emissions to calculate total mass emissions for each quarter; and sums quarterly emissions to calculate total mass emissions for each calendar year. Because the proposed new NOx and CO limits will

apply on a rolling 12-month basis, the DAHS will also be programmed to use the monthly mass emissions totals to calculate rolling 12-month emissions.

Following is a sample calculation for NOx, assuming a measured NOx concentration of 1.9 ppmvd, a measured stack oxygen concentration of 14.63% $O_2$, a monitored fuel flow rate of 1622.7 Mscf, and natural gas heating value of 1035 Btu/scf.

| | | |
|---|---|---|
| Cd | 1.9 | ppmvd |
| Fd | 8710 | dscf/MMBtu |
| K | 2.59E-09 | lb-mol/(dscf-ppmvd) |
| MW | 46 | lb/lb-mol |
| $O_2$ | 14.63 | % |
| Q | 1622.7 | Mscf/hr |
| GCV | 1035 | Btu/scf (HHV) |

NOx emission factor E (lb/MMBtu)

= Cd x Fd x K x MW x (20.9/[20.9 - $O_2$%])

= 1.9 ppmvd x 8710 dscf/MMBtu x 2.59E-09 lb-mol/(dscf-ppmvd) x 46 lb/lb-mol x [20.9/(20.9-$O_2$%)]

= 0.0066 lb/MMBtu

Heat Input H (MMBtu/hr)

= Q x GCV/$10^3$

= 1622.7 Mscf/hr x 1035 Btu/scf ÷ $10^3$ Mscf/MMBtu

= 1679.5 MMBtu/hr

Hourly NOx mass emission rate M (lb/hr)

= E x H

= 0.0066 lb/MMBtu * 1679.5 MMBtu/hr

= 11.0 lb/hr

Questions transmitted in an April 29, 2015, email message from Tao Jiang, CEC, to Gary Rubenstein, Sierra Research. Response 2 was provide by email; Response 1 was discussed by phone.

**Question 1:** On page 2 of the calculation spreadsheets, table "proposed permit limits", should numbers of su/sd for scenario 2 and 3 double, which should be 104 and 220 respectively? Similarly, in the table "Actual 12-Month Average Startup Emissions" on the next page, should the number of su/sd for scenario 3 double too?

**Response 1:** The number of startups/shutdowns for scenarios 2 and 3 were used to denote the number of combined startup/shutdown events, not individual events. The "per startup/shutdown" and "per event" terminology has been clarified in the final version of the calculation spreadsheets.

**Question 2:** On Page III-29 of the proposed permit, condition 18, the proposed annual heat input is 31,852,800 MMBtu, which is more than 20% higher than the max annual heat input proposed in your calculations (25,464,000). The maximum annual NOx emission is close to 100 tpy based on your calculations. How can you justify the higher heat input will not make the NOx emission exceed the 100 tpy ceiling?

**Response 2:** BEP will be tracking emissions and fuel use on a rolling 12-month basis. If it is necessary to use more than 25,464,000 MMBtu of fuel in a rolling 12-month period, BEP will be able to reduce NOx emissions by slightly adjusting the ammonia injection rate. An average NOx emission rate of 1.6 ppmc (0.006 lb/MMBtu) at 31,852,800 MMBtu/yr results in about 95.6 tons per year of NOx emissions, below the proposed 97 tpy cap. While it is extremely unlikely that BEP would need to use as much as 31,852,800 MMBtu of fuel in a rolling 12-month period, it is important not to impose any conditions that would limit their ability to respond when dispatched by CAISO; they have the ability to track and control their NOx emissions to ensure continuous compliance. As you know, we are trying to preserve this plant's operating flexibility to the benefit of all, while maintaining compliance with the proposed emission limits.

**Attachment B**

**Revised Conditions of Certification**

The proposed revisions to the Conditions of Certification that were included in the original PTA are shown in ~~strikeout~~ and **bold <u>underline</u>** font. The additional changes addressed in this supplement are shown in ~~double strikeout~~ and **bold <u>double underline</u>** font. Only the modified conditions are shown.

[The following Conditions of Certification apply to the two individual gas turbine generators (District Permit Numbers: B007953, B007954).]

**AQ-4** Emissions of NOx, CO, oxygen and ammonia slip shall be monitored using a Continuous Emissions Monitoring System (CEMS). **<u>Each CEMS shall be operational whenever the associated combustion turbine generator is in operation, including during periods of startup, shutdown and malfunction.</u>** Turbine fuel consumption shall be monitored using a continuous monitoring system. Stack gas flow rate shall be monitored using either a Continuous Emission Rate Monitoring System (CERMS) meeting the requirements of 40 CFR Part 75 Appendix A or a stack flow rate calculation method. The operator shall install, calibrate, maintain, and operate these monitoring systems according to a District approved monitoring plan and MDAQMD Rule 218, and they shall be installed prior to initial equipment startup.

**Verification:** The project owner shall make the site available for inspection by representatives of the District, ARB, EPA and CEC.

**AQ-5** Emissions from the turbines (including its associated duct burner) shall not exceed the following emission limits at any firing rate, except for CO, NOx and VOC during periods of startup, shutdown and malfunction:

a. Hourly rates, computed every 15 minutes, verified by CEMS and annual compliance tests:

   i. NOx as NO2 — **<u>the most stringent of</u>** 19.80 lb/hr ~~(based on~~ **<u>or</u>** 2.5 ppmvd corrected to 15% O2 and averaged over one hour~~)~~.

   ii. **<u>NOx as NO2 – effective [insert date 12 months after effective date of permit], 2.0 ppmvd corrected to 15% oxygen and averaged over a rolling 12 month period.</u>**

   ~~ii.~~ **<u>iii.</u>** CO — **<u>the most stringent of</u>** 17.5 lb/hr ~~(based on~~ **<u>or</u>** 4.0 ppmvd corrected to 15% O2 and averaged over 3 hours~~)~~.

   **<u>iv. CO – 10 lb/hr averaged over a rolling 12-month period.</u>**

   ~~iii.~~ ~~**iv.**~~ **<u>v.</u>** Ammonia Slip — 10 ppmvd (corrected to 15% O2 and averaged over three hours).

b. Hourly rates, verified by annual compliance tests or other compliance methods in the case of SOx:

   i. VOC as CH4 — 2.9 lb/hr (based on 1 ppmvd corrected to 15% O2).

   ii. SOx as SO2 — 2.7 lb/hr (based on 0.5 grains/100 dscf fuel sulfur).

   iii. PM10 — 11.5 lb/hr.

**Verification:** The project owner shall submit the following in each Quarterly

Operations Report: All continuous emissions data reduced and reported in accordance with the District approved CEMS protocol; a list of maximum hourly, maximum daily, total quarterly, ~~and~~ total calendar year, **monthly, and rolling 12-month** emissions of NOx, CO, PM10, VOC and SOx (including calculation protocol); **total monthly and rolling 12-month fuel use in the gas turbines and duct burners; average NOx concentration and average CO mass emission rate, for all operating periods except during startup, shutdown and malfunction, for each gas turbine and associated duct burner, calculated on a rolling 12-month basis;** a log of all excess emissions, including the information regarding malfunctions/ breakdowns required by District Rule 430; operating parameters of emission control equipment, including but not limited to ammonia injection rate, NOx emission rate and ammonia slip; any maintenance to any air pollutant control system (recorded on an as-performed basis); and any permanent changes made in the plant process or production that could affect air pollutant emissions, and when the changes were made.

**AQ-7** Emissions from **all Blythe Energy Project I permit units at** this facility, including the cooling towers, shall not exceed the following emission limits, based on a rolling 12 month summary:

a. NOx — ~~202~~ **97** tons/year, verified by CEMS.

b. CO — ~~621~~ **97** tons/year, verified by CEMS.

c. VOC as CH4 — 24 tons/year, verified by compliance tests and hours of operation in mode.

d. SOx as SO2 — 24 tons/year, verified by fuel sulfur content and fuel use data.

e. PM10 — ~~103~~ **97** tons/year, verified by compliance tests and hours of operation.

**These limits shall apply to all emissions from all Blythe Energy Project I permit units at this facility, and shall include emissions during all modes of operation, including startup, shutdown and malfunction.**

**Verification:** The project owner shall submit the following in each Quarterly Operations Report: All continuous emissions data reduced and reported in accordance with the District approved CEMS protocol; a list of maximum hourly, maximum daily, total quarterly, ~~and~~ total calendar year, **monthly, and rolling 12-month** emissions of NOx, CO, PM10, VOC and SOx (including calculation protocol); **total monthly and rolling 12-month fuel use in the gas turbines and duct burners; average NOx concentration and average CO mass emission rate, for all operating periods except during startup, shutdown and malfunction, for each gas turbine and associated duct burner, calculated on a rolling 12-month basis;** a log of all excess emissions, including the information regarding malfunctions/ breakdowns required by District Rule 430; operating parameters of emission control equipment, including but not limited to ammonia injection rate, NOx emission rate and ammonia slip; any maintenance to any air pollutant control system (recorded on an as-performed basis); and any permanent changes made in the plant process or production that could affect air pollutant emissions, and when the changes were made.

**AQ-8** Emissions of CO and NOx from the turbines shall only exceed the limits contained in AQ-5 during startup and shutdown periods as follows:

a. Startup is defined as the period beginning with ignition and lasting until either the equipment complies with all operating permit limits specified in condition AQ-5a for two consecutive 15-minute averaging periods or four hours after ignition, whichever occurs first. Shutdown is defined as the period beginning with the lowering of equipment from base load and lasting until fuel flow is completely off and combustion has ceased.

b. The emissions from each startup or shutdown event shall not exceed the following, verified by CEMS:
   i. NOx – 376 lb
   ii. CO –3600 lb

**c. Effective [insert date 12 months after effective date of permit], the CO emissions from all startup and shutdown events at both power blocks, averaged over a rolling 12-month period, shall not exceed 750 lb/event, verified by CEMS.**

**Verification:** The project owner shall include a detailed record of each startup and shutdown event in the Quarterly Operations Report. Each record shall include, but not be limited to, duration, fuel consumption, total emissions of NOx and CO, **average CO emissions from all startups and shutdowns of the gas turbines, on a per event basis, calculated on a rolling 12-month basis;** and the date and time of the beginning and end of each startup and shutdown event. Additionally, the project owner shall report the total plant operation time (hours), number of startups, hours in startup and shutdown, and average plant operation schedule (hours per day, days per week, weeks per year).

**AQ-17 ~~Deleted.~~**

~~The project owner must surrender to the District sufficient valid Emission Reduction Credits for the turbines before the start of construction of any part of the project for which this equipment is intended to be used. In accordance with Regulation XIII the operator shall obtain 202 tons of NOx and 103 tons of PM10 offsets (VOC ERCs from SCAQMD may be substituted for NOx ERCs at a rate of 1.6:1).~~ **Effective [insert date 12 months after effective date of permit], total fuel use in the two gas turbines and two duct burners shall not exceed 31,852,800 MMBtu in any rolling 12-month period.**

**Verification:** ~~The project owner must submit all ERC documentation to the District and the CPM prior to the start of construction.~~ **The project owner shall submit the following in each Quarterly Operations Report: All continuous emissions data reduced and reported in accordance with the District approved CEMS protocol; a list of maximum hourly, maximum daily, total quarterly, ~~and~~ total calendar year, monthly, and rolling 12-month emissions of NOx, CO, PM10, VOC and SOx (including calculation protocol); total monthly and rolling 12-month fuel use in the gas turbines and duct burners; average NOx concentration and average CO mass emission rate, for all operating periods except during startup, shutdown and malfunction, for each gas turbine and associated duct burner, calculated on a rolling 12-month basis; a log of all excess emissions, including the information regarding malfunctions/ breakdowns required by District Rule 430; operating parameters of emission control equipment, including but**

**not limited to ammonia injection rate, NOx emission rate and ammonia slip; any maintenance to any air pollutant control system (recorded on an as-performed basis); and any permanent changes made in the plant process or production that could affect air pollutant emissions, and when the changes were made.**

[The following Conditions of Certification apply to the emergency diesel IC engine (District Permit Number: E007961)]

**AQ-32** The project owner shall maintain a log for this unit, which, at a minimum, contains the information specified below. This log shall be kept current and onsite for a minimum of five (5) years and shall be provided to District personnel on request. At a minimum, the log shall include:

a. Date of each use or test;

b. Duration of each test, in minutes;

c. ~~**Fuel consumed during each calendar year, in gallons**~~ **Monthly and calendar year operation in terms of fuel consumption (in gallons) and total hours;**

**d. Monthly and rolling 12-month total CO, NOx and PM10 emissions, calculated based on monthly fuel use and District-approved emission factors**; and

~~**d.**~~ **e.** Fuel sulfur concentration (the project owner may use the supplier's certification of sulfur content if it is maintained as part of this log).

**Verification:** The above information shall be maintained on-site for a minimum of five (5) years and shall be provided to District and/or CEC personnel on request.

**Attachment C**
**MDAQMD Permit Modifications Requested by the Applicant**

# Preliminary Decision/Preliminary Determination for

# New Source Review Action & Title V Federal Operating Permit Significant Modification

**Facility Name: Blythe Energy, Inc.**

**Facility ID/Federal Operating Permit #: 130202262**

**Address: 385 N. Buck Blvd., Blythe, CA 92225**

**New Source Review (NSR) Action: Administrative in nature, not a modification pursuant to 1301(HH) as there is no net emissions increase**

**Title V Permit Action: Significant Modification**

## I. Introduction

A. The proposed action:

1. lowers the federally enforceable emission limits for oxides of nitrogen (NOx), carbon monoxide (CO) and particulate matter less than 10 microns in size (PM10) from all permitted equipment at Blythe Energy, Inc. to below the federal major source thresholds (Rule 1201(S))

2. ~~amends the~~ adds the following new permit limits: NOx annual average concentration permit ~~limit~~, CO annual average mass emissions, and annual fuel use.

B. Facility Description

The plant uses two F-Class Siemens V84.3A combustion turbine generators (CTGs) with dedicated heat recovery steam generators (HRSGs) to produce electricity. Inlet air to the CTGs is filtered and, during seasonally warm conditions, conditioned with chilled air supported by a mechanical draft wet cooling tower (chiller). Compressed air and natural gas are mixed and combusted in the turbine combustion chamber. Lean pre-mixed air and low-NOx combustors are used to minimize NOx formation during combustion. Exhaust gas from the combustion chamber is expanded through a multi-stage power turbine, which drives both the air compressor and electric power generator. Heat from the exhaust gas is then recovered in the HRSG.

Each HRSG is equipped with a duct burner to provide supplementary firing during high ambient temperatures to maintain constant steam production to the condensing steam turbine generator (STG). A Selective Catalytic Reduction (SCR) system is used to reduce NOx emissions. Steam is produced in each HRSG and flows to the STG. The STG drives an electric generator to produce electricity. STG exhaust steam is condensed in a surface condenser with water from the main cooling tower.

The project site has a 303 bhp emergency diesel-fueled internal combustion engine that drives a water pump for fire suppression. It also has a portable 250 bhp emergency diesel-fueled internal combustion engine that drives a water pump for fire suppression. There is also a propane fueled 114 bhp internal combustion engine that drives an emergency electrical power generator.

Current facility emission limits for NOx, CO and PM10 are above the major source threshold. This action reduces the facility emissions limits for NOx, CO and PM10 to below the 100 ton per year thresholds and adds additional limits to ensure that the annual limits are enforceable as a practical matter.

## II. NSR Analysis – Preliminary Decision and Title V – Preliminary Determination/Statement of Basis

This document constitutes the NSR review document and Preliminary Determination on the application pursuant to Rule 1302(C) and 1205(C). The proposed changes do not meet the Rule 1301(HH) definition of a Regulation XIII - New Source Review "Modification" because there is no net emission increase. As required by Rule 1302, this document will review the proposed District permit changes. Because the action does not result in an emissions increase, neither BACT nor offsets and the associated requirements are triggered. The proposed changes constitute a significant modification (Rule 1201(BB)) of the Title V permit therefore the application will be processed pursuant to the procedures specified per Rule 1203(B)(1). The significant modification shall be publicly noticed and submitted to the California Air Resources Board (CARB) and the United States Environmental Protection Agency (USEPA) as required by Rule 1203(B)(1) on March 11, 2015.

Interested persons are invited to submit written comments and/or other documents regarding the terms and conditions of the proposed changes. To be considered, comments, documents and requests for public hearing must be submitted no later than 5:00 P.M. on Monday, April 13, 2015 to the Attention: Roseana Navarro-Brasington, Mojave Desert Air Quality Management District, 14306 Park Avenue, Victorville, CA 92392, Phone: (760) 245-1661, extension 5706, Facsimile: (760) 245-2022 or at rnbrasington@mdaqmd.ca.gov . The required 45 day EPA comment period will close on Monday, April 27, 2015.

A. Initial Application /Comprehensive Emissions Inventory Review

The District received an application to modify District permits B007953 and B007954 and to modify the facility's Title V permit on February 16, 2015. The application package has been deemed complete. The most current emissions inventory data available is for emissions year 2012.

B. Emissions Calculations – The current permitting action lowers the facility emissions caps for NOx, CO and PM10 as follows:

| | TPY | | |
|---|---|---|---|
| | NOx | CO | PM10 |
| Current Limit | 202 | 621 | 103 |
| Proposed New Limit | 97 | 97 | 97 |
| Net Change | **-105** | **-524** | **-6** |

The permitting action also adds the following new limits to the facility's Title V permit:

- Limit annual average NOx emissions concentrations from each gas turbine and its associated duct burner to 2.0 ppmvd @ 15% $O_2$, except during periods of startup, shutdown and malfunction;
- Limits annual average CO mass emissions from each gas turbine and its associated duct burner to 10 lb/hr, except during periods of startup, shutdown and malfunction;
- Limits annual average CO emissions from the gas turbines and duct burners to 750 lb/event during startups and shutdowns; and
- Limits total annual heat input to the gas turbines and duct burners to 31,850,800 MMBtu per year.

All new annual limits, including the new emission caps, will apply on a rolling 12-month basis.

To demonstrate that the new facility emission caps are achievable as a practical matter, the applicant submitted example calculations showing that NOx and CO emissions from the gas turbines/duct burners under various operating scenarios, all of which can be considered typical but none of which impose enforceable limits on actual plant operation. Enforceable limits are specified in the Title V operating permit and the District Permits to Operate for the facility. The example scenarios include base load, peaking and intermediate load operations, and substantiate that typical operations reasonably would not exceed 96 tons per year. Sample calculations have also been provided that show that emissions from the emergency equipment would not exceed 1 ton per year. The applicant's calculations are included as Appendix B. BEP is required to track and control NOx and CO emissions to ensure continuous compliance.

C. Applicable Requirements

The following rules and regulations are applicable to the proposed permitting action:

Regulation XII contains requirements for sources which must have a federal operating permit. The identified changes constitute a significant modification of the Title V permit. Specific requirements of Regulation XII are stipulated as follows;

Rule 1202 – *Applications* designates that official applications will be used as necessary under Regulation XII and outlines the specified information which shall be included on the official application in order for the APCO to determine completeness as well as provides a timeline for that determination. The application was submitted on official District forms. The District determines this permitting action to be a significant modification being processed as such according to the procedure specified in the rule.

Rule 1203 – *Federal Operating Permits (FOP)* defines the permit operating term, stipulates the process by which FOPs, Significant Modifications to FOPs and Renewals of FOPs shall be issued. This rule further identifies restrictions on issuance, permit contents, operational flexibility, compliance certification, permit shield, and violation of permit conditions. The proposed FOP action is considered a significant permit modification. The District will carry out USEPA, State, and public review and comment period in accordance with the procedure outlined in Rule 1203(B)(1).

Rule 1205 - *Modifications of Federal Operating Permits* specifies the process by which FOP are modified.

The District has determined that the action constitutes a significant permit modification and will incorporate the changes as required by Regulation XII.

Rule 1300 – *General* ensures that Prevention of Significant Deterioration (PSD) requirements apply to all projects. The facility operates under a PSD permit. The current permitting action lowers the facility emissions caps for NOx, CO and PM10 to below the PSD major source thresholds however the District is not currently delegated authority for PSD permitting and defers any opinion with respect to PSD to USEPA.

Rule 1302 – *Procedure* requires certification of compliance with the Federal Clean Air Act, applicable implementation plans, and all applicable MDAQMD rules and regulations. The Authority to Construct (ATC) application package for the proposed project includes sufficient documentation to comply with Rule 1302(D)(5)(b)(iii). Permit conditions for the proposed project will require compliance with Rule 1302(D)(5)(b)(iv).

Rule 1303 – *Requirements* requires offsets for new or modified sources at new or existing major sources of nonattainment pollutants. The project has satisfied the offset requirements associated with the original permitting and facility limits. The current permitting action does not increase emissions and does not require any additional offsets.

Rule 1320 - *New Source Review for Toxic Air Contaminants* applies to new or modified sources on a permit unit basis requiring public notice and/or risk reduction at elevated levels of health risk. This permitting action will not result in an emissions increase therefore the facility is not new or modified pursuant to Rule 1301 therefore Rule 1320 is not applicable.

Rule 1520 - *Control of Toxic Air Contaminants From Existing Sources* applies on a facilitywide basis requiring public notice and/or risk reduction at elevated levels of health risk. This action will not result in an increase risk at the facility as it reduces the emissions caps for three criteria pollutants, NOx, CO and PM10. A Health Risk Assessment (HRA) was performed for the originally permitting analysis. The HRA calculated a peak 70-year cancer risk of 0.4 per million. The calculated peak 70-year residential cancer risk is less than 1.0 per million (for all receptors). The maximum non-cancer chronic and acute Hazard Indices are both less than the significance level of 1.0 (0.21 and 0.03, respectively). The HRA was based on the facility's PTE not the actual emissions as is required by Rule 1520 therefore the original HRA is a more conservative indicator of the risk that would result from a reassessment based on the actual facility emissions.

D. Toxics

1. Rule 1320 – *New Source Review for Toxic Air Contaminants*

As this permitting action does not result in an emissions increase, it is not a modification therefore New Source Review is not triggered.

2. Rule 1520 – *Control of Toxic Air Contaminants From Existing Sources*

The HRA performed to support the original permits was based on the PTE and resulted in scores less than 1. As the current permitting action does not result in any emissions increases, the resulting risk to receptors would remain the same or decrease as a result of this action.

E. Offsets/Modeling

Because this action does not result in an emissions increase, offsets are not required. Modeling is required for projects triggering offsets pursuant to Rule 1302(C)(2)(b). As offsets are not applicable to the proposed permit changes air dispersion modeling is not required.

The proposed action reduces the Potential to Emit for NOx, CO and PM10. The emissions reduction is not eligible for banking because the rulebook specifically disallows banking of credits resulting from reduction of a facility's PTE per Rule 1305(B)(2)(b). No simultaneous actions have been proposed at the time of this permitting action therefore the emissions reductions resulting from this action are not eligible for use.

# Appendix B

## Example Emissions Calculations

**Summary**

| Scenario | Based on Proposed Permit Limits | | | | | | Based on Actual Historical 12-Month Emissions | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # of su/sd events | baseload hrs | duct firing hrs | NOx, tpy | CO, tpy | Heat Input, MMBtu/yr | # of su/sd events | baseload hrs | duct firing hrs | NOx, tpy | CO, tpy | Heat Input, MMBtu/yr |
| Scenario 1: base load operation | 2 | 7000 | 2500 | 95.9 | 71.5 | | 2 | 7800 | 3000 | 95.8 | 78.6 | |
| Scenario 2: weekly startup/shutdown, no weekend operation | 52 | 5616 | 2080 | 96.0 | 95.2 | 25,464,000 | 104 | 5616 | 2080 | 76.2 | 84.8 | 28,425,600 |
| Scenario 3: daily cycling on weekdays, no weekend operation | 110 | 1320 | 880 | 59.7 | 95.7 | | 175 | 2100 | 1400 | 38.7 | 69.1 | |
| Maximum historical (2012-2014) | | | | | | | | | | 67.5 | 54.8 | 15,650,644 |

Notes:
Number of startup/shutdown events and baseload/duct firing hours are per gas turbine/HRSG.
Annual emissions are total for two trains.

**BEP Operating Scenarios**
**Proposed Permit Limits**

| | | | | su/sd (each unit) | | base load (each) | | | annual (total) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # of su/sd events | baseload hrs | duct firing hrs | NOx, lb/event | CO, lb/event | GT NOx, lb/hr | DF NOx, lb/hr | CO, lb/hr | NOx, tpy | CO, tpy |
| Scenario 1: base load operation | 2 | 7000 | 2500 | 376 | 750 | 13.28 | 0.90 | 10.0 | 95.9 | 71.5 |
| Scenario 2: weekly startup/shutdown, no weekend operation | 52 | 5616 | 2080 | 376 | 750 | 13.28 | 0.90 | 10.0 | 96.0 | 95.2 |
| Scenario 3: daily cycling on weekdays, no weekend operation | 110 | 1320 | 880 | 376 | 750 | 13.28 | 0.90 | 10.0 | 59.7 | 95.7 |

max hourly heat input: 1776 MMBtu/hr, each gas turbine (permit)
120 MMBtu/hr, each duct burner (permit)
max annual heat input: 25,464,000 MMBtu/yr total for two turbines (calculated based on Scenario 1 hours)

NOx emission limit: 2.0 ppmc, normal operation (new annual average permit limit)
0.0075 lb/MMBtu, normal operation (calculated from ppm limit)
376 lb/start (existing permit limit)

CO emission limits: 10 lb/hr per gas turbine/duct burner (new annual average permit limit)
750 lb/start (new annual average permit limit)

Scenario 1: base load operation
turbine: 7000 hrs/yr
DB: 2500 hrs/yr

Scenario 2: weekly startup/shutdown, no weekend operation
turbine: 108 hrs/wk (startup 8 am Monday; shut down 8 pm Friday)
52 wks/yr
DB: 8 hrs/day
5 days/wk
52 wks/yr

Scenario 3: daily cycling on weekdays, no weekend operation
turbine: 12 hrs/day
5 days/wk
22 wks/yr
DB: 8 hrs/day
5 days/wk
22 wks/yr

**BEP Operating Scenarios**
**Actual 12-Month Average Startup Emissions**

| | | | | su/sd (each unit) | | base load (each) | | | annual (total) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # of su/sd events | baseload hrs | duct firing hrs | NOx, lb/event | CO, lb/event | GT NOx, lb/hr | DF NOx, lb/hr | CO, lb/hr | NOx, tpy | CO, tpy |
| Scenario 1: base load operation | 2 | 7800 | 3000 | 71.4 | 275 | 11.95 | 0.81 | 10.0 | 95.8 | 78.6 |
| Scenario 2: 2 x weekly startup/shutdown, no weekend operation | 104 | 5616 | 2080 | 71.4 | 275 | 11.95 | 0.81 | 10.0 | 76.2 | 84.8 |
| Scenario 3: daily cycling on weekdays, no weekend operation | 175 | 2100 | 1400 | 71.4 | 275 | 11.95 | 0.81 | 10.0 | 38.7 | 69.1 |

| | | |
|---|---|---|
| max hourly heat input: | 1776 | MMBtu/hr, each gas turbine (permit) |
| | 120 | MMBtu/hr, each duct burner (permit) |
| max annual heat input: | 28,425,600 | MMBtu/yr total for two turbines (calculated based on Scenario 1 hours) |
| NOx emission limit: | 1.8 | ppmc, normal operation (new annual average permit limit with typical compliance margin) |
| | 0.0067 | lb/MMBtu, normal operation (calculated from ppm limit) |
| | 71.4 | lb/start (max 12-month avg 2012-14) |
| CO emission limits: | 10 | lb/hr per gas turbine/duct burner (new annual average permit limit) |
| | 275 | lb/start (max 12-month avg 2012-14) |

Scenario 1: base load operation

| | | |
|---|---|---|
| turbine: | 7800 | hrs/yr |
| DB: | 3000 | hrs/yr |

Scenario 2: 2 x weekly startup/shutdown, no weekend operation

| | | |
|---|---|---|
| turbine: | 108 | hrs/wk (startup 8 am Monday; shut down 8 pm Friday) |
| | 52 | wks/yr |
| DB: | 8 | hrs/day |
| | 5 | days/wk |
| | 52 | wks/yr |

Scenario 3: daily cycling on weekdays, no weekend operation

| | | |
|---|---|---|
| turbine: | 12 | hrs/day |
| | 5 | days/wk |
| | 35 | wks/yr |
| DB: | 8 | hrs/day |
| | 5 | days/wk |
| | 35 | wks/yr |

**Blythe Energy Project**
**Calculation of PTE from Emergency Engines**

| Permit Unit | Description | Emission Rate, lb/hr | | | | | PTE, tpy (based on 200 hrs/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NOx | CO | VOC | SO2 | PM | NOx | CO | VOC | SO2 | PM |
| Diesel fire water pump | MY2002, John Deere, 303 bhp; 14 gal/hr | 4.6 | 5.7 | 0.6 | 0.1 | 0.05 | 0.46 | 0.57 | 0.06 | 0.01 | 0.005 |
| Propane emergency engine generator | Ford Model WSG1068, 114 bhp, 12 gal/hr | 1.67 | 1.55 | 1.0 | 0.004 | 0.06 | 0.17 | 0.15 | 0.10 | 0.0004 | 0.006 |
| Total Annual PTE | | | | | | | 0.63 | 0.72 | 0.16 | 0.01 | 0.01 |

*MOJAVE DESERT*
*AIR QUALITY MANAGEMENT DISTRICT*

# Federal Operating Permit Number: 130202262

For: BLYTHE ENERGY, INC.

Facility: BLYTHE ENERGY, INC.

Issued Pursuant to MDAQMD Regulation XII
Effective Date: June 4, 2012

**● SEE TITLE V PAGE 2 FOR PERMIT REVISION SUMMARY ●**

This Federal Operating Permit Expires
June 4, 2017

Issued By: Eldon Heaston
Executive Director
Air Pollution Control Officer

14306 PARK AVENUE, VICTORVILLE, CALIFORNIA 92392
PHONE (760) 245-1661
FAX (760) 245-2022

# PERMIT REVISIONS

**~~March 9, 2015~~April 24, 2015 Significant Modification:**
Processed by Roseana Brasington
~~Updated the following: owner/company name, owner mailing address, facility name, responsible official, facility site contact and alternative facility site contact.~~
Page I-5: Removed reference to model/serial numbers for the steam generator and steam condensing turbine. Model and serial numbers for the combustion turbines have been provided and are reflected in the current permits.
Page III-25: Removed reference to model/serial numbers for the steam generator and steam condensing turbine. Model and serial numbers for the combustion turbines have been provided and are reflected in the current permits.
Pages III-26-III-27: added annual average emission concentration limit for NOx, annual average mass emission limits for CO and 12-month rolling fuel use limit for the gas turbines, reduced annual NOx, CO and PM10 emission limits and clarified that the emissions limits include all Blythe Energy Project I permitted equipment and updated condition language for consistency with District permit
Page III-29: Removed Authority to Construct permit condition which required the surrender of emission reduction credits. The facility has satisfied the offset requirement.

**July 29, 2014 Administrative Modification:**
Processed by R.N. Brasington
Updated the following: owner/company name, owner mailing address, facility name, responsible official, facility site contact and alternative facility site contact.

**July 2, 2012 Administrative Title V Renewal and Title IV Acid Rain Permit revision** (by: Samuel J Oktay, PE)**;** Revised Rule 1113 references, Page II-15 through II-16; added Rule SIP History Reference, Page VII-48; Revised Rule 442 references; Page II-13; Page II-23 added 40 CFR 98 reference for GHG reporting; added 40 CFR 63 Subpart ZZZZ requirements to permits E007961, E008981, and E009492; Pages I-7; III-33 through III-34, III-34 through III-36, and III-36 through III-38 respectively; page III-25 clarified conditions 6 & 7 for permits B007953 & B007954 regarding VOC limits; page III-26 clarified condition 10 for permits B007953 & B007954; changed Permit # C010833, Pages I-7 and III-38 to read Unit 2; Title IV Acid Rain Permit revisions VI-44 through VI-46; Phase II Application added to pages VI-47 through VI-49.

**April 11, 2011 Administrative Modification:**
Updated physical address due to incorporation into City of Blythe city limits (no change to location of facility), and updated responsible official.

**April 8, 2010 Administrative Modification described as follows:**
Intro; Addition of oxidation catalyst to each Combustion Turbine Generator/Heat Recovery Steam Generator unit. The design of the units are accommodating to the retrofit of the oxidation catalyst. An emission decrease is anticipated but current permit limits will remain unchanged. Permit is revised as follows:
Part I

-Description revised to include two oxidation catalysts.
-Section 1.PART III, ITEM A- added Oxidation Catalyst description.
Part III
-Permits B007953 and B007954, revised condition #10 to include reference to Oxidation Catalyst. Deleted reference to future installation of OC (condition #28), renumbered following condition.
-Permits B007955 and B007956, updated condition #3 specifying OC installed and applicable permit numbers thereof.
-Added permit units C010832 ("new" subpart L) and C010833, creating subparts L and M respectively.
*Changes made by C. Anderson*

# TABLE OF CONTENTS

# PART I
# INTRODUCTORY INFORMATION

## A. FACILITY IDENTIFYING INFORMATION:

| | |
|---|---|
| Owner/Company Name: | BLYTHE ENERGY, INC. |
| Owner Mailing Address: | BLYTHE ENERGY, INC.<br>P.O. Box 1210<br>Blythe, CA 92226 |
| Facility Name: | BLYTHE ENERGY, INC. |
| Facility Location: | BLYTHE ENERGY, INC.<br>385 N Buck Blvd<br>Blythe, CA 92225 |
| MDAQMD Federal Operating Permit Number: | 130202262 |
| MDAQMD Company Number: | 1302 |
| MDAQMD Facility Number: | 02262 |
| Responsible Official:<br>Title:<br><br>Phone Number: | Mr. Chris Doyle<br>Divisional Vice President Business Operations<br>604-623-4797 |
| Facility "Site" Contact:<br>Title:<br>E-mail:<br>Phone Number: | Mike Darmody<br>Sr. Environmental Specialist<br>michael.darmody@altagas.ca<br>760-922-9950 ext. 230 |
| Alternative Facility "Site" Contact:<br>Title:<br>E-mail:<br>Phone Number: | Mr. Mike Ludwin<br>Plant General Manager<br>mike.ludwin@altagas.ca<br>760-922-9950 |
| Nature of Business:<br>SIC Code:<br>ORIS Code:<br>Facility Location: | Electric Power Generation<br>4911 – Electric Power Generation<br>0329 – Phase II Acid Rain Source<br>UTM (m) 714609 (E) / 3721719 (N) |

**BLYTHE ENERGY, INC. Power Plant Description:**

The plant uses two F-Class Siemens V84.3A combustion turbine generators (CTGs) with dedicated heat recovery steam generators (HRSGs) to produce electricity. Inlet air to the CTGs is filtered and, during seasonally warm conditions, conditioned with chilled air supported by a mechanical draft wet cooling tower (chiller). Compressed air and natural gas are mixed and combusted in the turbine combustion chamber. Lean pre-mixed air and low-NOx combustors are used to minimize NOx formation during combustion. Exhaust gas from the combustion chamber is expanded through a multi-stage power turbine, which drives both the air compressor and electric power generator. Heat from the exhaust gas is then recovered in the HRSG.

Each HRSG is equipped with a duct burner to provide supplementary firing during high ambient temperatures to maintain constant steam production to the condensing steam turbine generator (STG). A Selective Catalytic Reduction (SCR) system is used to reduce NOx emissions. An Oxidation Catalyst is used to reduce CO and VOC. Steam is produced in each HRSG and flows to the STG. The STG drives an electric generator to produce electricity. STG exhaust steam is condensed in a surface condenser with water from the main cooling tower.

The project site has a 303 bhp emergency diesel-fueled internal combustion engine that drives a water pump for fire suppression. It also has a portable 250 bhp emergency diesel-fueled internal combustion engine that drives a water pump for fire suppression. There is also a propane fueled 114 bhp internal combustion engine that drives an emergency electrical power generator.

## 1. PART III, ITEM A:

Permit #B007953 COMBUSTION TURBINE GENERATOR POWER BLOCK (CT1) consisting of: Natural gas fueled Siemens F Class Model V84.3A(2) Serial No. 800436 combustion turbine generator power block producing approximately 260 MW(e) with a connected heat recovery steam generator and a steam condensing turbine (shared with B007954), maximum turbine heat input of 1776 MMBtu/hr. ~~Manufacturer, model and serial numbers will be specified when available.~~

Permit #B007954 COMBUSTION TURBINE GENERATOR POWER BLOCK (CT2) consisting of: Natural gas fueled Siemens F Class Model V84.3A(2) Serial No. 800437 combustion turbine generator power block producing approximately 260 MW(e) with a connected heat recovery steam generator and a steam condensing turbine (shared with B007953), maximum turbine heat input of 1776 MMBtu/hr. ~~Manufacturer, model and serial numbers will be specified when available.~~

Permit #B007955 DUCT BURNER UNIT 1: Natural gas burner located within the heat recovery steam generator covered by B007953, maximum heat input of 120 MMBtu/hr. Manufacturer is Forney, model # 1002-WPS-C1 and serial #17130.

Permit #B007956 DUCT BURNER UNIT 2: Natural gas burner located within the heat recovery steam generator covered by B007954, maximum heat input of 120 MMBtu/hr. Manufacturer is

Forney, model # 1002-WPS-C1 and serial #17202.

Permit #B007957 A Marathon Model 9B 445TTFN4573AA wet cooling tower with water circulation, treatment and handling equipment and air circulation equipment, including the following:

| Capacity | Equipment Name | Order |
|---|---|---|
| 250.00 | Cooling Cell Fan #8, Motor Serial No. MU402450-2/22-02 | 1 |
| 250.00 | Cooling Cell Fan #7, Motor Serial No. MU402450-2/22-01 | 2 |
| 250.00 | Cooling Cell Fan #6, Motor Serial No. MU402450-2/22-05 | 3 |
| 250.00 | Cooling Cell Fan #5, Motor Serial No. MU402450-2/22-03 | 4 |
| 250.00 | Cooling Cell Fan #4, Motor Serial No. MU402450-2/22-06 | 5 |
| 250.00 | Cooling Cell Fan #3, Motor Serial No. MU402450-2/22-07 | 6 |
| 250.00 | Cooling Cell Fan #2, Motor Serial No. MU402450-2/22-04 | 7 |
| 250.00 | Cooling Cell Fan #1, Motor Serial No. MU402450-2/22-08 | 8 |
| 1000.00 | Circulating Water Pump #12, Johnson Serial No. 01JB1129B | 9 |
| 1000.00 | Circulating Water Pump #11, Johnson Serial No. 01JB1129A | 10 |

Permit #B007958 Water circulation, treatment and handling equipment and air circulation equipment, including units as follows:

| Capacity | Equipment Name | Order |
|---|---|---|
| 250.00 | Cooling Cell Fan #12, BAC Model CXV-T08 Serial No. U025323712 | 1 |
| 250.00 | Cooling Cell Fan #11, BAC Model CXV-T08 Serial No. U025323711 | 2 |
| 250.00 | Cooling Cell Fan #10, BAC Model CXV-T08 Serial No. U025323710 | 3 |
| 250.00 | Cooling Cell Fan #9, BAC Model CXV-T08 Serial No. U025323709 | 4 |
| 250.00 | Cooling Cell Fan #8, BAC Model CXV-T08 Serial No. U025323708 | 5 |
| 250.00 | Cooling Cell Fan #7, BAC Model CXV-T08 Serial No. U025323707 | 6 |
| 250.00 | Cooling Cell Fan #6, BAC Model CXV-T08 Serial No. U025323706 | 7 |
| 250.00 | Cooling Cell Fan #5, BAC Model CXV-T08 Serial No. U025323705 | 8 |
| 250.00 | Cooling Cell Fan #4, BAC Model CXV-T08 Serial No. U025323704 | 9 |
| 250.00 | Cooling Cell Fan #3, BAC Model CXV-T08 Serial No. U025323703 | 10 |
| 250.00 | Cooling Cell Fan #1, BAC Model CXV-T08 Serial No. U025323701 | 11 |
| 250.00 | Cooling Cell Fan #2, BAC Model CXV-T08 Serial No. U025323702 | 12 |
| 750.00 | Chiller Recirulating Pump #4, Cascade Serial No. 16061 | 13 |
| 750.00 | Chiller Recirulating Pump #3, Cascade Serial No. 16060 | 14 |
| 750.00 | Chiller Recirulating Pump #2, Cascade Serial No. 16059 | 15 |
| 750.00 | Chiller Recirulating Pump #1, Cascade Serial No. 16058 | 16 |

Permit #C007959 SCR UNIT 1 consisting of: SELECTIVE CATALYTIC REDUCTION system with a catalyst located within the power train covered by B007953 and an ammonia injection system. Manufacturer is Hitachi Zosen, model # NOxNON-700 and serial numbers will be specified when available.

Permit #C007960 SCR UNIT 2 consisting of: SELECTIVE CATALYTIC REDUCTION system with a catalyst located within the power train covered by B007954 and an ammonia injection system. Manufacturer is Hitachi Zosen; model and serial numbers will be specified when available.

Permit #C010832 OXIDATION CATALYST UNIT 1 consisting of: Oxidation Catalyst located within the duct burner covered by B007955. Manufacturer is Johnson Matthey; model is Honeycat, serial number 200cpsi.

Permit #C010833 OXIDATION CATALYST UNIT 2 consisting of: Oxidation Catalyst located within the duct burner covered by B007956. Manufacturer is Johnson Matthey; model is Honeycat, serial number 200cpsi.

Permit # E007961 NON-CERTIFIED DIESEL IC ENGINE, EMERGENCY FIRE PUMP consisting of: Year of Manufacture 2002; USEPA Family Name NA; CARB Executive Order NA; Tier 0, One John Deere, Diesel fired internal combustion engine, Model No. 6081HF001 and Serial No. RG6081H145432, Direct Injected, Turbo Charged, producing 303 bhp with 6 cylinders at 2200 rpm while consuming a maximum of 14 gal/hr. This equipment powers a Pump.

Permit # E008981 PORTABLE DIESEL IC ENGINE, NON-CERTIFIED, EMERGENCY FIRE PUMP consisting of: Year of Manufacture 2002; USEPA Family Name NA; CARB Executive Order NA; Tier 0, One Ford, Diesel fired internal combustion engine, Model No. 2U1L-6007-SA and Serial No. 02-04-009097, After Cooled, Direct Injected, Other, Turbo Charged, producing 250 bhp with 8 cylinders at 2300 rpm while consuming a maximum of 13 gal/hr. This equipment powers a Pump.

Permit # E009492 PROPANE IC ENGINE, EMERGENCY GENERATOR (CHILLER BLDG) consisting of: One Ford, Propane fired internal combustion engine, Model No. WSG106816005E-NA and Serial No. 01-11- 012316, Direct Injected, Inter Cooled, producing 114 bhp with 4 cylinders at 1800 rpm while consuming a maximum of 12 gal/hr. This equipment powers a Generator.

# PART II
# FACILITYWIDE APPLICABLE REQUIREMENTS; EMISSIONS LIMITATIONS; MONITORING, RECORDKEEPING, REPORTING AND TESTING REQUIREMENTS; COMPLIANCE CONDITIONS; COMPLIANCE PLANS

## A. ***REQUIREMENTS APPLICABLE TO ENTIRE FACILITY AND EQUIPMENT:***

1. A permit is required to operate this facility.
[Rule 203 - *Permit to Operate*; Version in State Implementation Plan (SIP) = California Air Resources Board (CARB) Ex. Order G-73, 40 Code of Federal Regulations (CFR) 52.220(c)(39)(ii)(B) - 11/09/78 43 Federal Register (FR) 52237; Current Rule Version = 07/25/77]

2. The equipment at this facility shall not be operated contrary to the conditions specified in the District Permit to Operate.
[Rule 203 - *Permit to Operate*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

3. The Air Pollution Control Officer (APCO) may impose written conditions on any permit.
[Rule 204 - *Permit Conditions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

4. Commencing work or operation under a permit shall be deemed acceptance of all the conditions so specified.
[Rule 204 - *Permit Conditions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

5. Posting of the Permit to Operate is required on or near the equipment or as otherwise approved by the Air Pollution Control Officer (APCO) / District.
[Rule 206 - *Posting of Permit to Operate*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

6. Owner/Operator shall not willfully deface, alter, forge, or falsify any permit issued under District rules.
[Rule 207 - *Altering or Falsifying of Permit*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) and 52.220(c)(31)(vi)(C) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

7. Permits are not transferable.
[Rule 209 - *Transfer and Voiding of Permit*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

8. The Air Pollution Control Officer (APCO) may require the Owner/Operator to provide and maintain such facilities as are necessary for sampling and testing.
[Rule 217 - *Provision for Sampling And Testing Facilities*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(31)(vi)(C) - 02/01/77 43 FR 52237; Current Rule Version = 07/25/77]

9. The equipment at this facility shall not require a District permit or be listed on the Title V permit if such equipment is listed in Rule 219 and meets the applicable criteria contained in Rule 219 (B). However, any exempted insignificant activities/equipment are still subject to all applicable facility-wide requirements.
[SIP Pending: Rule 219 - *Equipment Not Requiring a Written Permit* as Amended 12/21/94; Prior version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237]

10. The Owner/Operator of this facility shall obtain a Federal Operating Permit for operation of this facility.
[Rule 221 - *Federal Operating Permit Requirement*; Version in SIP = Current, 40 CFR 52.220(c)(216)(i)(A)(2) - 02/05/96 61 FR 4217]

11. Owner/Operator shall pay all applicable MDAQMD permit fees.
[Rule 301 - *Permit Fees;* Applicable Version = 10/23/94, Applicable via Title V Program interim approval 02/05/96 61 FR 4217]

12. Owner/Operator shall pay all applicable MDAQMD Title V Permit fees.
[Rule 312 - *Fees for Federal Operating Permits;* Applicable Version = 10/23/94, Applicable via Title V Program interim approval 02/05/96 61 FR 4217]

13. Stack and point source visible emissions from this facility, of any air contaminant (including smoke) into the atmosphere, shall not equal or exceed Ringelmann No. 1 for a period or periods aggregating more than three minutes in any one hour:
    (a) While any unit is fired on Public Utilities Commission (PUC) grade natural gas, Periodic Monitoring for combustion equipment is not required to validate compliance with the Rule 401 Visible Emissions limit. However, the Owner/Operator shall comply with the recordkeeping requirements stipulated elsewhere in this permit regarding the logging of fuel type, amount, and suppliers' certification information.

(b) While any unit is fired on diesel fuel, Periodic Monitoring, in addition to required recordkeeping, is required to validate compliance with Rule 401 Visible Emissions limit as indicated below:
(i). Reciprocating engines equal or greater than 1000 horsepower, firing on only diesel with no restrictions on operation, a visible emissions inspection is required every three (3) months or during the next scheduled operating period if the unit ceases firing on diesel/distillate within the 3-month time frame.
(ii). Diesel Standby and emergency reciprocating engines using California low sulfur fuels require no additional monitoring for opacity.
(iii). Diesel/Distillate-Fueled Boilers firing on California low sulfur fuels require a visible emissions inspection after every 1 million gallons diesel combusted, to be counted cumulatively over a 5-year period.
(iv). On any of the above, if a visible emissions inspection documents opacity, an U.S. Environmental Protection Agency (EPA) Method 9 "Visible Emissions Evaluation" shall be completed within 3 working days, or during the next scheduled operating period if the unit ceases firing on diesel/distillate within the 3 working day time frame.

[Rule 204 - *Permit Conditions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 43 FR 40011; Current Rule Version = 07/25/77]
*[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]*

14. Owner/Operator is limited to use of the following quality fuels for fuel types specified elsewhere in this permit: PUC quality natural gas fuel - sulfur compounds shall not exceed 800 parts per million (ppm) calculated as hydrogen sulfide at standard conditions; diesel fuel - sulfur content shall not exceed 0.5 percent by weight. Compliance with Rule 431 fuel sulfur limits is assumed for PUC quality natural gas fuel and CARB certified diesel fuel. Records shall be kept on-site and available for review by District, state, or federal personnel at any time. The sulfur content of non-CARB certified diesel fuel shall be determined by use of American Society for Testing and Materials (ASTM) method D 2622-82 or ASTM method D 2880-71, or equivalent.
[*40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements*]
[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

15. Emissions of fugitive dust from any transport, handling, construction, or storage activity at this facility shall not be visible in the atmosphere beyond the property line of the facility.
[Rule 403 - *Fugitive Dust*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 43 FR 40011; Current Rule Version = 07/25/77]

16. Owner/Operator shall comply with the applicable requirements of Rule 403.2 unless an "Alternative $PM_{10}$ Control Plan" (ACP) pursuant to Rule 403.2(G) has been approved.
[**SIP Pending:** Rule 403.2 - *Fugitive Dust Control for the Mojave Desert Planning Area* as amended 07/31/95 and submitted 10/13/95]

17. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter (PM) except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
    (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
    (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
    (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
    [Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

18. Owner/Operator shall not discharge into the atmosphere from this facility, solid PM including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
    (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
    (b) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
    [Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

19. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide ($SO_2$), greater than or equal to 500 ppm by volume.
    [Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

20. Owner/Operator shall not discharge into the atmosphere from this facility, carbon monoxide (CO) exceeding 2000 ppm measured on a dry basis, averaged over a minimum of 15 consecutive minutes. The provisions of this condition shall not apply to emissions from internal combustion engines.
    [Rule 407 - *Liquid and Gaseous Air Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 43 FR 40011; Current Rule Version = 07/25/77]

21. Owner/Operator shall not build, erect, install, or use any equipment at this facility, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission that would otherwise constitute a violation of Chapter 3 (commencing with Section 41700) of Part 4, of Division 26 of the Health and Safety Code or of District Rules. This condition shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code, or of District Rule 402.

[Rule 408 - *Circumvention*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 43 FR 40011; Current Rule Version = 07/25/77]

22. Owner/Operator shall not discharge into the atmosphere from this facility from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide ($CO_2$) at standard conditions averaged over a minimum of 25 consecutive minutes.
[Rule 409 - *Combustion Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 43 FR 40011; Current Rule Version = 07/25/77]
Reference Section III A(1)

23. The Air Pollution Control Officer (APCO), at his/her discretion, may refrain from enforcement action against an Owner/Operator of any equipment that has violated a technology-based emission limitation, including but not limited to conditions contained in any permit issued by the District establishing such emission limitation, provided that a Breakdown has occurred and:
    (a) Any breakdown that results in emissions exceeding a technology-based emission limitation is reported to the District within one hour of such breakdown or within one hour of the time a person knew or reasonably should have known of the occurrence of such breakdown; and
    (b) An estimate of the repair time is provided to the District as soon as possible after the report of the breakdown; and
    (c) All reasonable steps are immediately taken to minimize the levels of emissions and to correct the condition leading to the excess emissions.
    (d) The equipment is operated only until the end of a cycle or twenty-four (24) hours, whichever is sooner, at which time it shall be shut down for repairs unless a petition for an emergency variance has been filed with the clerk of the Hearing Board in accordance with Regulation V.
    (e) If the breakdown occurs outside normal District working hours, the intent to file an emergency variance shall be transmitted to the District in a form and manner prescribed by the Air Pollution Control Officer (APCO).
[**SIP Pending:** Rule 430 - *Breakdown Provisions* as amended 12/21/94 and submitted 02/24/95]

24. Owner/Operator of this facility shall not discharge into the atmosphere emissions in excess of the following from VOC containing materials or from organic solvents which are not VOCs unless such emissions have been reduced by at least 85%:
    (a) VOCs from all VOC containing materials, Emissions Units, equipment or processes subject to this rule, in excess of 540 kilograms (1,190 pounds) per month per Facility.
    (b) a non-VOC organic solvent in excess of 272 kilograms (600 pounds) per day as calculated on a thirty (30) day rolling average.
    (c) The provisions of this condition shall not apply to:
        (1) The manufacture of organic solvents, or the transport or storage of organic solvents, or the transport or storage of materials containing organic

solvents.

(2) The emissions of VOCs from VOC-containing materials or equipment which are subject to the rules of Regulation IV or which are exempt from air pollution control requirements by said rules.

(3) The spraying or other employment of organic solvents as insecticides, pesticides or herbicides.

(4) The use of equipment or materials for which other requirements are specified in source specific rules of Regulation XI after the compliance dates specified in such source specific rules.

(5) The use of 1-1-1 Trichloroethane.

(6) Aerosol products

[**SIP**: Rule 442 – *Usage of Solvents*, As Amended Adopted; 9/17/2007, 72 FR 52791, 40 CFR 52.220(c)(347)(i)(C)(1)]

25. Owner/Operator shall not set open outdoor fires unless in compliance with Rule 444. Outdoor fires burned according to an existing District permit are not considered "open outdoor fires" for the purposes of Rule 444 (reference Rule 444(B)(10)).
[Rule 444 – *Open Outdoor Fires*, Version in SIP = Current, 40 CFR 2.220(c)(42)(xiii)(A) and 40 CFR 52.273 (6)(12)(i)]

26. Owner/Operator of this facility shall comply with the Organic Solvent Degreasing Operations requirements of Rule 1104 when engaged in wipe cleaning, cold solvent cleaning, and/or vapor cleaning (degreasing) operations for metal/non-metal parts/products. These requirements are listed as follows:

(a) All degreasers shall be equipped with a cover, which reduces solvent evaporation and minimizes disturbing the vapor zone.

(b) A permanent, conspicuous label summarizing the applicable operating requirements contained in Rule 1104. In lieu of a label, operating instructions may be posted near the degreaser where the operators can access the proper operating requirements of this rule.

(c) <u>Cold Solvent Degreasers – Freeboard Requirements:</u>

(i) Cold solvent degreasers using only low volatility solvents, which are not agitated, shall operate with a freeboard height of not less than 6 inches.

(ii) Cold solvent degreasers using only low volatility solvents may operate with a freeboard ratio equal to or greater than 0.50 when the cold solvent degreaser has a cover, which remains closed during the cleaning operation.

(iii) Any cold solvent degreasers using solvent which is agitated, or heated above 50$^{o}$C (120$^{o}$F) shall operate with a freeboard ratio equal to or greater than 0.75.

(iv) A water cover may be used as an acceptable control method to meet the freeboard requirements, when the solvent is insoluble in water and has a specific gravity greater than one.

(d) <u>Cold Solvent Degreasers – Cover Requirements:</u>

(i) Cold solvent degreasers using high volatility solvent shall have a cover that

is a sliding, rolling or guillotine (bi-parting) type, which is designed to easily open and close without disturbing the vapor zone.

(e) Cold Solvent Degreasers – Solvent Level Identification:

(i) A permanent, conspicuous mark locating the maximum allowable solvent level conforming to the applicable freeboard requirements.

(f) All Degreasers shall comply with the following operating requirements:

(i) Any solvent cleaning equipment and any emission control device shall be operated and maintained in strict accord with the recommendations of the manufacturer.

(ii) Degreasers shall not be operating with any detectable solvent leaks.

(iii) All solvent, including waste solvent and waste solvent residues, shall be stored in closed containers at all times. All containers for any solvent(s) shall have a label indicating the name of the solvent/material they contain.

(iv) Waste solvent and any residues shall be disposed of by one of the following methods: a commercial waste solvent reclamation service licensed by the State of California; **or** a federally or state licensed facility to treat, store or dispose of such waste; **or** the originating facility may recycle the waste solvent and materials in conformance with requirements of Section 25143.2 of the California Health and Safety Code.

(v) Degreasers shall be covered to prevent fugitive leaks of vapors, except when processing work or to perform maintenance.

(vi) Solvent carry-out shall be minimized by the following methods:

(a) Rack workload arranged to promote complete drainage

(b) Limit the vertical speed of the power hoist to 3.3 meters per minute (11 ft/min) or less when such a hoist is used.

(c) Retain the workload inside of the vapor zone until condensation ceases.

(d) Tip out any pools of solvent remaining on the cleaned parts before removing them from the degreaser if the degreasers are operated manually.

(e) Do not remove parts from the degreaser until the parts are visually dry and not dripping/leaking solvent. (This does not apply to an emulsion cleaner workload that is rinsed with water within the degreaser immediately after cleaning.)

(vii) The cleaning of porous or absorbent materials such as cloth, leather, wood or rope is prohibited.

(viii) Except for sealed chamber degreasers, all solvent agitation shall be by either pump recirculation, a mixer, or ultrasonics.

(ix) The solvent spray system shall be used in a manner such that liquid solvent does not splash outside of the container. The solvent spray shall be a continuous stream, not atomized or shower type, unless, the spray is conducted in a totally enclosed space, separated from the environment.

(x) For those degreasers equipped with a water separator, no solvent shall be visually detectable in the water in the separator.

(xi) Wipe cleaning materials containing solvent shall be kept in closed

containers at all times, except during use.

(xii) A degreaser shall be located so as to minimize drafts being directed across the cleaning equipment, the exposed solvent surface, or the top surface of the vapor blanket.

(xiii) A method for draining cleaned material, such as a drying rack suspended above the solvent and within the freeboard area, shall be used so that the drained solvent is returned to the degreaser or container.

(g) Rule 442 Applicability: Any solvent using operation or facility which is not subject to the source-specific Rule 1104 shall comply with the provisions of Rule 442. Any solvent using operation or facility which is exempt from all or a portion of the volatile organic compound (VOC) limits, equipment limits or the operational limits of Rule 1104 shall be subject to the applicable provisions of Rule 442.

(h) Solvent Usage Records. Owner/Operator subject to Rule 1104 or claiming any exemption under Rule 1104, Section (E), shall comply with the following requirements:

(1) Maintain and have available during an inspection, a current list of solvents in use at the facility which provides all of the data necessary to evaluate compliance, including the following information separately for each degreaser, as applicable:

(i) product name(s) used in the degreaser, and

(ii) the mix ratio of solvent compounds mixtures of solvents are used, and

(iii) VOC content of solvent or mixture of compounds as used, and

(iv) the total volume of the solvent(s) used for the facility, on a monthly basis, and

(v) the name and total volume applied of wipe cleaning solvent(s) used, on a monthly basis.

(2) Additionally, for any degreaser utilizing an add-on emission control device/system as a means of complying with provisions of Rule 1104 shall, on a monthly basis, maintain records of key system operating and maintenance data. Such data are recorded for the purpose of demonstrating continuous compliance during periods of emission producing activities. The data shall be recorded in a manner as prescribed by the District.

(3) Documentation shall be maintained on site of the disposal or on-site recycling of any waste solvent or residues.

(4) Records shall be retained (at facility) and available for inspection by District, state or federal personnel for the previous 5-year period as required by this Title V / Federal Operating Permit (Reference Rule 1203(D)(1)(d)(ii)).

[Rule 1104 - *Organic Solvent Degreasing Operations*; Version in SIP = Current, 40 CFR 52.220(c)(207)(i)(D)(2) - 04/30/96 61 FR 18962, effective 11/30/94]

27. Owner/Operator's use of *Architectural Coatings* at this facility shall comply with the applicable requirements of Rule 1113, including the VOC limits specified in Rule 1113, part C, Table of Standards, as listed below:

Table of Standards

| COATING: | VOC (grams/liter [g/L]) |
|---|---|
| Below Ground Wood Preservatives | 600 |
| Bond Breakers | 350 |
| Concrete Curing Compounds | 350 |
| Dry-Fog Coatings | 400 |
| Fire Retardant Coatings | |
| Clear | 650 |
| Pigmented | 350 |
| Flat Coatings | 100 |
| Primers, Sealers and Undercoaters | 200 |
| Graphic Arts (Sign) Coatings | 500 |
| Industrial Maintenance Coatings | 250 |
| High Temperature Coatings | 420 |
| Anti-Grafitti coatings | 600 |
| Clear Brushing Lacquers | 680 |
| Lacquers (including lacque sanding sealers) | 550 |
| Magnesite Cement Coatings | 450 |
| Mastic Texture Coatings | 300 |
| Metallic-Pigmented Coatings | 250 |
| Multi-Color Coatings | 580 |
| Stains | 250 |
| Wood Preservatives | 350 |
| Pretreatment (Wash) Primer | 420 |
| Quick Dry Enamels | 250 |
| Quick Dry Primers, Sealers and Undercoaters | 200 |
| Roof Coatings | 250 |
| Sanding Sealers | 350 |
| Shellac | |
| Clear | 730 |
| Opaque | 550 |
| Swimming Pool Coatings | 340 |
| Swimming Pool Repair and Maintenance Coatings | 340 |
| Traffic Marking Coatings | 150 |
| Varnish | 350 |
| Waterproof Sealers | 250 |

[Rule 1113 - *Architectural Coatings*; SIP: Submitted 04/01/2003; 40 CFR 52.220(c)(315)(i)(C)(1); Approved 01/02/04; Current Rule as Amended 02/24/03]

28. Owner/Operator's use of *Wood Products Coatings* at this facility shall comply with the applicable requirements of Rule 1114, including the VOC limits specified in Rule 1114, part C, Table of Standards, as listed below:

(1) VOC Content of Coatings & Adhesives

(a) Any Owners and/or Operators of Wood Products Coating Application Operations shall not apply any Coating or Adhesive to a Wood Product which has a VOC Content, including any VOC-containing material added to the original Coating supplied by the manufacturer, which exceeds the applicable limit specified below, unless emissions to the atmosphere are controlled by air pollution abatement equipment with an Overall Control Efficiency of at least 85 percent. Any Coating subject to this rule that meets either of the two VOC Content limit formats (grams per liter or pounds per gallon [lb/gal]) is in compliance with this subsection.

(i) LIMITS

Grams of VOC Per Liter of Coating,
Less Water and Less Exempt Compounds (VOC Content)

| Coating | Current Limit g/L (lb/gal) | On and After 7/1/97 | | On and After 7/1/2005 |
|---|---|---|---|---|
| | | Column I or g/L (lb/gal) | Column II g/L (lb/gal) | g/L (lb/gal) |
| Clear Sealers | 680 (5.7) | 550 (4.6) | 680 (5.7) | 275 (2.3) |
| Clear Topcoat | 680 (5.7) | 550 (4.6) | 275 (2.3) | 275 (2.3) |
| Pigmented Primers, Sealers and Undercoats | 600 (5.0) | 550 (4.6) | 600 (5.0) | 275 (2.3) |
| Pigmented Topcoats | 600 (5.0) | 550 (4.6) | 275 (2.3) | 275 (2.3) |

Effective July 1, 1997, a person or facility shall use Coatings on Wood Products that comply with either all VOC Content limits in Column I or all VOC Content limits in Column II. A person or facility that applies a Pigmented Primer, Sealer or Undercoat, but not a Clear Topcoat or Pigmented Topcoat, to a Wood Product shall be subject to column I for that product.

(ii) Notwithstanding the requirements of subsection (C)(1)(a)(i), a person or facility that applies a topcoat and a primer, sealer or undercoat to a Shutter may, until July 1, 2005, choose to comply with the VOC Content limits specified below for that Shutter:

(b) LIMITS

Grams of VOC Per Liter of Coating,
Less Water and Less Exempt Compounds (VOC Content)

| Coating | g/L (lb/gal) |
|---|---|
| Clear Sealers | 275 (2.3) |
| Clear Topcoat | 680 (5.7) |
| Pigmented Primers, Sealers & Undercoats | 275 (2.3) |
| Pigmented Topcoats | 600 (5.0) |

(c) LIMITS
Grams of VOC Per Liter of Coating,
Less Water and Less Exempt Compounds (VOC Content)

| Coating | Current Limit g/L (lb/gal) | On and After 7/1/97 g/L (lb/gal) | On and After 7/1/2005 g/L (lb/gal) |
|---|---|---|---|
| Fillers | 500 (4.2) | 500 (4.2) | 275 (2.3) |
| High-Solid Stains | 700 (5.8) | 550 (4.6) | 350 (2.9) |
| Inks | 500 (4.2) | 500 (4.2) | 500 (4.2) |
| Mold-Seal Coatings | 750 (6.3) | 750 (6.3) | 750 (6.3) |
| Multi-Colored Coatings | 685 (5.7) | 685 (5.7) | 275 (2.3) |
| Low-Solids Stains, Toners and Washcoats | 800 (6.7) | 480 (4.0) | 120 (1.0) |
| Adhesives | 250 (2.1) | 250 (2.1) | 250 (2.1) |

[Rule 1114 - *Wood Products Coating Operations*; Version in SIP = Current, Approved: 08/18/98, 63 FR 44132, 40 CFR 52.220(c)(244)(i)(C); Approved 61 FR 18962, 04/30/96]

29. Owner/Operator's use of *Metal Parts and Products Coatings* at this facility shall comply with the applicable requirements of Rule 1115, including the VOC limits specified in Rule 1115, as listed below:

Owner/Operator shall not apply to metal parts and products any coatings, including any VOC-containing materials added to the original coating supplied by the manufacturer, which contain VOC in excess of the limits specified below unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with a capture and control system Combined Efficiency of at least 85 percent:

LIMITS
(Grams of VOC Per Liter of Coating, Less Water and Less Exempt Compounds)

| Coating | Air Dried g/L | Air Dried (lb/gal) | Baked g/L | Baked (lb/gal) |
|---|---|---|---|---|
| General | 420 | (3.5) | 360 | (3.0) |
| Military Specification | 420 | (3.5) | 360 | (3.0) |
| Etching Filler | 420 | (3.5) | 420 | (3.5) |
| Solar-Absorbent | 420 | (3.5) | 360 | (3.0) |
| Heat-Resistant | 420 | (3.5) | 360 | (3.0) |
| High-Gloss | 420 | (3.5) | 360 | (3.0) |
| Extreme High-Gloss | 420 | (3.5) | 360 | (3.0) |

| | | | | |
|---|---|---|---|---|
| Metallic | 420 | (3.5) | 420 | (3.5) |
| Extreme Performance | 420 | (3.5) | 360 | (3.0) |
| Prefabricated Architectural | | | | |
| Component | 420 | (3.5) | 275 | (2.3) |
| Touch Up | 420 | (3.5) | 360 | (3.0) |
| Repair | 420 | (3.5) | 360 | (3.0) |
| Silicone-Release | 420 | (3.5) | 420 | (3.5) |
| High Performance | | | | |
| Architectural | 420 | (3.5) | 420 | (3.5) |
| Camouflage | 420 | (3.5) | 420 | (3.5) |
| Vacuum-Metalizing | 420 | (3.5) | 420 | (3.5) |
| Mold-Seal | 420 | (3.5) | 420 | (3.5) |
| High-Temperature | 420 | (3.5) | 420 | (3.5) |
| Electric-Insulating Varnish | 420 | (3.5) | 420 | (3.5) |
| Pan-Backing | 420 | (3.5) | 420 | (3.5) |
| Pretreatment Wash Primer | 420 | (3.5) | 420 | (3.5) |
| Clear Coating | 520 | (4.3) | 520 | (4.3) |

[Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]

30. Owner/Operator shall comply with all requirements of the District's Title V Program, MDAQMD Rules 1200 through 1210 (Regulation XII - *Federal Operating Permits*). [Applicable via Title V Program interim approval 02/05/96 61 FR 4217]

## *B. FACILITY-WIDE MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS:*

1. Any data and records generated and/or kept pursuant to the requirements in this federal operating permit (Title V Permit) shall be kept current and on site for a minimum of five (5) years from the date generated. Any records, data, or logs shall be supplied to District, state, or federal personnel upon request.
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]

2. Any Compliance/Performance testing required by this Federal Operating Permit shall follow the administrative procedures contained in the District's *Compliance Test Procedural Manual*. Any required annual Compliance and/or Performance Testing shall be accomplished by obtaining advance written approval from the District pursuant to the District's *Compliance Test Procedural Manual*. All emission determinations shall be made as stipulated in the *Written Test Protocol* accepted by the District. When proposed testing involves the same procedures followed in prior District approved testing, then the previously approved *Written Test Protocol* may be used with District concurrence.
[Rule 204 - *Permit Conditions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

3. Owner/Operator of permit units subject to Comprehensive Emissions Inventory Report / Annual Emissions Determinations for District, state, and federal required Emission Inventories shall monitor and record the following for each unit:
   (a) The cumulative annual usage of each fuel type. The cumulative annual usage of each fuel type shall be monitored from utility service meters, purchase or tank fill records.
   (b) Fuel suppliers' fuel analysis certification/guarantee including fuel sulfur content shall be kept on site and available for inspection by District, state or federal personnel upon request. The sulfur content of diesel fuel shall be determined by use of ASTM method D2622-82, or (ASTM method D 2880-71, or equivalent). Vendor data meeting this requirement are sufficient.

   [*40 CFR 70.6(a)(3)(B) – Periodic Monitoring Requirements*]
   [Rule 204 - *Permit Conditions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
   [Federal Clean Air Act: §110(a)(2)(F, K & J); §112; §172(c)(3); §182(a)(3)(A & B); §187(a)(5); § 301(a)] and in California Clean Air Act, Health and Safety Code §§39607 and §§44300 et seq.]

4 (a) Owner/Operator shall submit Compliance Certifications as prescribed by Rule 1203(F)(1) and Rule 1208, in a format approved by MDAQMD. Compliance Certifications by a Responsible Official shall certify the truth, accuracy and completeness of the document submitted and contain a statement to the effect that the certification is based upon information and belief, formed after a reasonable inquiry; the statements and information in the document are true, accurate, and complete.
   [40 CFR 70.6(c)(5)(i); Rule 1208; Rule 1203(D)(1)(vii-x)]

(b) Owner/Operator shall include in any Compliance Certification the methods used for monitoring such compliance.
   [40 CFR 70.6(c)(5)(ii); Rule 1203(D)(1)(g)(viii)]

(c) Owner/Operator shall comply with any additional certification requirements as specified in 42 United States Code (U.S.C.) §7414(a)(3), Recordkeeping, Inspections, Monitoring and Entry (Federal Clean Air Act §114(a)(3)) and 42 U.S.C. §7661c(b), Permit Requirements and Conditions (Federal Clean Air Act §503(b)), or in regulations promulgated thereunder.
   [Rule 1203 (D)(1)(g)(x)]

(d) On an *annual* basis, of any given year, Owner/Operator shall submit a *Compliance Certification Report*, within 30 days of the anniversary of the date of the issuance or renewal of the Federal Operating Permit, to the Air Pollution Control Officer (APCO) / District pursuant to District Rule 1203. Each report shall be certified to be true, accurate, and complete by "The Responsible Official" and a copy of this annual report shall also be contemporaneously submitted to the EPA Region IX Administrator.
   [40 CFR 72.90.a and Rule 1203 (D)(1)(g)(v - x)]

5. Owner/Operator shall submit, on an annual basis, a *Monitoring Report* to the Air Pollution Control Officer (APCO) / District. Each *Monitoring Report* shall be submitted no later than 30 days after the midpoint (six months after the Title V Permit month & day

issue date) of the Title V Permit anniversary date of any given year. This *Monitoring Report* shall be certified to be true, accurate, and complete by "The Responsible Official" and shall include the following information and/or data:

(a) Summary of deviations from any federally-enforceable requirement in this permit.
(b) Summary of all emissions monitoring and analysis methods required by any Applicable Requirement / federally - enforceable requirement.
(c) Summary of all periodic monitoring, testing or record keeping (including test methods sufficient to yield reliable data) to determine compliance with any Applicable Requirement / federally - enforceable requirement that does not directly require such monitoring.

An alternate Monitoring Report format may be used upon prior approval by MDAQMD. [Rule 1203(D)(1)(e)(i)]

6. Owner/Operator shall promptly report all deviations from Federal Operating Permit requirements including, but not limited to, any emissions in excess of permit conditions, deviations attributable to breakdown conditions, and any other deviations from permit conditions. Such reports shall include the probable cause of the deviation and any corrective action or preventative measures taken as a result of the deviation. [Rule 1203(D)(1)(e)(ii) and Rule 430(C)]

Prompt reporting shall be determined as follows:

(a) For deviations involving emissions of air contaminants in excess of permit conditions including but not limited to those caused by a breakdown, prompt reporting shall be within one hour of the occurrence of the excess emission or within one hour of the time a person knew or reasonably should have known of the excess emission. Documentation and other relevant evidence regarding the excess emission shall be submitted to the District within sixty (60) days of the date the excess emission was reported to the District. [SIP Pending: Rule 430 - Breakdown Provisions as amended 12/21/94 and submitted 2/24/95]
(b) For other deviations from permit conditions not involving excess emissions of air contaminants shall be submitted to the District with any required monitoring reports at least every six (6) months. [Rule 1203(D)(1)(e)(i)]

7. If any facility unit(s) should be determined not to be in compliance with any federally-enforceable requirement during the 5-year permit term, then Owner/Operator shall obtain a *Schedule of Compliance* approved by the District Hearing Board pursuant to the requirements of MDAQMD Regulation 5 (Rules 501 - 518). In addition, Owner/Operator shall submit a *Progress Report* on the implementation of the *Schedule of Compliance*. The *Schedule of Compliance* shall contain the information outlined in (b), below. The *Progress Report* shall contain the information outlined in (c), below. The *Schedule of Compliance* shall become a part of this Federal Operating Permit by administrative incorporation. The *Progress Report* and *Schedule of Compliance* shall comply with Rule 1201(I)(3)(iii) and shall include:

(a) A narrative description of how the facility will achieve compliance with such requirements; and
(b) A *Schedule of Compliance* which contains a list of remedial measures to be taken

for the facility to come into compliance with such requirements, an enforceable sequence of actions, with milestones, leading to compliance with such requirements and provisions for the submission of *Progress Reports* at least every six (6) months. The *Schedule of Compliance* shall include any judicial order, administrative order, and/or increments of progress or any other schedule as issued by any appropriate judicial or administrative body or by the District Hearing Board pursuant to the provisions of Health & Safety Code §42350 et seq.; and

(c) *Progress Reports* submitted under the provisions of a *Schedule of Compliance* shall include: Dates for achieving the activities, milestone, or compliance required in the schedule of compliance; and dates when such activities, milestones or compliance were 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 due to the failure to meet dates in the schedule of compliance. [Rule 1201 (I)(3)(iii); Rule 1203 (D)(1)(e)(ii); Rule 1203 (D)(1)(g)(v)]

## *C. FACILITY-WIDE COMPLIANCE CONDITIONS:*

1. Owner/Operator shall allow an authorized representative of the MDAQMD to enter upon the permit holder's premises at reasonable times, with or without notice.
[40 CFR 70.6(c)(2)(i); Rule 1203(D)(1)(g)(i)]

2. Owner/Operator shall allow an authorized representative of the MDAQMD to have access to and copy any records that must be kept under condition(s) of this Federal Operating Permit.
[40 CFR 70.6(c)(2)(ii); Rule 1203(D)(1)(g)(ii)]

3. Owner/Operator shall allow an authorized representative of the MDAQMD to inspect any equipment, practice or operation contained in or required under this Federal Operating Permit.
[40 CFR 70.6(c)(2)(iii); Rule 1203(D)(1)(g)(iii)]

4. Owner/Operator shall allow an authorized representative of the MDAQMD to sample and/or otherwise monitor substances or parameters for the purpose of assuring compliance with this Federal Operating Permit or with any Applicable Requirement.
[40 CFR 70.6(c)(2)(iv); Rule 1203(D)(1)(g)(iv)]

5. Owner/Operator shall remain in compliance with all Applicable Requirements / federally enforceable requirements by complying with all compliance, monitoring, record-keeping, reporting, testing, and other operational conditions contained in this Federal Operating Permit. Any noncompliance constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; the termination, revocation and re-issuance, or modification of this Federal Operating Permit; and/or grounds for denial of a renewal application.
[1203 (D)(1)(f)(ii)]

6. Owner/Operator shall comply in a timely manner with all applicable requirements / federally - enforceable requirements that become effective during the term of this permit. [Rule 1201 (I)(2); Rule 1203(D)(1)(g)(v)]

7. Owner/Operator shall insure that all applicable subject processes comply with the provisions of 40 CFR 61, *National Emission Standards for Hazardous Air Pollutants*, subpart A, *General Provisions*, and subpart M, *Asbestos*. [40 CFR 61, subparts A and M]

Note: Blythe Energy, Inc. Power Plant is an asbestos-free facility and will remain so.

8. Owner/Operator shall comply with all applicable requirements of 40 CFR 98, the Mandatory Greenhouse Gas Reporting rule. [40 CFR 98]

# PART III
# EQUIPMENT SPECIFIC APPLICABLE REQUIREMENTS; EMISSIONS LIMITATIONS; MONITORING, RECORDKEEPING, REPORTING AND TESTING REQUIREMENTS; COMPLIANCE CONDITIONS; COMPLIANCE PLANS

## EQUIPMENT DESCRIPTIONS:

PERMIT CONDITIONS; (UNLESS OTHERWISE STATED ALL CONDITIONS RESULT FROM RULE 204 - PERMIT CONDITIONS; VERSION IN SIP = CARB EX. ORDER G-73, 40 CFR 52.220(C)(39)(II)(B) - 11/09/78 43 FR 52237; CURRENT RULE VERSION = 07/25/77:

A. Permit #B007953 COMBUSTION TURBINE GENERATOR POWER BLOCK (CT1) consisting of: Natural gas fueled Siemens F Class Model V84.3A(2) Serial No. 800436 combustion turbine generator power block producing approximately 260 MW(e) with a connected heat recovery steam generator and a steam condensing turbine (shared with B007954), maximum turbine heat input of 1776 MMBtu/hr. ~~Manufacturer, model and serial numbers will be specified when available.~~

B. Permit #B007954 COMBUSTION TURBINE GENERATOR POWER BLOCK (CT2) consisting of: Natural gas fueled Siemens F Class Model V84.3A(2) Serial No. 800437 combustion turbine generator power block producing approximately 260 MW(e) with a connected heat recovery steam generator and a steam condensing turbine (shared with B007953), maximum turbine heat input of 1776 MMBtu/hr. ~~Manufacturer, model and serial numbers will be specified when available.~~

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

2. This equipment shall be exclusively fueled with pipeline quality natural gas with a sulfur content not exceeding 0.5 grains per 100 dscf on a rolling twelve month average basis, and shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.

3. This equipment is subject to the federal NSPS codified at 40 CFR Part 60, Subparts A (General Provisions) and GG (Standards of Performance for Stationary Gas Turbines). This equipment is also subject to the Prevention of Significant Deterioration (40 CFR 51.166) and Federal Acid Rain (Title IV) programs. Compliance with all applicable provisions of these regulations is required.

4. Emissions from this equipment (including its associated duct burner) shall not exceed the following emission limits at any firing rate, except for CO, NOx, and VOC during periods of startup, shutdown and malfunction:
   a. Hourly rate, computed every 15 minutes, verified by CEMS and annual compliance tests:
   i. NOx as NO2 ~~–~~ the most stringent of 19.80 lb/hr ~~(based on~~ or 2.5 ppmvd corrected to 15% oxygen and averaged over one hour~~)~~
   ii. NOx as NO2 – effective [insert date 12 months after effective date of permit], 2.0 ppmvd corrected to 15% oxygen and averaged over a rolling 12 month period.
   iii. CO ~~–~~ the most stringent of 17.5 lb/~~hr (based on~~or 4.0 ppmvd corrected to 15% oxygen and averaged over three hours~~)~~
   iv. CO – 10 lb/hr averaged over a rolling 12-month period
   b. Hourly rates, verified by annual compliance tests or other compliance methods in the case of SOx:
   i. VOC as CH4 - 2.9 lb/hr (based on 1 ppmvd corrected to 15% oxygen)
   ii. SOx as SO2 - 2.7 lb/hr (based on 0.5 grains/100 dscf fuel sulfur)
   iii. PM10 - 11.5 lb/hr

5. Emissions of CO and NOx from this equipment shall only exceed the limits contained in Condition 4 during startup and shutdown periods as follows:
   a. Startup is defined as the period beginning with ignition and lasting until either the equipment complies with all Condition 4 operating permit limits for two consecutive 15-minute averaging periods or four hours after ignition, whichever occurs first. Shutdown is defined as the period beginning with the lowering of equipment from base load and lasting until fuel flow is completely off and combustion has ceased.
   b. The emissions from each startup or shutdown event shall not exceed the following, verified by CEMS:
   i. NOx - 376 lb
   ii. CO - 3600 lb
   c. Effective [insert date 12 months after effective date of permit], the CO emissions from all startup and shutdown events at both power blocks, averaged over a rolling 12-month period, shall not exceed 750 lb/event, verified by CEMS.

6. Emissions from this equipment, including the duct burner, shall not exceed the following emission limits, based on a calendar day summary:
   a. NOx - 5762 lb/day, verified by CEMS
   b. CO - 8004 lb/day, verified by CEMS
   c. VOC as CH4 - 239 lb/day, verified by compliance tests and hours of operation in steady-state, pre-mix mode.
   d. SOx as SO2 - 130 lb/day, verified by fuel sulfur content and fuel use data
   e. PM10 - 565 lb/day, verified by compliance tests and hours of operation

7. Emissions from all Blythe Energy Project I permit units at this facility (as listed in Part I.A.1 of this Permit), including the cooling towers, shall not exceed the following emission limits, based on a rolling 12 month summary:
   a. NOx - ~~202~~ 97 tons/year, verified by CEMS

b. CO - ~~621~~ 97 tons/year, verified by CEMS

c. VOC as CH4 - 24 tons/year, verified by compliance tests and hours of operation in steady-state, pre-mix mode

d. SOx as SO2 - 24 tons/year, verified by fuel sulfur content and fuel use data

e. PM10 - ~~103~~ 97 tons/year, verified by compliance tests and hours of operation

These limits shall apply to all emissions from all Blythe Energy Project I permit units at this facility (as listed in Part I.A.1, of this Permit), and shall include emissions during all modes of operation, including startup, shutdown and malfunction.

8. Particulate emissions from this equipment shall not exceed opacity equal to or greater than twenty percent (20%) for a period aggregating more than three (3) minutes in any one (1) hour, excluding uncombined water vapor.

9. This equipment shall exhaust through a stack at a minimum height of 130 feet.

10. ***For Permit B007953 only:*** The owner/operator (o/o) shall not operate this equipment after the initial commissioning period without the selective catalytic NOx reduction system with valid District permit C007959, as well as the oxidation catalyst with valid District permit C010832 installed and fully functional.

10. ***For Permit B007954 only:*** The owner/operator (o/o) shall not operate this equipment after the initial commissioning period without the selective catalytic NOx reduction system with valid District permit C007960 as well as the oxidation catalyst with valid District permit C010833 installed and fully functional.

11. The o/o shall provide stack sampling ports and platforms necessary to perform source tests required to verify compliance with District rules, regulations and permit conditions. The location of these ports and platforms shall be subject to District approval.

12. Emissions of NOx, CO, oxygen and ammonia slip shall be monitored using a Continuous Emissions Monitoring System (CEMS). Each CEMS shall be operational whenever the associated combustion turbine generator is in operation, including during periods of startup, shutdown and malfunction . Turbine fuel consumption shall be monitored using a continuous monitoring system. Stack gas flow rate shall be monitored using either a Continuous Emission Rate Monitoring System (CERMS) meeting the requirements of 40 CFR Part 75 Appendix A or a stack flow rate calculation method. The o/o shall install, calibrate, maintain, and operate these monitoring systems according to a District-approved monitoring plan and MDAQMD Rule 218, and they shall be installed prior to initial equipment startup. Six (6) months prior to installation the operator shall submit a monitoring plan for District review and approval.~~Emissions of NOx, CO, oxygen and ammonia slip shall be monitored using a Continuous Emissions Monitoring System (CEMS). Turbine fuel consumption shall be monitored using a continuous monitoring system consistent with 40 CFR Part 75 Appendix D. The o/o shall install, calibrate, maintain, and operate these monitoring systems according to a District-approved monitoring plan and MDAQMD Rule 218.~~

13. The o/o shall conduct all required compliance/certification tests in accordance with a District-approved test plan. Thirty (30) days prior to the compliance/certification tests the

o/o shall provide a written test plan for District review and approval. Written notice of the compliance/certification test shall be provided to the District ten (10) days prior to the tests so that an observer may be present. A written report with the results of such compliance/certification tests shall be submitted to the District within forty-five (45) days after testing.

14. The o/o shall perform the following annual compliance tests in accordance with the MDAQMD Compliance Test Procedural Manual. The test report shall be submitted to the District no later than six weeks prior to the expiration date of this permit. The following compliance tests are required:
a. NOx as NO2 in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Methods 19, 20, or 7E). If testing is performed at 90%-100% of rated capacity, then the annual calibration RATA associated with the NOx CEMS in use on these units may be used in lieu of the required annual EPA Reference Method 20, as long as all of the requirements of prior test notification, proper test result submittal, etc., are followed.
b. VOC as CH4 in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Methods 25A and 18).
c. SOx as SO2 in ppmvd at 15% oxygen and lb/hr.
d. CO in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Method 10).
e. PM10 in mg/m3 at 15% oxygen and lb/hr (measured per USEPA Reference Methods 5 and 202 or CARB Method 5)
f. Flue gas flow rate in dscfm.
g. Opacity (measured per USEPA Reference Method 9).
h. Ammonia slip in ppmvd at 15% oxygen.

15. The o/o shall, at least as often as once every five years (commencing with the initial compliance test), include the following supplemental source tests in the annual compliance testing:
a. Characterization of cold startup VOC emissions;
b. Characterization of warm startup VOC emissions;
c. Characterization of hot startup VOC emissions;
d. Characterization of shutdown VOC emissions.

16. Continuous monitoring systems shall meet the following acceptability testing requirements from 40 CFR 60 Appendix B:
a. For NOx, Performance Specification 2.
b. For oxygen, Performance Specification 3.
c. For CO, Performance Specification 4.
d. For stack gas flow rate, Performance Specification 6 (if CERMS is installed).
e. For ammonia, a District approved procedure that is to be submitted by the o/o.

17. The o/o shall submit to the Air Pollution Control Officer (APCO) and USEPA Region IX the following information for the preceding calendar quarter by January 30, April 30, July 30 and October 30 of each year this permit is in effect. Each January 30 submittal shall include a summary of the reported information for the previous year. This information shall be maintained on site for a minimum of five (5) years and shall be provided to District personnel on request:
a. Operating parameters of emission control equipment, including but not limited to

ammonia injection rate, NOx emission rate and ammonia slip.

b. Total plant operation time (hours), number of startups, hours in startup, and hours in shutdown period.
c. Date and time of the beginning and end of each startup and shutdown period.
d. Average plant operation schedule (hours per day, days per week, weeks per year).
e. All continuous emissions data reduced and reported in accordance with the District-approved CEMS protocol.
f. Maximum hourly, maximum daily, total quarterly, and total calendar year emissions of NOx, CO, PM10, VOC and SOx (including calculation protocol).
g. Total monthly and rolling 12-month emissions of NOx, CO and $PM_{10}$ from all permit units.
h. Total monthly and rolling 12-month fuel use in the gas turbines and duct burners.
i. Average NOx concentration and average CO mass emission rate, for all operating periods except during startup, shutdown and malfunction, for each gas turbine and associated duct burner, calculated on a rolling 12-month basis.
j. Average CO emissions from all startups and shutdowns of the gas turbines, on a per event basis, calculated on a rolling 12-month basis.
k. Fuel sulfur content (monthly laboratory analyses, monthly natural gas sulfur content reports from the natural gas supplier(s), or the results of a custom fuel monitoring schedule approved by USEPA for compliance with the fuel monitoring provisions of 40 CFR 60 Subpart GG).
l. A log of all excess emissions, including the information regarding malfunctions/breakdowns required by Rule 430.
m. Any permanent changes made in the plant process or production, which would affect air pollutant emissions, and indicate when changes were made.
n. Any maintenance to any air pollutant control system (recorded on an as-performed basis).

18. ~~The o/o must surrender to the District sufficient valid Emission Reduction Credits for this equipment before the first firing of a combustion turbine. In accordance with Regulation XIII the operator shall obtain 202 tons of NOx and 103 tons of PM10 offsets (VOC ERCs from SCAQMD may be substituted for NOx ERCs at a rate of 1.6:1). The PM10 offsets may be tendered in lieu of surrender at the o/o's option.~~ Effective [insert date 12 months after effective date of permit], total fuel use in the two gas turbines and two duct burners (Permit #B007953 COMBUSTION TURBINE GENERATOR POWER BLOCK (CT1), Permit #B007954 COMBUSTION TURBINE GENERATOR POWER BLOCK (CT2), Permit #B007955 DUCT BURNER UNIT 1 and Permit #B007956 DUCT BURNER UNIT 2) shall not exceed 31,852,800 MMBtu in any rolling 12-month period.

C. Permit #B007955 DUCT BURNER UNIT 1: Natural gas burner located within the heat recovery steam generator covered by B007953, maximum heat input of 120 MMBtu/hr. Manufacturer is Forney, model # 1002-WPS-C1 and serial #17130.

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless

otherwise noted below.

2. This equipment shall be exclusively fueled with natural gas and shall be operated and maintained in strict accord with the recommendations of the manufacturer/supplier and/or sound engineering principles.

3. This duct burner shall not be operated unless the combustion turbine generator with valid District permit B007953, selective catalytic reduction system with valid District permit C007959, and oxidation catalyst C010832 are in operation.

4. Fuel use by this equipment shall be recorded and maintained on site for a maintained on site for a minimum of five (5) years and shall be provided to District, State or Federal personnel on request.

D. Permit #B007956 DUCT BURNER UNIT 2: Natural gas burner located within the heat recovery steam generator covered by B007954, maximum heat input of 120 MMBtu/hr. Manufacturer Forney, model # 1002-WPS-C1 and serial #17202.

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

2. This equipment shall be exclusively fueled with natural gas and shall be operated and maintained in strict accord with the recommendations of the manufacturer/supplier and/or sound engineering principles.

3. This duct burner shall not be operated unless the combustion turbine generator with valid District permit B007954, selective catalytic reduction system with valid District permit C007960, and oxidation catalyst C010833 are in operation.

4. Fuel use by this equipment shall be recorded and maintained on site for a minimum of five (5) years and shall be provided to District, State or Federal personnel on request.

E. Permit #B007957 (Main Cooling Tower) A Marathon Model 9B 445TTFN4573AA wet cooling tower with water circulation, treatment and handling equipment and air circulation equipment, including the following:

| Capacity | Equipment Name | Order |
|---|---|---|
| 250.00 | Cooling Cell Fan #8, Motor Serial No. MU402450-2/22-02 | 1 |
| 250.00 | Cooling Cell Fan #7, Motor Serial No. MU402450-2/22-01 | 2 |
| 250.00 | Cooling Cell Fan #6, Motor Serial No. MU402450-2/22-05 | 3 |
| 250.00 | Cooling Cell Fan #5, Motor Serial No. MU402450-2/22-03 | 4 |
| 250.00 | Cooling Cell Fan #4, Motor Serial No. MU402450-2/22-06 | 5 |
| 250.00 | Cooling Cell Fan #3, Motor Serial No. MU402450-2/22-07 | 6 |
| 250.00 | Cooling Cell Fan #2, Motor Serial No. MU402450-2/22-04 | 7 |
| 250.00 | Cooling Cell Fan #1, Motor Serial No. MU402450-2/22-08 | 8 |
| 1000.00 | Circulating Water Pump #12, Johnson Serial No. 01JB1129B | 9 |
| 1000.00 | Circulating Water Pump #11, Johnson Serial No. 01JB1129A | 10 |

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.

3. The drift rate shall not exceed 0.0006 percent with a maximum circulation rate of 146,000 gallons per minute for the Main Cooling Tower. The maximum hourly PM10 emission rate shall not exceed 0.546 pounds per hour from both the Main and the Chiller Cooling Towers, as calculated per the written District-approved protocol.

4. Whenever the power plant is in operation, the operator shall perform tests of the blow-down water quality once in every seven day period at a minimum; to clarify, if at any time during that same seven day period the power plant has run, then the owner operator shall perform blow-down water quality tests. The operator shall maintain a log, which contains the date and result of each blow-down water quality test, and the resulting mass emission rate. This log shall be maintained on site for a minimum of five (5) years and shall be provided to District, State or Federal personnel on request.

5. The operator shall conduct all required cooling tower water quality tests in accordance with a District-approved test and emissions calculation protocol.

6. A maintenance procedure shall be established that states how often and what procedures will be used to ensure the integrity of the drift eliminators. This procedure shall be submitted to the District for approval at least thirty (30) days prior to construction and shall be kept on-site and available to District personnel on request.

F. Permit #B007958 (Chiller Cooling Tower) Water circulation, treatment and handling equipment and air circulation equipment, including units as follows:

| Capacity | Equipment Name | Order |
|---|---|---|
| 250.00 | Cooling Cell Fan #12, BAC Model CXV-T08 Serial No. U025323712 | 1 |
| 250.00 | Cooling Cell Fan #11, BAC Model CXV-T08 Serial No. U025323711 | 2 |
| 250.00 | Cooling Cell Fan #10, BAC Model CXV-T08 Serial No. U025323710 | 3 |
| 250.00 | Cooling Cell Fan #9, BAC Model CXV-T08 Serial No. U025323709 | 4 |
| 250.00 | Cooling Cell Fan #8, BAC Model CXV-T08 Serial No. U025323708 | 5 |
| 250.00 | Cooling Cell Fan #7, BAC Model CXV-T08 Serial No. U025323707 | 6 |
| 250.00 | Cooling Cell Fan #6, BAC Model CXV-T08 Serial No. U025323706 | 7 |
| 250.00 | Cooling Cell Fan #5, BAC Model CXV-T08 Serial No. U025323705 | 8 |
| 250.00 | Cooling Cell Fan #4, BAC Model CXV-T08 Serial No. U025323704 | 9 |
| 250.00 | Cooling Cell Fan #3, BAC Model CXV-T08 Serial No. U025323703 | 10 |
| 250.00 | Cooling Cell Fan #1, BAC Model CXV-T08 Serial No. U025323701 | 11 |
| 250.00 | Cooling Cell Fan #2, BAC Model CXV-T08 Serial No. U025323702 | 12 |
| 750.00 | Chiller Recirulating Pump #4, Cascade Serial No. 16061 | 13 |
| 750.00 | Chiller Recirulating Pump #3, Cascade Serial No. 16060 | 14 |
| 750.00 | Chiller Recirulating Pump #2, Cascade Serial No. 16059 | 15 |
| 750.00 | Chiller Recirulating Pump #1, Cascade Serial No. 16058 | 16 |

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.

3. The drift rate shall not exceed 0.0006 percent with a maximum circulation rate of 22,000 gallons per minute for the Chiller Cooling Tower. The maximum hourly PM10 emission rate shall not exceed 0.546 pounds per hour from both the Main and the Chiller Cooling Towers, as calculated per the written District-approved protocol.

4. Whenever the power plant is in operation, the operator shall perform weekly tests of the blow-down water quality. The operator shall maintain a log, which contains the date and result of each blow-down water quality test, and the resulting mass emission rate. This log shall be maintained on site for a minimum of five (5) years and shall be provided to District, State or Federal personnel on request.

5. The operator shall conduct all required cooling tower water quality tests in accordance with a District-approved test and emissions calculation protocol. Thirty (30) days prior to the first such test the operator shall provide a written test and emissions calculation protocol for District review and approval.

6. A maintenance procedure shall be established that states how often and what procedures will be used to ensure the integrity of the drift eliminators. This procedure shall be submitted to the District for approval at least thirty (30) days prior to construction and shall be kept on-site and available to District personnel on request.

G. Permit #C007959 SCR UNIT 1 consisting of: Selective Catalytic Reduction system with a catalyst located within the power train covered by B007953 and an ammonia injection system. Manufacturer is Hitachi Zosen, model # NOxNON-700 and serial numbers will be specified when available.

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.

3. This equipment shall be operated concurrently with the combustion turbine generator with valid MDAQMD permit B007953.

4. Ammonia shall be injected whenever the selective catalytic reduction system has reached or exceeded 550 deg Fahrenheit. Except during periods of startup and shutdown, ammonia slip shall not exceed 10 ppmvd (corrected to 15% oxygen), averaged over three hours.

5. Ammonia injection by this equipment in pounds per hour shall be recorded and maintained on site for a minimum of five (5) years and shall be provided to District, State or Federal personnel on request.

H. Permit #C007960 SCR UNIT 2 consisting of: SELECTIVE CATALYTIC REDUCTION system with a catalyst located within the power train covered by B007954 and an ammonia injection system. Manufacturer is Hitachi Zosen; model and serial numbers will be specified when available.

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.

3. This equipment shall be operated concurrently with the combustion turbine generator with valid MDAQMD permit B007954.

4. Ammonia shall be injected whenever the selective catalytic reduction system has reached or exceeded 550 deg Fahrenheit. Except during periods of startup and shutdown, ammonia slip shall not exceed 10 ppmvd (corrected to 15% oxygen), averaged over three hours.

5. Ammonia injection by this equipment in pounds per hour shall be recorded and maintained on site for a minimum of five (5) years and shall be provided to District, State or Federal personnel on request.

I. Permit #E007961 NON-CERTIFIED DIESEL IC ENGINE, EMERGENCY FIRE PUMP consisting of: Year of Manufacture 2002; USEPA Family Name NA; CARB Executive Order NA; Tier 0, One John Deere, Diesel fired internal combustion engine, Model No. 6081HF001 and Serial No. RG6081H145432, Direct Injected, Turbo Charged, producing 303 bhp with 6 cylinders at 2200 rpm while consuming a maximum of 14 gal/hr. This equipment powers a Pump.

PERMIT CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR Part 63, Subpart ZZZZ]

2. This unit shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% (15 ppm) on a weight per weight basis per CARB Diesel or equivalent requirements. [Title 17 CCR §93115]

3. A non-resettable hour meter with a minimum display capability of 9,999 hours shall be installed and maintained on this unit to indicate elapsed engine operating time. [Title 17 CCR §93115; 40 CFR §63.6625(f)]

4. This unit shall be limited to use for emergency power, defined as in response to a fire or due to low fire water pressure. In addition, this unit shall be operated no more than 50 hours per year for testing and maintenance, excluding compliance source testing. Time required for source testing will not be counted toward the 50 hour per year limit. [CCR Section 93115.6]

5. The requirements of section 93115.6, the hour limits indicated above, do not apply to in-use emergency fire pump assemblies that are driven directly by stationary diesel-fueled CI engines and only operated the number of hours necessary to comply with the testing requirements of National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference. [CCR Section 93115.3]

6. The owner/operator (o/o) shall maintain an operations log for this unit current and on-site,

either at the engine location or at an on-site location, for a minimum of five (5) years, and provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:

a. Date of each use and duration of each use (in hours), using the engines hour meter;

b. Reason for use (testing & maintenance, emergency, required emission testing);

c. Monthly and calendar year operation in terms of fuel consumption (in gallons) and total hours;

d. Monthly and rolling 12-month total CO, NOx and $PM_{10}$ emissions, calculated based on monthly fuel use and District-approved emission factors; and

e. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).

[40 CFR §63.6655(f); Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

7. The owner/operator shall conduct inspections in accord with the following schedule. All inspections must occur at least annually regardless of operating hours.

a. Change oil and filter every 500 hours of operation or annually, whichever comes first, or use an oil change analysis program to extend oil change frequencies per the requirements in 40 CFR 63.6625(i);

b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and

c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR Part 63.6630(a); Table 2d.4.; Subpart ZZZZ]

8. The owner/operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)].

9. This unit is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines Title 17 CCR 93115 and 40 CFR 63 Subpart ZZZZ (RICE NESHAPs). In the event of conflict between conditions and the referenced regulatory citations, the more stringent requirements shall govern. [Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

J. Permit # E008981 PORTABLE DIESEL IC ENGINE, NON-CERTIFIED, EMERGENCY FIRE PUMP consisting of: Year of Manufacture 2002; USEPA Family Name NA; CARB Executive Order NA; Tier 0, One Ford, Diesel fired internal combustion engine, Model No. 2U1L-6007-SA and Serial No. 02-04-009097, After Cooled, Direct Injected, Other, Turbo Charged, producing 250 bhp with 8 cylinders at 2300 rpm while consuming a maximum of 13 gal/hr. This equipment powers a Pump.

PERMIT CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which

produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR Part 63, Subpart ZZZZ]

2. This unit shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% (15 ppm) on a weight per weight basis per CARB Diesel or equivalent requirements. [17 CCR 93116]

3. A non-resettable hour meter with a minimum display capability of 9,999 hours shall be installed and maintained on this unit to indicate elapsed engine operating time. [17 CCR 93116; 40 CFR §63.6625(f)]

4. This unit shall be limited to use for emergency power, defined as in response to a fire or due to low fire water pressure. In addition, this unit shall be operated no more than 50 hours per year for testing and maintenance, excluding compliance source testing. Time required for source testing will not be counted toward the 50 hour per year limit. [Title 13 CCR Section 93116]

5. The requirements of section 93116, the hour limits indicated above, do not apply to in-use emergency fire pump assemblies that are driven directly by stationary diesel-fueled CI engines and only operated the number of hours necessary to comply with the testing requirements of National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference. [CCR Section 93116]

6. The o/o shall maintain an operations log for this unit current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:
   a. Date of each use and duration of each use (in hours per hour timer);
   b. Reason for use (testing & maintenance, emergency, required emission testing);
   c. Monthly and calendar year operation in terms of fuel consumption (in gallons) and total hours;
   d. Monthly and rolling 12-month total CO, NOx and $PM_{10}$ emissions, calculated based on monthly fuel use and to District-approved emission factors; and
   e. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log). [Title 17 CCR 93116; 40 CFR §63.6655(f); Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

7. The owner/operator shall conduct inspections in accord with the following schedule. All inspections must occur at least annually regardless of operating hours.
   a. Change oil and filter every 500 hours of operation or annually, whichever comes first, or use an oil change analysis program to extend oil change frequencies per the requirements in 40 CFR 63.6625(i);
   b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and

c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR Part 63.6630(a); Table 2d.4., Subpart ZZZZ]

8. The owner/operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]

9. This equipment shall be regulated as a stationary diesel CI engine, as clarified in the definition of a portable source in 93115.4(a)(72). As a stationary source, this unit is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Portable Compression Ignition Engines Title 17 CCR 93116 and 40 CFR 63 Subpart ZZZZ (RICE NESHAPs). In the event of conflict between conditions and the referenced regulatory citations, the more stringent requirements shall govern. [Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

K. Permit # E009492 PROPANE IC ENGINE, EMERGENCY GENERATOR (CHILLER BLDG) consisting of: One Ford, Propane fired internal combustion engine, Model No. WSG106816005E-NA and Serial No. 01-11- 012316, Direct Injected, Inter Cooled, producing 114 bhp with 4 cylinders at 1800 rpm while consuming a maximum of 12 gal/hr. This equipment powers a Generator.

PERMIT CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR Part 63, Subpart ZZZZ]

2. This ICE shall only be fired on propane (LPG).
[Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

3. A non-resettable hour meter with a minimum display capability of 9,999 hours shall be installed and maintained on this unit to indicate elapsed engine operating time.
[40 CFR §63.6625(f); Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

4. This unit shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than 100 hours per year for testing and maintenance, excluding compliance source testing. Time required for source testing will not be counted toward the 100 hour per year limit.
[40 CFR Part 63, Subpart ZZZZ; Rule 204 - Permit Conditions; Version in SIP = CARB

Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

5. The hour limits indicated above, do not apply to in-use emergency fire pump assemblies that are driven directly by stationary diesel-fueled CI engines and only operated the number of hours necessary to comply with the testing requirements of National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference. [Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

6. The o/o shall maintain an operations log for this unit current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:
   a. Date of each use and duration of each use (in hours);
   b. Reason for use (testing & maintenance, emergency, required emission testing);
   c. Monthly and calendar year operation in terms of fuel consumption (in gallons) and total hours; and
   d. Monthly and rolling 12-month total CO, NOx and $PM_{10}$ emissions, calculated based on monthly fuel use and to District-approved emission factors. [40 CFR §63.6655(f); Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

7. The owner/operator shall conduct inspections in accord with the following schedule. All inspections must occur at least annually regardless of operating hours.
   a. Change oil and filter every 500 hours of operation or annually, whichever comes first; or use an oil change analysis program to extend oil change frequencies per the requirements in 40 CFR 63.6625(i);
   b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first;
   c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
   [40 CFR Part 63.6630(a); Table 2d.5., Subpart ZZZZ]

8. The owner/operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]

9. This unit is subject to the requirements of 40 CFR 63 Subpart ZZZZ (RICE NESHAPs). In the event of conflict between conditions and the referenced regulatory citation, the more stringent requirements shall govern. [Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

L. Permit # C010832 OXIDATION CATALYST, UNIT 1 consisting of: Oxidation Catalyst System with a catalyst located within the power train covered by B007953. Johnson Matthey, Honeycat, serial number 200cpsi.

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.

3. This equipment shall be operated concurrently with the combustion turbine generator with valid District permit B007953.

M. Permit # C010833 OXIDATION CATALYST, UNIT 2 consisting of: Oxidation Catalyst System with a catalyst located within the power train covered by B007954. Johnson Matthey, Honeycat, serial number 200cpsi.

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.

3. This equipment shall be operated concurrently with the combustion turbine generator with valid District permit B007954.

# PART IV
# STANDARD FEDERAL OPERATING PERMIT CONDITIONS

## *A. STANDARD CONDITIONS:*

1. If any portion of this Federal Operating Permit is found to be invalid by the final decision of a court of competent jurisdiction the remaining portion(s) of this Federal Operating Permit shall not be affected thereby.
[40 CFR 70.6(a)(5); Rule 1203(D)(1)(f)(i)]

2. Owner/Operator shall comply with all condition(s) contained herein. Noncompliance with any condition(s) contained herein constitutes a violation of the Federal Clean Air Act and of MDAQMD Regulation XII and is grounds for enforcement action; termination, revocation and re-issuance, or modification of this Federal Operating Permit; and/or grounds for denial of a renewal of this Federal Operating Permit.
[40 CFR 70.6(a)(6)(i); Rule 1203(D)(1)(f)(ii)]

3. It shall not be a defense in an enforcement action brought for violation(s) of condition(s) contained in this Federal Operating Permit that it would have been necessary to halt or reduce activity to maintain compliance with those condition(s).
[40 CFR 70.6(a)(6)(ii); Rule 1203(D)(1)(f)(iii)]

4. This Federal Operating Permit may be modified, revoked, reopened or terminated for cause.
[40 CFR 70.6(a)(6)(iii); Rule 1203(D)(1)(f)(iv)]

5. The filing of an application for modification; a request for revocation and re-issuance; a request for termination; notifications of planned changes; or anticipated noncompliance with condition(s) does not stay the operation of any condition contained in this Federal Operating Permit.
[40 CFR 70.6(a)(6)(iii); Rule 1203(D)(1)(f)(v)]

6. The issuance of this Federal Operating Permit does not convey any property rights of any sort nor does it convey any exclusive privilege.
[40 CFR 70.6(a)(6)(iv); Rule 1203(D)(1)(f)(vi)]

7. Owner/Operator shall furnish to the MDAQMD, within a reasonable time as specified by the MDAQMD, any information that the MDAQMD may request in writing.
[40 CFR 70.6(a)(6)(v); Rule 1203(D)(1)(f)(vii)]

8. Owner/Operator shall furnish to District, state or federal personnel, upon request, copies of any records required to be kept pursuant to condition(s) of this Federal Operating Permit.
[40 CFR 70.6(a)(6)(v); Rule 1203(D)(1)(f)(viii)]

9. Any records required to be generated and/or kept by any portion of this Federal Operating Permit shall be retained by the facility Owner/Operator for at least five (5) years from the date the records were created.
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]

10. Owner/Operator shall pay all applicable fees as specified in MDAQMD Regulation III, including those fees related to permits as set forth in Rules 301 and 312.
[40 CFR 70.6(a)(7); Rule 1203(D)(1)(f)(ix)]

11. Owner/Operator shall not be required to revise this permit for approved economic incentives, marketable permits, emissions trading or other similar programs provided for in this permit.
[40 CFR 70.6(a)(8); Rule 1203(D)(1)(f)(x)]

12. Compliance with condition(s) contained in this Federal Operating Permit shall be deemed compliance with the Applicable Requirement underlying such condition(s). The District clarifies that "only" Applicable Requirements listed & identified elsewhere in this Title V Permit are covered by this Permit Shield and does not extend to any unlisted/unidentified conditions pursuant to the requirements of 40 CFR 70.6(f)(1)(i).
[40 CFR 70.6(f)(1)(i); Rule 1203(G)(1)]

13. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to limit the emergency powers of USEPA as set forth in 42 U.S.C. §7603.
[40 CFR 70.6(f)(3)(i); Rule 1203(G)(3)(a)]

14. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to limit liability for violations, which occurred prior to the issuance of this Federal Operating Permit.
[40 CFR 70.6(f)(3)(ii); Rule 1203(G)(3)(b)]

15. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to alter any Applicable Requirement Contained in the Acid Rain Program.
[40 CFR 70.6(f)(3)(iii); Rule 1203(G)(3)(c)]

16. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to limit the ability of USEPA or the MDAQMD to obtain information pursuant to other provisions of law including but not limited to 42 U.S.C. §7414. [40 CFR 70.6(f)(3)(iv); Rule 1203(G)(3)(d)]

17. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to

apply to emissions trading pursuant to provisions contained in an applicable State Implementation Plan.
[40 CFR 70.4(b)(12)(ii)(B); Rule 1203(G)(3)(e)]

18. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to apply to changes made which are not expressly allowed by this Federal Operating Permit.
[40 CFR 70.4(b)(14)(iii); Rule 1203(G)(3)(f)]

19. The Permit Shield set forth in Part IV, condition 12, shall not be construed to apply to changes made pursuant to the Significant Permit Modification provisions until such changes are included in this Federal Operating Permit.
[40 CFR 70.5(a)(1)(ii), 70.7(e)(2)(vi); Rule 1203 (G)(3)(g)]

20. If Owner/Operator performs maintenance on, or services, repairs, or disposes of appliances, Owner/Operator shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. These requirements are Federally Enforceable through this Title V Permit.
[40 CFR Part 82, Subpart F]

21. If Owner/Operator performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), Owner/Operator shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. These requirements are Federally Enforceable through this Title V Permit.
[40 CFR Part 82, Subpart B]

22. Notwithstanding the testing requirements contained elsewhere in this Title V Permit, any credible evidence may be used to establish violations, including but not limited to; reference test methods, engineering calculations, indirect estimates of emissions, CEMS data, and parametric monitoring data. Data need not be required to be collected in a Title V permit in order to be considered credible.
[Section 113(a) of the Clean Air Act]

23. Owner/operator desiring to renew this Federal Operating Permit shall submit an application for renewal at least six (6) months, but no earlier than eighteen (18) months, prior to the expiration date of this Federal Operating Permit.
[40 CFR 70, Rule 1202(B)(3)(b)]

# PART V
# OPERATIONAL FLEXIBILITY

## A. ALTERNATIVE OPERATING SCENARIO (S):

## *B. OFF PERMIT CHANGES:*

I. Permitee may make a proposed change to equipment covered by this permit that is not expressly allowed or prohibited by this permit if:

A. Permitee has applied for and obtained all permits and approvals required by MDAQMD Regulation II and Regulation XII unless the equipment involved in the change is exempt from obtaining such permits and approvals pursuant to the provisions of Rule 219; and

1. The proposed change is not:
   a. Subject to any requirements under Title IV of the Federal Clean Air Act; or *[See 1203(E)(1)(c)(i)d]*
   b. A modification under Title I of the Federal Clean Air Act; or
   c. A modification subject to Regulation XIII; and *[See 1203(E)(1)(c)(i) d]*
   d. The change does not violate any Federal, State or Local requirement, including an applicable requirement; and *[See 1203(E)(1)(c)(i)c]*
   e. The change does not result in the exceedance of the emissions allowable under this permit (whether expressed as an emissions rate or in terms of total emissions). *[See 1203(E)(1)(c)(i)e]*

II. Procedure for "Off Permit" Changes

A. If a proposed "Off Permit Change" qualifies under Part V, Section (B)(I)(A)(1) above, permitee shall implement the change as follows:

1. Permitee shall apply for an Authority To Construct permit pursuant to the provisions of Regulation II. *[See 1203(E)(1)(c)(i)b]*
2. In addition to the information required pursuant to the provisions of Regulation II and Regulation XIII such application shall include:
   a. A notification that this application is also an application for an "Off Permit" Change pursuant to this condition; and *[See 1203(E)(1)(c)(i)b]*
   b. A list of any new Applicable Requirements which would apply as a result of the change; and *[See 1203(E)(1)(c)(i)b.]*
   c. A list of any existing Applicable Requirements, which would cease to apply as a result of the change. *[See 1203(E)(1)(c)(i)c]*
3. Permitee shall forward a copy of the application and notification to USEPA upon submitting it to the District. *[See 1203(E)(1)(c)(i)a]*

B. Permitee may make the proposed change upon receipt from the District of the Authority to Construct Permit or thirty (30) days after forwarding the copy of the notice and application to USEPA whichever occurs later. *[See 1203(E)(1)(c)(i)a*

*and g]*

C. Permitee shall attach a copy of the Authority to Construct Permit and any subsequent Permit to Operate, which evidences the Off Permit Change to this Title V permit. *[See 1203(E)(1)(c)(i)f]*

D. Permitee shall include each Off-Permit Change made during the term of the permit in any renewal application submitted pursuant to Rule 1202(B)(3)(b). *[See 1203(E)(1)(c)(i)f]*

III. Other Requirements:

A. The provisions of Rule 1205 – Modifications do not apply to an Off Permit Change made pursuant to this condition.

B. The provisions of Rule 1203(G) – Permit Shield do not apply to an Off Permit Change made pursuant to this condition. *[See 40 CFR 70.4(b)(i)(B)]*

[Rule 1203(E)(1)(c)]

# PART VI
# Title IV Acid Rain Permit

Issued to: BLYTHE ENERGY, INC.

Operated by: BLYTHE ENERGY, INC.

Facility: BLYTHE ENERGY, INC.

ORIS Code: 55295

SIC Code: 4911 – Electric Power Generation

**ACID RAIN PERMIT CONTENTS**

1. Statement of Basis
2. $SO_2$ allowances allocated under this permit for each affected unit.
3. Standard Requirements
3. The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

## 1. STATEMENT OF BASIS:

Statutory and Regulatory Authorities: Pursuant MDAQMD Regulation 12, Program - Federal Operating Permits, a.k.a. Title V (Adopted 7/25/94, Amended 02/22/95, Additional Rules adopted 06/28/95, 7/31/95) and 02/05/96 FR 4217 (Interim Approval), in accordance with Rule 221 - *Federal Operating Permit Requirement*, 40 CFR 52.220(c)(216)(i)(A)(2) - 02/05/96 61 FR 4217 and Rule 1210 - *Acid Rain Provisions of Federal Operating Permits*, and Titles IV and V of the Clean Air Act of 1990, the Mojave Desert Air Quality Management District issues this permit.

The facility has two units (ID# 1 and 2) subject to the requirements of Phase II of the Federal Acid Rain Program as defined in 40 CFR 72, which are incorporated into this Operating Permit. Unit ID# 1 includes CT1 and DB1 as described in Part I of the Operating Permit and Unit ID# 2 includes CT2 and DB2.

## 2. $SO_2$ ALLOWANCES ALLOCATED UNDER THIS PERMIT FOR EACH AFFECTED UNIT:

The yearly allowance allocations as identified in 40 CFR 73, Tables 2, 3 or 4 are identified below:

| Unit ID# | Years | | | | |
|---|---|---|---|---|---|
| | 2012 | 2013 | 2014 | 2015 | 2016 |
| 1 | 0 | 0 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 | 0 | 0 |

The number of allowances actually held by an affected source in a unit account may differ from the number allocated by the United States Environmental Protection Agency (U.S. EPA). The aforementioned condition does not necessitate a revision to the unit $SO_2$ allowance allocations identified in this permit (see 40 CFR 72.84).

The owner/operator shall hold allowances, as of the allowance transfer deadline, in the facility's compliance account (after deduction under 40 CFR 73.34(c)) no less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit. The Phase II Acid Rain Permit will renew with the Title V Permit.

## 3. STANDARD REQUIREMENTS:

1. Owner / Operator shall comply with *all listed compliance conditions contained within this Title IV Acid Rain Permit and associated Title V Permit.*

2. The *Statement of Basis* listed in this Acid Rain Permit complies with the elements set forth in 40 CFR 72.64.
[Incorporated herein by this reference].

3. This Acid Rain Permit complies with the requirements set forth in 40 CFR 72.50. [incorporated herein by this reference].

4. Owner/Operator of BLYTHE ENERGY, INC. shall comply with all applicable provisions of 40 CFR 72, Permits Regulation (Title IV) and their Title IV permit application as indicated in this combined, *Federal Operating Permit / Title IV Acid Rain Permit*, Part VI. [40 CFR 72.84][40 CFR 72; Rule 1210]

5. Emissions from this source/facility shall not exceed any allowances that the source/facility lawfully holds under Title IV of the Act or its regulations. [40 CFR 70.6(a)(4)]

6. Where an applicable requirement of the Act is more stringent than an applicable requirement of Title IV regulations, both provisions shall be incorporated into the permit and be enforceable by the Administrator. [40 CFR 70.6(a)(1)(ii)]

7. Notwithstanding the testing requirements contained elsewhere in this combined Title IV / V Permit, any credible evidence may be used to establish violations, including but not limited to; reference test methods, engineering calculations, indirect estimates of emissions, CEMS data, and parametric monitoring data. Data need not be required to be collected in a Title V permit in order to be considered credible. [Section 113(a) of the Clean Air Act]

**4. EPA Phase II Acid Rain Permit Application:** Attached herein:

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

# Phase II Permit Application

Page 1

For more information, see instructions and refer to 40 CFR 72.30 and 72.31

This submission is: [X] New [ ] Revised

STEP 1
Identify the source by plant name, State, and ORIS code.

| Plant Name | State | ORIS Code |
|---|---|---|
| Blythe Energy | CA | 55295 |

STEP 2
Enter the unit ID# for each affected unit, and indicate whether a unit is being repowered and the repowering plan being renewed by entering "yes" or "no" at column c. For new units, enter the requested information in columns d and e.

| a | b | c | d | e |
|---|---|---|---|---|
| | Compliance Plan | | | |
| Unit ID# | Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1) | Repowering Plan | New Units Commence Operation Date | New Units Monitor Certification Deadline |
| 1 | Yes | No | 06/2002 | 09/2002 |
| 2 | Yes | No | 06/2002 | 09/2002 |
| | Yes | | | |
| | Yes | | | |
| | Yes | | | |
| | Yes | | | |
| | Yes | | | |
| | Yes | | | |
| | Yes | | | |
| | Yes | | | |
| | Yes | | | |
| | Yes | | | |

STEP 3
Check the box if the response in column c of Step 2 is "Yes" for any unit.

[ ] For each unit that is being repowered, the Repowering Extension Plan form is included.

EPA Form 7610-16 (rev. 4-98)

Blythe Energy
Plant Name (from Step 1)



**STEP 4**
**Read the standard requirements and certification, enter the name of the designated representative, and sign and date**

**Standard Requirements**

Permit Requirements.

(1) The designated representative of each affected source and each affected unit at the source shall:
(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
(2) The owners and operators of each affected source and each affected unit at the source shall:
(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
(ii) Have an Acid Rain Permit.

Monitoring Requirements.

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements.

(1) The owners and operators of each source and each affected unit at the source shall:
(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7, 72.8, or 72.14 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements.

(1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and
(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

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(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

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Liability.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7, 72.8, or 72.14, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 ($NO_x$ averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities. No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7, 72.8, or 72.14 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

**Certification**

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| Name Kenneth P. Hoffman | |
|---|---|
| Signature Kenneth P. Hoffman | Date 2/22/01 |

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# PART VII
# CONVENTIONS, ABREVIATIONS, DEFINITIONS

## A. ***CONVENTIONS***

The following referencing conventions are used in this federal operating permit:

40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS)
40 CFR Part 60, Appendix F, Quality Assurance Procedures
40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAPS)
40 CFR Part 61, Subpart M, National Emission Standards for Asbestos
40 CFR Part 63--National Emission Standards For Hazardous Air Pollutants For Affected Source Categories
40 CFR Part 72, Permits Regulation (Acid Rain Program)
40 CFR Part 73, Sulfur Dioxide Allowance System
40 CFR Part 75, Continuous Emission Monitoring
40 CFR Part 75, Subpart D, Missing Data Substitution Procedures
40 CFR Part 75, Appendix B, Quality Assurance and Quality Control Procedures
40 CFR Part 75, Appendix C, Missing Data Estimating Procedures
40 CFR Part 75, Appendix D, Optional $SO_2$ Emissions Data Protocol
40 CFR Part 75, Appendix F, Conversion Procedures
40 CFR Part 75, Appendix G, Determination of $CO_2$ Emissions

## B. ***OTHER CONVENTIONS:***

1. Unless otherwise noted, a "day" shall be considered a 24-hour period from midnight to midnight (i.e., calendar day).
2. The process unit identifications represent the District permit number designations. These numbers are not sequential. The use of District permit numbers provides continuity between the District and Federal Operating Permit systems.

## C. ***ABBREVIATIONS***

Abbreviations used in this permit are as follows:

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| CFR | Code of Federal Regulations |
| APCO | Air Pollution Control Officer |
| bhp | brake horsepower |
| Btu | British thermal units |
| CCR | California Code of Regulations |
| CEMS | continuous emissions monitoring system |
| CO | carbon monoxide |
| $CO_2$ | carbon dioxide |
| District | Mojave Desert Air Quality Management District (formed July 1993) |

| | |
|---|---|
| MDAQMD | Mojave Desert Air Quality Management District (formed July 1993) |
| MD | Mojave Desert Air Quality Management District (formed July 1993) |
| SB | San Bernardino County APCD (1975 to formation of MDAQMD) |
| gr/dscf | grains per dry standard cubic foot |
| gpm | gallons per minute |
| gph | gallons per hour |
| hp | horse power |
| H&SC | California Health and Safety Code |
| lb | pounds |
| lb / hr | pounds per hour |
| lb / MM Btu | pounds per million British thermal units |
| MM Btu | million British thermal units |
| MM Btu/hr | million British thermal units per hour |
| MW | Megawatt electrical power |
| MW(e) net | net Megawatt electrical power |
| $NH_3$ | ammonia |
| NMOC | non-methane organic compounds |
| $NO_x$ | oxides of nitrogen |
| $NO_2$ | nitrogen dioxide |
| $O_2$ | oxygen |
| pH | pH (acidity measure of solution) |
| $PM_{10}$ | particulate matter less than 10 microns aerodynamic diameter |
| ppmv | parts per million by volume |
| psig | pounds per square inch gauge pressure |
| QA | quality assurance |
| rpm | revolutions per minute |
| RVP | Reid vapor pressure |
| SCAQMD | South Coast Air Quality Management District |
| scfm | standard cubic feet per minute |
| scfh | standard cubic feet per hour |
| SIC | Standard Industrial Classification |
| SIP | State of California Implementation Plan |
| $SO_x$ | oxides of sulfur |
| $SO_2$ | sulfur dioxide |
| tpy | tons per year |
| TVP | true vapor pressure |

***D.*** ***MDAQMD Rule SIP History***

***For Rule SIP History including approval, pending approval, etc, see:***
*http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=45*