

*MOJAVE DESERT*  
*AIR QUALITY MANAGEMENT DISTRICT*

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Federal Operating Permit Number: 130202262

For: BLYTHE ENERGY, LLC

Facility: BLYTHE ENERGY, LLC

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

## PERMIT REVISIONS

**December 1, 2011 Administrative Permit Renewal** (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-12 through II-13.

**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*

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## PART I INTRODUCTORY INFORMATION

### A. FACILITY IDENTIFYING INFORMATION:

Owner/Company Name: BLYTHE ENERGY, LLC

Owner Mailing Address: BLYTHE ENERGY, LLC  
P.O. BOX 1210  
Blythe, CA 92226

Facility Name: BLYTHE ENERGY, LLC

Facility Location: BLYTHE ENERGY, LLC  
385 N Buck Blvd  
Blythe, CA 92225

MDAQMD Federal Operating Permit Number: 130202262

MDAQMD Company Number: 1302

MDAQMD Facility Number: 02262

Responsible Official: Mr. Nathan Hanson  
Title: Asset Manager  
Phone Number: 212-615-3456

Facility "Site" Contact: Charlyn Mosley  
Title: Environmental Specialist  
Phone Number: (760) 831-2651

Alternative Facility "Site" Contact: Ms. Kathy French  
Title: Asst. VP, Envr  
Phone Number: 636-532-2200

Nature of Business: Electric Power Generation  
SIC Code: 4911 – Electric Power Generation  
ORIS Code: 0329 – Phase II Acid Rain Source  
Facility Location: UTM (m) 714609 (E) / 3721719 (N)

## **BLYTHE ENERGY, LLC 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-NO<sub>x</sub> combustors are used to minimize NO<sub>x</sub> 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 NO<sub>x</sub> 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	2
250.00	Cooling Cell Fan #7, Motor Serial No. MU402450-2/22-01	3
250.00	Cooling Cell Fan #6, Motor Serial No. MU402450-2/22-05	4
250.00	Cooling Cell Fan #5, Motor Serial No. MU402450-2/22-03	5
250.00	Cooling Cell Fan #4, Motor Serial No. MU402450-2/22-06	6
250.00	Cooling Cell Fan #3, Motor Serial No. MU402450-2/22-07	7
250.00	Cooling Cell Fan #2, Motor Serial No. MU402450-2/22-04	8
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	11
750.00	Chiller Recirculating Pump #4, Cascade Serial No. 16061	12
750.00	Chiller Recirculating Pump #3, Cascade Serial No. 16060	13

Capacity	Equipment Name	Order
750.00	Chiller Recirculating Pump #2, Cascade Serial No. 16059	14
750.00	Chiller Recirculating Pump #1, Cascade Serial No. 16058	15

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 IC Engine, emergency fire pump consisting of: John Deere diesel pump, model no. 6081HF001, 6 cylinders, direct injected, turbocharged, 303 bhp at 2200 rpm.

Permit #E008981 IC Engine, emergency water pump consisting of: Ford diesel engine, model no. 2U1L-6007-SA, 8 cylinders, direct injected, after cooled, turbocharged, 250 bhp at 2300 rpm.

Permit # E009492 IC Engine, Emergency Generator (CHILLER BLDG) consisting of: Ford propane engine, model # WSG106816005E-NA, 4 cylinders, direct injected, inter cooled, 114 bhp at 1800 rpm.

**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<sub>10</sub> 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<sub>2</sub>), 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.
- (a) 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.
- (a) 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<sub>2</sub>) 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) Cold Solvent Degreasers - Freeboard Requirements:
    - (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°C (120°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) Cold Solvent Degreasers - Cover Requirements:
    - (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:

<u>COATING:</u>	<u>Table of Standards</u>	<u>VOC (grams/liter</u> <u>[g/L])</u>
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-Graffiti 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	On and After 7/1/2005
		g/L (lb/gal)	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		Baked	
	g/L	(lb/gal)	g/L	(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:**

- 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)]
- 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]
8. Owner/Operator shall notify Air Pollution Control Officer (APCO) / District at least 10 working days before any applicable asbestos stripping or removal work is to be performed as required by section 61.145.b of 40 CFR 61 subpart M, *National Emission Standard for Asbestos*. [40 CFR 61.145.b]
9. Owner/Operator shall notify the Air Pollution Control Officer (APCO) / District, on an **annual** basis, postmarked by December 17 of the calendar year, of the predicted asbestos renovations for the following year as required by section 61.145.b of 40 CFR 61, subpart M [see cite for threshold triggering and applicability]. A notification is not required when asbestos abatement work is not proposed. This facility was constructed without the use of asbestos. [40 CFR 61.145.b]

**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, NO<sub>x</sub>, and VOC during periods of startup, shutdown and malfunction:
  - a. Hourly rate, computed every 15 minutes, verified by CEMS and annual compliance tests:
    - i. NO<sub>x</sub> as NO<sub>2</sub> - 19.80 lb/hr (based on 2.5 ppmvd corrected to 15% oxygen and averaged over one hour)
    - ii. CO - 17.5 lb/hr (based on 4.0 ppmvd corrected to 15% oxygen and averaged over three hours)
  - b. Hourly rates, verified by annual compliance tests or other compliance methods in the case of SO<sub>x</sub>:
    - i. VOC as CH<sub>4</sub> - 2.9 lb/hr (based on 1 ppmvd corrected to 15% oxygen)
    - ii. SO<sub>x</sub> as SO<sub>2</sub> - 2.7 lb/hr (based on 0.5 grains/100 dscf fuel sulfur)
    - iii. PM<sub>10</sub> - 11.5 lb/hr
5. Emissions of CO and NO<sub>x</sub> 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. NO<sub>x</sub> - 376 lb
    - ii. CO - 3600 lb
6. Emissions from this equipment, including the duct burner, shall not exceed the following emission limits, based on a calendar day summary:
  - a. NO<sub>x</sub> - 5762 lb/day, verified by CEMS
  - b. CO - 8004 lb/day, verified by CEMS
  - c. VOC as CH<sub>4</sub> - 239 lb/day, verified by compliance tests and hours of operation in mode
  - d. SO<sub>x</sub> as SO<sub>2</sub> - 130 lb/day, verified by fuel sulfur content and fuel use data
  - e. PM<sub>10</sub> - 565 lb/day, verified by compliance tests and hours of operation
7. Emissions from this facility, including the cooling towers, shall not exceed the following emission limits, based on a rolling 12 month summary:
  - a. NO<sub>x</sub> - 202 tons/year, verified by CEMS
  - b. CO - 621 tons/year, verified by CEMS

- c. VOC as CH<sub>4</sub> - 24 tons/year, verified by compliance tests and hours of operation in mode
  - d. SO<sub>x</sub> as SO<sub>2</sub> - 24 tons/year, verified by fuel sulfur content and fuel use data
  - e. PM<sub>10</sub> - 103 tons/year, verified by compliance tests and hours of operation
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. The owner/operator (o/o) shall not operate this equipment after the initial commissioning period without the selective catalytic NO<sub>x</sub> reduction system with valid District permit C007959, as well as the oxidation catalyst with valid District permit C010832 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 NO<sub>x</sub>, 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. NO<sub>x</sub> as NO<sub>2</sub> 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 NO<sub>x</sub> 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 CH<sub>4</sub> in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Methods 25A and 18).
  - c. SO<sub>x</sub> as SO<sub>2</sub> 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. PM<sub>10</sub> in mg/m<sup>3</sup> 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 NO<sub>x</sub>, 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, NO<sub>x</sub> 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 NO<sub>x</sub>, CO, PM<sub>10</sub>, VOC and SO<sub>x</sub> (including calculation protocol).
  - g. 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).
- h. A log of all excess emissions, including the information regarding malfunctions/breakdowns required by Rule 430.
  - i. Any permanent changes made in the plant process or production, which would affect air pollutant emissions, and indicate when changes were made.
  - j. 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 NO<sub>x</sub> and 103 tons of PM<sub>10</sub> offsets (VOC ERCs from SCAQMD may be substituted for NO<sub>x</sub> ERCs at a rate of 1.6:1). The PM<sub>10</sub> offsets may be tendered in lieu of surrender at the o/o's option.
  19. During an initial commissioning period of no more than 120 days, commencing with the first firing of fuel in this equipment, NO<sub>x</sub>, CO, VOC and ammonia concentration limits shall not apply. The o/o shall minimize emissions of NO<sub>x</sub>, CO, VOC and ammonia to the maximum extent possible during the initial commissioning period.
  20. The o/o shall tune each CTG and HRSG to minimize emissions of criteria pollutants at the earliest feasible opportunity in accordance with the recommendations of the equipment manufacturers and the construction contractor.
  21. The o/o shall install, adjust and operate each SCR system to minimize emissions of NO<sub>x</sub> from the CTG and HRSG at the earliest feasible opportunity in accordance with the recommendations of the equipment manufacturers and the construction contractor. The NO<sub>x</sub> and ammonia concentration limits shall apply coincident with the steady state operation of the SCR systems.
  22. The o/o shall submit a commissioning plan to the District and the CEC at least four weeks prior to the first firing of fuel in this equipment. The commissioning plan shall describe the procedures to be followed during the commissioning of the CTGs, HRSGs and steam turbine. The commissioning plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purposes of the activity. The activities described shall include, but not be limited to, the timing of the dry low NO<sub>x</sub> combustors, the installation and testing of the CEMS, and any activities requiring the firing of the CTGs and HRSGs without abatement by an SCR system.
  23. The total number of firing hours of each CTG and HRSG without abatement of NO<sub>x</sub> by the SCR shall not exceed 350 hours during the initial commissioning

period. Such operation without NO<sub>x</sub> abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system in place and operating. Upon completion of these activities, the o/o shall provide written notice to the District and CEC and the unused balance of the unabated firing hours shall expire.

24. During a period that includes a portion of the initial commissioning period, emissions from this facility shall not exceed the following CO emission limits (verified by CEMS): 421 tons/year (rolling twelve month summary), 44,000 pounds/calendar day and 2000 pounds/hour.
  25. During a period that includes a portion of the initial commissioning period, prior to the steady state operation of the SCR system, emissions from this facility shall not exceed the following NO<sub>x</sub> emission limits (verified by CEMS): 273 tons/year (rolling twelve month summary), 22,000 pounds/calendar day and 1000 pounds/hour.
  26. Within 60 days after achieving the maximum firing rate at which the facility will be operated, but not later than 180 days after initial startup, the operator shall perform an initial compliance test. This test shall demonstrate that this equipment is capable of operation at 100% load in compliance with the emission limits in Condition 4 above.
  27. The initial compliance test shall include tests for the following. The results of the initial compliance test shall be used to prepare a supplemental health risk analysis:
    - a. Formaldehyde;
    - b. Certification of CEMS and CERMS (or stack gas flow calculation method) at 100% load, startup modes and shutdown mode;
    - c. Characterization of cold startup VOC emissions;
    - d. Characterization of warm startup VOC emissions;
    - e. Characterization of hot startup VOC emissions; and
    - f. Characterization of shutdown VOC emissions.
  28. The o/o may apply to lower hourly, daily and twelve-month rolling PM<sub>10</sub> emission limits in Conditions 4, 6, and 7 and thereby reduce the PM<sub>10</sub> offset obligation of the project, based on the results of the initial compliance test. Revised emission limits shall be submitted to the District within 60 days after the last unit's initial compliance test. Any emission reduction credit certificates, or portions thereof, that was tendered to the District but is not needed to meet reduced PM<sub>10</sub> offset requirements will be returned to the permittee at full value.
- 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 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 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	2
250.00	Cooling Cell Fan #7, Motor Serial No. MU402450-2/22-01	3
250.00	Cooling Cell Fan #6, Motor Serial No. MU402450-2/22-05	4
250.00	Cooling Cell Fan #5, Motor Serial No. MU402450-2/22-03	5
250.00	Cooling Cell Fan #4, Motor Serial No. MU402450-2/22-06	6
250.00	Cooling Cell Fan #3, Motor Serial No. MU402450-2/22-07	7
250.00	Cooling Cell Fan #2, Motor Serial No. MU402450-2/22-04	8
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. The maximum hourly PM10 emission rate shall not exceed 0.546 pounds per hour from this equipment and the cooling tower with valid District permit B007958, as calculated per the written District-approved protocol.
4. 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.

F. 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	11
750.00	Chiller Recirculating Pump #4, Cascade Serial No. 16061	12
750.00	Chiller Recirculating Pump #3, Cascade Serial No. 16060	13
750.00	Chiller Recirculating Pump #2, Cascade Serial No. 16059	14
750.00	Chiller Recirculating Pump #1, Cascade Serial No. 16058	15

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. The maximum hourly PM10 emission rate shall not exceed 0.546 pounds per hour from this equipment and the cooling tower with valid District permit B007957, as calculated per the written District-approved protocol.

4. 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 IC Engine, emergency fire pump consisting of: John Deere diesel pump, model no. 6081HF001, serial no. RG6081H145432, 6 cylinders, direct injected, turbocharged, and 303 bhp at 2200 rpm.

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 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.
  3. This unit shall be limited to use for emergency power, defined as when commercially available power has been interrupted, and as part of a testing program, which does not exceed 60 minutes of operation per week (up to two hours once per year for annual testing and up to four hours once every three years for triennial testing).
  4. 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.
  5. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.
  6. The o/o shall maintain a log for this unit, which, at a minimum, contains the information specified below. This log shall be maintained current and on-site for a minimum of five (5) years and shall be provided to District, State or Federal personnel on request:
    - a. Date of each use;
    - b. Duration of each use, in minutes;
    - c. Annual operation in terms of total calendar year fuel use (in gallons) or hours;
  7. This unit is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines (Title17 CCR 93115). In the event of conflict between these conditions and the ATCM, the requirements of the ATCM shall govern.
- J. Permit #E008981 IC Engine, emergency water pump consisting of: Ford diesel engine, model no. 2U1L-6007-SA, serial no. 02-04-009097, 8 cylinders, direct injected, after cooled, turbocharged, and 250 bhp at 2300 rpm.

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 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.
3. This unit shall be limited to use for emergency power, defined as when commercially

available power has been interrupted, and as part of a testing program, which does not exceed 60 minutes of operation per week (up to two hours once per year for annual testing and up to four hours once every three years for triennial testing).

4. 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.
  5. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.
  6. The o/o shall maintain a log for this unit, which, at a minimum, contains the information specified below. This log shall be maintained current and on-site for a minimum of five (5) years and shall be provided to District, State or Federal personnel on request:
    - a. Date of each use;
    - b. Duration of each use, in minutes;
    - c. Annual operation in terms of total calendar year fuel use (in gallons) or hours;
    - d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).
  7. This unit is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines (Title17 CCR 93115). In the event of conflict between these conditions and the ATCM, the requirements of the ATCM shall govern.
- K. Permit # E009492 IC Engine, Emergency Generator (CHILLER BLDG) consisting of: Ford propane engine, model # WSG106816005E-NA, serial no. 01-11-012316, 4 cylinders, direct injected, inter cooled, and 114 bhp at 1800 rpm.

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.
2. Engine may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.

3. This ICE shall only be fired on propane (LPG).
  4. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.
  5. 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 20 hours per year for testing and maintenance, excluding compliance source testing. Time required for source testing will not be counted toward the 20 hour per year limit.
  6. The o/o shall maintain a 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 or Federal personnel on 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); and
    - c. Calendar year operation in terms of fuel consumption (in gallons) and total hours.
- 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 1 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. Permittee may make a proposed change to equipment covered by this permit that is not expressly allowed or prohibited by this permit if:

- A. Permittee 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, permittee shall implement the change as follows:
1. Permittee 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. Permittee 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. Permittee 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. Permittee 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. Permittee 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

## Title IV Acid Rain Permit

Issued to: BLYTHE ENERGY, LLC  
Operated by: BLYTHE ENERGY, LLC  
Facility: BLYTHE ENERGY, LLC  
ORIS Code: 0329 – Phase II Acid Rain Source  
SIC Code: 4911 – Electric Power Generation

### **ACID RAIN PERMIT CONTENTS**

1. Statement of Basis
2. SO<sub>2</sub> allowances allocated under this permit and NO<sub>x</sub> requirements for each affected unit.
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.

Description(s): SO<sub>x</sub> emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. The owner/operator shall: hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (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; and comply with the applicable Acid Rain emissions limitations for sulfur dioxide. NO<sub>x</sub> emissions shall be monitored by CEMS in accordance with 40 CFR 75. The owner/operator shall comply with the applicable Acid Rain emissions limitations for nitrogen oxides. The owner/operator shall

comply with the requirements of the Phase II Acid Rain Permit upon the date of issuance, which is pending at the time of the initial Title V Permit Application submittal.

**2. SO2 ALLOWANCES:**

The facility is subject to the Acid Rain Program requirements of (§64.2(b)(1)(iii)), because of NOx, and will be subject to emission limitations or standards for which the Part 70 permit will specify a continuous compliance determination method (§64.2 (b)(1)(vi)) for CO.

METHOD	DESCRIPTION OR REFERENCE METHOD
<b>Monitoring</b>	The owner or operator and, to the extent applicable, the designated representative of a facility containing an affected unit shall comply with the monitoring requirements as set forth in 40 CFR 72.9(b) (incorporated herein by this reference) and 40 CFR 75 (incorporated herein by this reference).
<b>Reporting</b>	The owner or operator of a facility containing an affected unit shall comply with the requirements relating to reporting as set forth in 40 CFR 72.9(f).
<b>Record Keeping</b>	The owner or operator of a facility containing an affected unit shall comply with the requirements relating to recordkeeping as set forth in 40 CFR 72.9(f).
<b>Test Methods</b>	Not Applicable

Description(s): SOx emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. The owner/operator shall: hold allowances, as of the allowance transfer deadline, in the unit’s compliance subaccount (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; and comply with the applicable Acid Rain emissions limitations for sulfur dioxide. NOx emissions shall be monitored by CEMS in accordance with 40 CFR 75. The owner/operator shall comply with the applicable Acid Rain emissions limitations for nitrogen oxides. The owner/operator shall comply with the requirements of the Phase II Acid Rain Permit upon the date of issuance of the initial 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, LLC 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]

## PART VII CONVENTIONS, ABBREVIATIONS, 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<sub>2</sub> Emissions Data Protocol
- 40 CFR Part 75, Appendix F, Conversion Procedures
- 40 CFR Part 75, Appendix G, Determination of CO<sub>2</sub> 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:

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 <sub>2</sub>	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 <sub>3</sub>	ammonia
NMOC	non-methane organic compounds
NO <sub>x</sub>	oxides of nitrogen
NO <sub>2</sub>	nitrogen dioxide
O <sub>2</sub>	oxygen
pH	pH (acidity measure of solution)
PM <sub>10</sub>	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 <sub>x</sub>	oxides of sulfur
SO <sub>2</sub>	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>***