

**AIR QUALITY**  
MANAGEMENT DISTRICT**STATEMENT OF BASIS FOR  
RENEWAL OF THE TITLE V FEDERAL OPERATING PERMIT**

**TITLE V PERMIT NO.:** TV2008-07-01  
**DATE:** December 01, 2009  
**REVIEWING ENGINEER:** Bruce Nixon

**A. FACILITY INFORMATION:**

**FACILITY NAME:** Central Valley Financing Authority (CVFA)  
Carson Cogeneration Project

**LOCATION:** 8580 Laguna Station Road  
Elk Grove, CA 95758

**MAILING ADDRESS:** P.O. Box 15830  
Sacramento, CA 95852-1830

**RESPONSIBLE OFFICIAL:** James Shetler  
CVFA Representative  
(916) 732-6757

**CONTACT PERSON:** Jeff White  
Plant Manager  
(916) 394-2930

**B. PURPOSE OF THIS STATEMENT OF BASIS**

The Title V Federal Operating Permit is intended to be a document containing only enforceable terms and conditions as well as any additional information, such as the identification of emission units, emission points, emission sources and processes, that makes the terms meaningful. 40 CFR Part 70.7(a)(5) requires that each Title V permit have an accompanying "...statement that sets forth the legal and factual basis for the draft permit conditions". The purpose of this Statement of Basis is to satisfy the above requirement by providing pertinent details regarding the permit/application data and permit conditions in a more easily understandable format. This Statement of Basis also includes background narrative and explanations of regulatory decisions made by the SMAQMD. It should be emphasized that this Statement of Basis, while based on information contained in the permit, is a separate document and is not itself an enforceable term and condition of the permit.

### C. Permit Action History

This Statement of Basis is for the 2nd renewal of CVFA Carson's existing Title V Federal Operating Permit No. TV2003-07-02. The existing permit expires on February 01, 2010.

The following permit actions have occurred since the initial Federal Operating Permit No. TV1996-07-01 was issued:

<u>Permit Action</u>	<u>Date</u>	<u>Permit No.</u>
Initial permit issued:	09-01-1999	TV1996-07-01
1st Minor Modification	07-24-2001	TV1996-07-02
1st Permit Renewal	02-01-2005	TV2003-07-01
1st Administrative Amendment	10-03-2006	TV2003-07-01A
1st Significant Modification	10-29-2009	TV2003-07-02

This 2nd permit renewal action will be assigned the permit number TV2008-07-01.

## **D. Facility Description**

The following facility description is for informational purposes only and does not contain any applicable federally enforceable requirements.

1. CVFA Carson is a cogeneration facility that became operational in 1995. The facility generates electricity and provides steam for use by others. There are two gas turbine generator units:
  - a. combined cycle gas turbine with a supplemental exhaust duct burner and heat recovery steam generator.
  - b. peaking gas turbine.
2. CVFA Carson provides:
  - a. electricity to the Sacramento Municipal Utility District (SMUD)
  - b. steam heat for digesters at the Sacramento Regional Wastewater Treatment Plant
  - c. steam to power refrigeration compressors at an adjacent ice production plant.
3. The cogeneration portion of the CVFA Carson facility is based on the combined cycle gas turbine. The major components of the cogeneration portion of the facility include:
  - a. combined cycle gas turbine, 500 MMBTU/hour, ~50 MW (after the combined cycle gas turbine upgrade)
  - b. exhaust duct burner, 99.9 MMBTU/hour
  - c. heat recovery steam generator
  - d. steam turbine electrical generator, ~17.2 MW
  - e. emission control systems
  - f. exhaust stack
  - g. water treatment systems
  - h. fuel delivery systems
  - i. electrical transmission and interconnection systems.

The combined cycle gas turbine combusts natural gas and/or digester gas (from the Sacramento Regional Wastewater Treatment Plant digesters). The combined cycle gas turbine operates at or near maximum load, producing up to 42 megawatts of electrical power (gross) prior to the combined cycle gas turbine upgrade [50 megawatts of electrical power (gross) after

#### **D. Facility Description (continued)**

the combined cycle gas turbine upgrade], 24 hours per day and 365 days per year.

The associated duct burner, with a heat input rating of 99.9 MMBtu/hr and a nominal annual capacity factor of 50%, is also fired with natural gas and/or digester gas. The steam produced by the duct burner and heat recovery steam generator combination drives a steam turbine, which produces up to 17.2 megawatts of electrical power (gross).

4. The peaking power portion of the CVFA Carson facility is based on a simple cycle gas turbine. The major components of the peaking power portion of the facility include:
  - a. peaking gas turbine, 450 MMBTU/hour, ~42 MW
  - b. emission control systems
  - c. exhaust stack
  - d. water treatment systems
  - e. fuel delivery systems
  - f. electrical transmission and interconnection systems.

The peaking gas turbine is used to respond to intermittent peak electrical demands that are greater than the electrical power produced by the combined cycle gas turbine. The peaking gas turbine combusts natural gas and/or digester gas. The peaking gas turbine operates an average of 10 hours per day and 4,500 hours per year. It can provide 42 megawatts of electrical power (gross).

5. An emergency use, diesel fueled, internal combustion (IC) engine is included in the CVFA Carson facility to provide emergency electrical power.

In case of an electric power interruption, the emergency use IC engine and electrical generator will start automatically to provide electrical power for startup of the peaking gas turbine. As soon as the peaking turbine is producing electric power, the emergency use IC engine and generator will shut down. Anticipated operation of the emergency use IC engine during such an incident is less than two hours.

Routine maintenance of the emergency use IC engine and electrical generator is required to ensure its reliable operation when needed. For that purpose, the IC engine is operated approximately 30 hours/year.

## E. Significant Emissions Unit Information

### 1. COMBINED CYCLE POWER BLOCK

*(The description below indicates the changes that will occur when the combined cycle gas turbine is upgraded in the future. Title V regulations require that the Title V permit incorporate the significant modification prior to the initial operation of the upgraded combined cycle gas turbine.)*

#### **Combined Cycle Gas Turbine**

Permit No.: P/O 22021 (for reference purposes only - not federally enforceable)  
Manufacturer: General Electric  
Model No.: **before upgrade** - LM6000PA  
**after upgrade** - LM6000PC Sprint/EFS  
Type: Combined cycle  
Heat Input Rating: **before upgrade** - 450 MMBTU/hour  
**after upgrade** - 500 MMBTU/hour  
Primary Fuel: Natural gas  
Secondary Fuel: Digester gas and natural gas mixture  
Power Rating: **before upgrade** - 42 MW  
**after upgrade** - 50 MW

#### **Duct Burner**

Permit No.: P/O 22066 (for reference purposes only - not federally enforceable)  
Heat Input Rating: 99.9 MMBTU/hour  
Primary Fuel: Natural gas  
Secondary Fuel: Digester gas and natural gas mixture  
Electrical Rating: Supplies a portion of the energy to a heat recovery steam generator that produces steam for a steam turbine electrical generator with a rating of 17.2 MW

#### **NOx Air Pollution Control System**

Permit No.: P/O 11015 (for reference purposes only - not federally enforceable)  
Control Device: Selective catalytic reduction  
Manufacturer: Mitsubishi Cormetech Model CM 33  
Venting: Combined cycle gas turbine and duct burner

#### **CO Air Pollution Control System** (to be installed with the combined cycle gas turbine upgrade)

Permit No.: P/O 22022 (for reference purposes only - not federally enforceable)  
Control Device: Oxidation catalyst  
Manufacturer: to be determined when installed as part of combined cycle gas turbine upgrade  
Venting: Combined cycle gas turbine and duct burner

<b>E. Significant Emissions Unit Information (continued)</b>
--

## **2. PEAKING POWER BLOCK**

### **Peaking Gas Turbine**

Permit No.: P/O 15535(rev2) (for reference purposes only - not federally enforceable)  
Manufacturer: General Electric  
Model No.: LM6000  
Type: Simple cycle  
Heat Input Rating: 450 MMBTU/hour  
Primary Fuel: Natural gas  
Secondary Fuel: Digester gas and natural gas mixture  
Power Rating: 42 MW

### **NOx Air Pollution Control System**

Permit No.: P/O 11017 (for reference purposes only - not federally enforceable)  
Control Device: Selective catalytic reduction  
Manufacturer: Mitsubishi Cormetech Model CM 42HT  
Venting: Peaking gas turbine

### **CO Air Pollution Control System**

Permit No.: P/O 11018 (for reference purposes only - not federally enforceable)  
Control Device: Oxidation catalyst  
Manufacturer: W.R. Grace Type 2-22  
Venting: Peaking gas turbine

## **3. COOLING TOWER:**

Permit No.: P/O 11019(rev1) (for reference purposes only - not federally enforceable)  
Number of Cells: 3 Cells  
Water Circulation Rate: 22,000 gallons/minute

## **4. IC ENGINE, EMERGENCY USE**

Permit No.: P/O 11020(rev3) (for reference purposes only - not federally enforceable)  
Manufacturer: Detroit Diesel  
Model No.: 12V-92TA  
Serial No.: 12VF009718  
Engine BHP: 830 bhp  
Fuel Type: CARB diesel  
Driving: Electrical generator

<b>E. Significant Emissions Unit Information (continued)</b>
--

**F. Insignificant Emissions Unit Information**

<b>Equipment Description</b>	<b>Basis for the Exemption</b>
A. Vehicles	SMAQMD Rule 201, Section 111.1 Vehicles used to transport passengers or freight.
B. Diesel storage tank	SMAQMD Rule 201, Section 117 Vapor pressure $\leq$ 5 mm Hg or initial boiling point $\geq$ 150 °C.
C. Anhydrous ammonia storage tank  Compressed gas cylinders	SMAQMD Rule 201, Section 117.1 Storage of liquefied or compressed gases.
D. Sulfuric acid storage tank	SMAQMD Rule 201 Section 122 Emissions < 2 lb/day without air pollution control device.
E. Gas turbine lube oil tank	SMAQMD Rule 201, Section 117 Vapor pressure $\leq$ 5 mm Hg or initial boiling point $\geq$ 150 °C.
F. Steam turbine lube oil tank	SMAQMD Rule 201, Section 117 Vapor pressure $\leq$ 5 mm Hg or initial boiling point $\geq$ 150 °C.
G. Hydraulic oil storage tanks	SMAQMD Rule 201, Section 117 Vapor pressure $\leq$ 5 mm Hg or initial boiling point $\geq$ 150 °C.
H. Waste lube oil storage tank	SMAQMD Rule 201, Section 117 Vapor pressure $\leq$ 5 mm Hg or initial boiling point $\geq$ 150 °C.
I. Portable pressure washer	SMAQMD Rule 201, Section 112.1 IC engine rated $\leq$ 50 hp.
J. Building air conditioning systems	SMAQMD Rule 201, Section 115 Air conditioning systems
K. Small painting operations for maintenance activities	SMAQMD Rule 201, Section 118.2 Use of less than 1 gallon/day
L. Cold solvent cleaner and wipe cleaning for maintenance activities	SMAQMD Rule 201, Section 118.3 $\leq$ 100 gallon tank capacity, non-halogenated solvent.

**F. Insignificant Emissions Unit Information (continued)**

Equipment Description	Basis for the Exemption
<p>M. Fugitive emissions associated with plant piping systems for fuel gas, fuel oil, lube oil and anhydrous ammonia</p> <p>Adhesives used for maintenance</p> <p>Abrasive blasting cabinet less than 53 cubic feet capacity</p> <p>Oil-water separator</p> <p>Natural gas compressors driven by electric motors</p> <p>Brazing, soldering welding and cutting torches for maintenance activities</p>	<p>SMAQMD Rule 201 Section 122            Emissions &lt; 2 lb/day without air pollution control device.</p>

### **G. Alternate Operating Scenarios**

None requested by the permittee.

**H. Facility Emissions**

Maximum Allowable Emissions tons per year							
Equipment	ROC	NOx	SO2	PM10	CO	Single HAP (A)	Total HAPs (A)
Baseload Gas Turbine							
Peaking Gas Turbine							
Duct Burner							
Cooling Tower							
IC Engine							
<b>Total (B)</b>	<b>18.3</b>	<b>40.1</b>	<b>11.6</b>	<b>19.0</b>	<b>100.0</b>	<b>9.4</b>	<b>24.4</b>

(A) The basis of this quantity is to qualify the gas turbines for the non-applicability of 40 CFR 63 Subpart YYYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Gas Turbines.

(B) Based on the facility-wide annual criteria pollutant emission limits (including the emergency use IC engine) [after the combined cycle gas turbine upgrade].

<b>I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS</b> <b>Facility-wide Requirements</b>
--

**SMAQMD Rule 105 - Emission Statement**

SIP Approved: 06-06-2008 (73 FR 32240)  
*09-05-1996 rule version is SIP approved*

Rule Description: This rule requires the facility to provide annual emission data.

Compliance Status: The permittee has provided annual emission data as required and is in compliance.

**SMAQMD Rule 201 - General Permit Requirements**

SIP Approved: 07-13-1987 (52 FR 26148)  
*11-20-1984 rule version is SIP approved*  
*08-24-2006 rule version is the current version and is not SIP approved*

Rule Description: This rule provides an orderly procedure for the review of new sources of air pollution and of the modification and operation of existing sources through the issuance of permits.

Compliance Status: The permittee has active permits for all sources that require permits.

**SMAQMD Rule 202 - New Source Review**

SIP Approved: 06-19-1985 (50 FR 25417)  
*11-20-1984 rule version is SIP approved*  
*02-24-2005 rule version is the current version and is not SIP approved*

Rule Description: This rule sets the procedures for review of new and modified stationary sources and provides the mechanisms for evaluating the applicability of BACT and/or offset requirements.

Compliance Status: The facility's equipment has been reviewed pursuant to this rule. BACT and/or emission offsets have been provided as required by the rule.

<b>I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS</b> <b>Facility-wide Requirements (continued)</b>
--

**SMAQMD Rule 207 - Title V Federal Operating Permits**

SIP Approved: 11-21-2003 (68 FR 65637) (part of Title V program approval)  
*04-26-2001 rule version is SIP approved*

Rule Description: This rule sets forth the procedures for review, issuance and renewal of Title V operating permits.

Compliance Status: The permittee has submitted a timely and complete Title V permit renewal application. The expiration date of the current Title V Operating Permit is therefore extended to the time that the SMAQMD makes a decision regarding approving the renewal of the Title V Operating Permit.

**SMAQMD Rule 401 - Ringelmann Chart**

SIP Approved: 02-01-1984 (49 FR 3987)  
*04-19-1983 rule version is SIP approved*

Rule Description: This rule limits the discharge of air contaminants into the atmosphere through visible emissions and opacity limitations.

Compliance Status: All equipment is expected to comply with the visible emission requirement.

**SMAQMD Rule 403 - Fugitive Dust**

SIP Approved: 12-05-1984 (49 FR 47490)  
*08-03-1977 rule version is SIP approved*

Rule Description: This rule regulates operations which may cause fugitive dust emissions into the atmosphere.

Compliance Status: The facility complies with this rule by taking the necessary precautions to ensure that fugitive dust is not airborne beyond the property line.

<b>I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS</b> <b>Facility-wide Requirements (continued)</b>
--

**SMAQMD Rule 442 - Architectural Coatings**

SIP Approved: 11-09-1998 (63 FR 60214)  
*09-05-1995 rule version is SIP approved*  
*05-24-2001 rule version is the current version and is not SIP approved*

Rule Description: This rule limits the quantity of volatile organic compounds in architectural coatings supplied, sold, offered for sale, applied, solicited for application or manufactured for use within the District.

Compliance Status: The affected coatings used by the permittee are received and stored in containers that display the required manufacturer's labels and demonstrate compliance with the rule's requirements.

**40 CFR 68 (begin at 68.1) - Chemical Accident Prevention Provisions**

Promulgated: 01-31-1994 (59 FR 4493)  
[04-09-2004 (69 FR 18831) most recent amendment]

Rule Description: This regulation specifies requirements for owners or operators of stationary sources concerning the prevention of accidental chemical releases.

An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, must comply with the requirements of 40 CFR Part 68.

40 CFR 68.215 requires that the air permitting authority include in the Title V permit for a facility specified statements regarding the regulation. Those statements are included in the Federally Enforceable Requirements - General section of the permit.

Compliance Status: The permittee stores more than the designated amounts of the specified chemical substances in 40 CFR 68 and is in compliance with the requirements of the regulation.

<b>I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS</b> <b>Facility-wide Requirements (continued)</b>
--

**40 CFR 82 Subpart F (begin at 82.150) - Protection of Stratospheric Ozone - Recycling and Emissions Reduction**

Promulgated: 05-14-1993 (58 FR 28712)  
[04-13-2005 (70 FR 19278) most recent amendment]

Rule Description: The purpose of this subpart is to reduce emissions of class I and class II refrigerants and their substitutes to the lowest achievable level by maximizing the recapture and recycling of such refrigerants during the service, maintenance, repair and disposal of appliances and restricting the sale of refrigerants consisting in whole or in part of a class I and class II ODS in accordance with Title VI of the Clean Air Act.

This subpart applies to any person servicing, maintaining or repairing appliances. This subpart also applies to persons disposing of appliances, including small appliances and motor vehicle air conditioners. In addition, this subpart applies to refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale and persons purchasing class I or class II refrigerants.

As indicated in 40 CFR 70.6, Title V permits need to assure compliance with all applicable requirements at the time of permit issuance. Part 70 defines as an applicable requirement, "Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Act, unless the Administrator has determined that such requirements need not be contained in a Title V permit." [40 CFR 70.2(12)]. The applicable requirements of Title VI are included in the Federally Enforceable Requirements - General section of the permit.

Compliance Status: The permittee employs qualified contractors to maintain equipment that contains class I or class II refrigerants.

<p><b>I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS</b> <b>Facility-wide Requirements (continued)</b></p>
--

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

**SMAQMD Rule 406 - Specific Contaminants**

SIP Approved: 12-05-1984 (49 FR 47490)  
 12-06-1978 rule version is SIP approved

Rule Description: This rule regulates emissions of sulfur compounds and combustion contaminants by limiting emission concentrations of SO<sub>2</sub> and particulate matter (PM).

Compliance Status: The following tables illustrate (1) the SMAQMD Rule 406 emission limits for sulfur compounds (measured as SO<sub>2</sub>) and combustion contaminants (measured as PM) and (2) the expected emissions from the equipment at the facility.

The permittee's equipment complies with this rule.

(See discussion of streamlining of multiple applicable requirements at the end of this section titled "Equipment Specific Requirements - Combined Cycle Gas Turbine, etc.)

*The Title V permit will contain a permit shield indicating that compliance with the conditions of the Title V permit will be deemed compliance with SMAQMD Rule 406.*

SO<sub>2</sub> Emission Concentration

Equipment	SMAQMD Rule 406 Allowable Sulfur Compounds Emissions ppmv as SO <sub>2</sub>	Expected Sulfur Compounds Emissions from Facility Equipment ppmv as SO <sub>2</sub>
Combined cycle gas turbine	2000	0.39 (A)
Peaking gas turbine	2000	0.20 (A)

(A) 2001 source test data.

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

Particulate Matter Emission Concentration

Equipment	SMAQMD Rule 406 Allowable Combustion Contaminants (PM) Emissions grains/dscf at 12% CO2	Expected Combustion Contaminants (PM) Emissions from Facility Equipment grains/dscf at 12% CO2
Combined cycle gas turbine	0.1	0.0035 (A)
Peaking gas turbine	0.1	0.00062 (A)

(A) 2001 source test data.

**SMAQMD Rule 413 - Stationary Gas Turbines**

SIP Approved: 03-01-1996 (61 FR 7992)  
 05-01-1997 rule version is SIP approved

Rule Description: This rule limits NOx emissions from each gas turbine to 9 ppmvd at 15% O2.

Compliance Status: The combined cycle gas turbine is required to meet a BACT NOx emission concentration limit of 5 ppmvd at 15% O2 before the combined cycle gas turbine upgrade and 2.5 ppmvd at 15% O2 after the combined cycle gas turbine upgrade. The BACT NOx emission concentration limit in the Title V permit is much stricter than the 9 ppmvd NOx emission limitation of SMAQMD Rule 413.

The peaking gas turbine is required to meet a BACT NOx emission concentration limit of 5 ppmvd at 15% O2. The BACT NOx emission concentration limit in the Title V permit is much stricter than the 9 ppmvd NOx emission limitation of SMAQMD Rule 413.

The gas turbines comply with the rule requirements.

(See discussion of streamlining of multiple applicable requirements at the end of this section titled "Equipment Specific Requirements - Combined Cycle Gas Turbine, etc.)

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

*The Title V permit will contain a permit shield indicating that compliance with the conditions of the Title V permit will be deemed compliance with SMAQMD Rule 413.*

**SMAQMD Rule 420 - Sulfur Content of Fuels**

SIP Approved: 12-05-1984 (49 FR 47490)  
 08-13-1981 rule version is SIP approved

Rule Description: This rule regulates emissions of sulfur compounds from the combustion of fuels by limiting the sulfur content of the fuel.

Compliance Status: The following table illustrates the SMAQMD Rule 420 sulfur limits for gaseous and liquid fuels and the expected sulfur content of the gaseous and liquid fuels combusted in equipment at the facility.

The permittee's equipment complies with this rule.

(See discussion of streamlining of multiple applicable requirements at the end of this section titled "Equipment Specific Requirements - Combined Cycle Gas Turbine, etc.)

*The Title V permit will contain a permit shield indicating that compliance with the conditions of the Title V permit will be deemed compliance with SMAQMD Rule 420.*

Equipment	Fuel	SMAQMD Rule 420 Allowable Sulfur Content of Fuel grains S as H <sub>2</sub> S/100ft <sup>3</sup>	Expected Sulfur Content of Fuel Used grains S as H <sub>2</sub> S/100ft <sup>3</sup>
Combined cycle gas turbine	natural gas	50	< 0.5
	digester gas	50	5.9
Duct Burner	natural gas	50	< 0.5
	digester gas	50	5.9
Peaking gas	natural gas	50	< 0.5

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

Equipment	Fuel	SMAQMD Rule 420 Allowable Sulfur Content of Fuel grains S as H <sub>2</sub> S/100ft <sup>3</sup>	Expected Sulfur Content of Fuel Used grains S as H <sub>2</sub> S/100ft <sup>3</sup>
turbine	digester gas	50	5.9

**Permit Conditions on SMAQMD Rule 201 Authorities to Construct and Permits to Operate**

Condition Description: The conditions of operation on SMAQMD Rule 201 Authorities to Construct and Permits to Operate for the combined cycle gas turbine, duct burner and peaking gas turbine limit emission concentrations, limit mass emissions, require BACT, require emission offsets be provided and require recordkeeping and reporting.

The following table indicates the conditions on the SMAQMD Rule 201 permits that are not applicable federally enforceable requirements.

Equipment	SMAQMD Rule 201 Permit No.	Permit conditions that are not federally enforceable
Combined cycle gas turbine, duct burner and associated equipment	A/C Nos. 11015, 22021, 22022 and 22066	Condition Nos. 1, 2, 3 and 4 and the ammonia (NH <sub>3</sub> ) related portion of Condition Nos. 6 and 23.
Peaking gas turbine and associated equipment	P/O Nos. 11017, 11018 and 15535(rev2)	Condition Nos. 1, 2, 3, 4, 5, 6 and 16 and the ammonia (NH <sub>3</sub> ) related portion of Condition No. 27.

Compliance Status: The permittee's equipment complies with the SMAQMD Rule 201 permit conditions.

**40 CFR 60 Subpart Dc (begin at 60.40c) - NSPS for Small Industrial - Commercial - Institutional Steam Generating Units:**

Promulgated: 09-12-1990 (55 FR 37683)  
 [01-28-2009 (74 FR 5090) most recent amendment]

Rule Description: This federal regulation applies to any steam generating unit capable of

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

combusting between 10 and 100 MMBTU/hour of fuels. The regulation limits PM, SO<sub>2</sub> and opacity emissions.

Compliance Status: The baseload gas turbine **is not subject to this rule** because it is not a "steam generating unit" as defined in 40 CFR 60.41c.

The peaking gas turbine **is not subject to this rule** because it is not a "steam generating unit" as defined in 40 CFR 60.41c.

*"Steam generating unit means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart."*

The duct burner **is subject to this rule before** the combined cycle gas turbine upgrade because it is capable of combusting 99.9 MMBTU/hour which is within the applicability range of 10 to 100 MMBTU/hour.

The duct burner **will not be subject to this rule after** the combined cycle gas turbine upgrade because it will then become subject to 40 CFR 60 Subpart KKKK [see 40 CFR 60.40c(e)].

The duct burner combusts only natural gas and digester gas and has no SO<sub>2</sub>, PM or opacity limitations imposed by 40 CFR 60 Subpart Dc. The only requirement is to maintain records of monthly natural gas and digester gas fuel consumption.

The duct burner complies with the 40 CFR Subpart Dc NSPS requirements.

(See discussion of streamlining of multiple applicable requirements at the end of this section titled "Equipment Specific Requirements - Combined Cycle Gas Turbine, etc.)

*The Title V permit will contain a permit shield indicating that compliance with the conditions of the Title V permit will be deemed compliance with 40 CFR 60 Subpart Dc.*

**40 CFR 60 Subpart GG (begin at 60.330) - NSPS for Stationary Gas Turbines**

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

Promulgated: 09-10-1979 (44 FR 52798)  
[02-24-2006 (71 FR 9457) most recent amendment]

Rule Description: This regulation affects all stationary gas turbines with a heat input greater than 10 MMBTU/hour. The gas turbine emissions are required to not exceed 75 ppmvd of NO<sub>x</sub> at 15% O<sub>2</sub> and 150 ppmvd of SO<sub>2</sub> at 15% O<sub>2</sub> (or ≤ 8000 ppmw total sulfur in the fuel).

Compliance Status: **Prior to the combined cycle gas turbine upgrade it will be subject to this rule. After the combined cycle gas turbine upgrade it will become subject to 40 CFR 60 Subpart KKKK.**

**NO<sub>x</sub>**

The combined cycle gas turbine and the peaking gas turbine are limited by SMAQMD Authority to Construct Nos. 22021 and 15535 to 2.5 and 5 ppmvd NO<sub>x</sub> at 15% O<sub>2</sub> respectively. This permit condition limitation is much less than the 75 ppmvd limitation of this federal regulation.

**SO<sub>2</sub>**

The fuel being combusted in the turbines will be natural gas and digester gas.

In the case of natural gas fuel, the sulfur content is less than 0.5 grains per 100 ft<sup>3</sup>. The natural gas fuel total sulfur content is much lower than the 8000 ppmv total sulfur limit of this rule. Therefore, the use of natural gas will comply with this federal regulation.

In the case of digester gas the sulfur content is limited to 50 ppmv or less (measured as H<sub>2</sub>S) by SMAQMD Rule 201 permit condition. The fuel total sulfur content is much lower than the 8000 ppmv total sulfur limit of this rule. Each gas turbine complies with this federal regulation.

(See discussion of streamlining of multiple applicable requirements at the end of this section titled "Equipment Specific Requirements - Combined Cycle Gas Turbine, etc.)

*The Title V permit will contain a permit shield indicating that compliance with the conditions of the Title V permit will be deemed compliance with 40 CFR 60 Subpart GG.*

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

**40 CFR 60 Subpart KKKK (begin at 60.4300) - Standards of Performance for Stationary Combustion Turbines:**

Promulgated: 07-06-2006 (71 FR 38497)  
[04-20-2009 (74 FR 11861) most recent amendment]

Rule Description: This NSPS establishes emission standards for the control of NOx and SO2 emissions from stationary combustion turbines that commenced construction, modification or reconstruction after February 18, 2005.

Compliance Status: The combined cycle gas turbine will be modified after February 18, 2005 and will become subject to this federal regulation.

**NOx**

This federal regulation limits NOx emission concentration from the combined cycle gas turbine and duct burner to 42 ppmv at 15% O2. SMAQMD Rule 201 Authority to Construct Nos. 22021 and 22066 permit conditions limit NOx emission concentration from the combined cycle gas turbine and duct burner to 2.5 ppmv at 15% O2 [after the combined cycle gas turbine upgrade].

**SO2**

This federal regulation states:

"You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement."

Potential =  $\frac{\text{allowable hourly SO}_2 \text{ emissions}}{\text{gas turbine heat input} + \text{duct burner heat input}}$   
Sulfur

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

$$\begin{aligned} \text{Emissions} &= \frac{2.81 \text{ lb SO}_2/\text{hour}}{500 \text{ MMBTU}/\text{hour} + 99.9 \text{ MMBTU}/\text{hour}} \\ &= 0.005 \frac{\text{lb SO}_2}{\text{MMBTU}} \end{aligned}$$

The combined cycle gas turbine is expected to comply with the NSPS Subpart KKKK requirements after it is upgraded.

(See discussion of streamlining of multiple applicable requirements at the end of this section titled "Equipment Specific Requirements - Combined Cycle Gas Turbine, etc.)

*The Title V permit will contain a permit shield indicating that compliance with the conditions of the Title V permit will be deemed compliance with 40 CFR 60 Subpart KKKK.*

**40 CFR Parts 72 through 78 Acid Rain Program:**

Promulgated: 01-11-1993 (58 FR 3650)  
[01-24-2008 (73 FR 4357) most recent amendment]

Rule Description: This federal regulation limits the emission of NO<sub>x</sub> and SO<sub>2</sub> from electric utility associated combustion equipment such as boilers and gas turbines in order to reduce the formation of acid rain.

Compliance Status: The permittee developed an alternative Acid Rain Program Monitoring Plan and requested approval from U.S. EPA. The U.S. EPA approval was granted in February 1999.

The permittee's monitoring plan includes the following approved technical alternatives:

- a. An alternative method for determining the sulfur content of digester gas fuel using the existing H<sub>2</sub>S monitor
- b. The use of a modified Equation G-4 from 40 CFR Part 75 Appendix G in order to account for the different carbon based F-factor of its fuel.
- c. An alternative procedure for calibration of the digester gas fuel

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

flowmeters.

The initial Title IV Acid Rain permit was issued concurrently with the initial Title V Federal Operating Permit on September 01, 1999. The Title IV Acid Rain permit was renewed with the Title V permit on February 01, 2005. The Title IV Acid Rain permit will be renewed for a second time with the Title V permit in February 2010.

The permittee complies with the Acid Rain Program requirements.

***The following federal regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination for the record:***

**40 CFR 60 Subpart D (begin at 60.40) - NSPS for Electric Utility Steam Generating Units for Which Construction Is Commenced After August 17, 1971:**

Promulgated: 06-14-1974 (39 FR 20791)  
[06-13-2007 (72 FR 32717) most recent amendment]

Rule Description: This federal regulation applies to any fossil fuel fired steam generating unit with a heat input greater than 250 MMBTU. It limits PM emissions to 0.1 lb/MMBTU, NOx to 0.20 lb/MMBTU and opacity to 20% except for one six minute period per hour of not more than 27% opacity.

Compliance Status: Each gas turbine is not subject to this rule because it is not a fossil fuel fired steam generating unit as defined in 40 CFR 60.41(a).

"Fossil-fuel fired steam generating unit means a furnace or boiler used in the process of burning fossil fuel for the purpose of producing steam by heat transfer."

Each gas turbine is not a "furnace or boiler" and is therefore **is not subject** to the rule.

The duct burner **is not subject** to the rule requirements because its heat input is less than the 250 MMBTU/hour heat input applicability level.

***The following federal regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination for the record:***

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

**40 CFR 60 Subpart Da (begin at 60.40a) - NSPS for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978:**

Promulgated: 06-11-1979 (44 FR 33613)  
[06-13-2007 (72 FR 32717) most recent amendment]

Rule Description: This federal regulation applies to any steam electric generating unit capable of combusting 250 MMBTU/hour of fossil fuel and supplying more than 1/3 of its potential output capacity and more than 25 MW electrical output to any utility power distribution system for sale. It limits PM emissions to 0.03 lb/MMBTU, NOx to 0.20 lb/MMBTU and opacity to 20% (6-minute average) except for one six minute period per hour of not more than 27% opacity.

Compliance Status: Each gas turbine **is not subject** to this rule because it is not a steam generating unit as defined in 40 CFR 60.41Da.

"Steam generating unit means any furnace, boiler, or other device used for combusting fuel for the purpose of producing steam (including fossil-fuel-fired steam generators associated with combined cycle gas turbines; nuclear steam generators are not included)".

The duct burner **is not subject** to the rule requirements because its heat input is less than the 250 MMBTU/hour heat input applicability level.

***The following federal regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination for the record:***

**40 CFR 60 Subpart Db (begin at 60.40b) - NSPS for Industrial - Commercial - Institutional Steam Generating Units:**

Promulgated: 11-25-1986 (51 FR 42768)  
[06-13-2007 (72 FR 32742) most recent amendment]

Rule Description: This federal regulation applies to any steam generating unit capable of combusting greater than 100 MMBTU/hour of fuels. The regulation limits NOx, PM, SO2 and opacity emissions.

Compliance Status: The gas turbine **is not subject** to this rule because it is not a "steam generating unit" as defined in 40 CFR 60.41b.

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

"*Steam generating unit* means a device that combusts any fuel or byproduct/waste and produces steam or heats water or any other heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in this subpart."

The duct burner **is not subject** to this rule because it is not capable of combusting greater than 100 MMBTU/hour of fuels.

***The following federal regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination for the record:***

**40 CFR 63 Subpart YYYY (begin at 63.6080) - National Emission Standards for Hazardous Air Pollutants for Stationary Gas Turbines:**

Promulgated: 03-05-2004 (69 FR 10511)  
04-20-2006 (71 FR 20467) most recent amendment

Rule Description: This federal regulation limits the emission of HAP from stationary gas turbines located at major sources of HAP.

Compliance Status: The combined cycle gas turbine and peaking gas turbine **are not subject** to the federal NESHAP for Stationary Gas Turbines because they are not located at a facility that is a major source for HAP.

**The following federal regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination for the record:**

**40 CFR 64 (begin at 64.1) Compliance Assurance Monitoring:**

Promulgated: 10-22-1997 (52 FR 54940)

Rule Description: This federal regulation specifies monitoring requirements for Title V sources that will assure compliance with emission limitations or standards.

Compliance Status: **NOx and SO2**  
This federal regulation exempts pollutant specific emissions units that are regulated by:

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

"Emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act"  
[40 CFR 64.2(b)(1)(i)]

"Acid Rain Program requirements pursuant to sections 404, 405, 406, 407(a), 407(b), or 410 of the Act"  
[40 CFR 64.2(b)(1)(iii)]

Since the gas turbines and duct burner are subject to NSPS and Acid Rain Program requirements for NO<sub>x</sub> and SO<sub>2</sub> they are exempt from 40 CFR Part 64 Compliance Assurance Monitoring for NO<sub>x</sub> and SO<sub>2</sub>.

**ROC and PM10**

Applicability of the Compliance Assurance Monitoring regulation requires that:

"The unit uses a control device to achieve compliance with any such emission limitation or standard"  
[40 CFR 64.2(a)(2)]

The gas turbines and duct burner do not use a control device for compliance with ROC and PM10 emissions limits and are therefore not subject to 40 CFR Part 64 Compliance Assurance Monitoring for ROC and PM10.

**CO**

This federal regulation exempts pollutant specific emissions units that are regulated by:

"Emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1"  
[40 CFR 64.2(b)(1)(vi)]

Since the gas turbines and duct burner are subject to a continuous emission monitoring requirement for CO in the Title V permit they are exempt from 40 CFR Part 64 Compliance Assurance Monitoring for CO.

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

**Streamlining Multiple Applicable Requirements:**

A. Combined Cycle Gas Turbine NOx Emission Concentration [before gas turbine upgrade]

Basis of Requirement	Applicable Requirements NOx
40 CFR Subpart GG NSPS for Stationary Gas Turbine	≤ 75 ppmv at 15% O2
SMAQMD Rule No. 413 – Stationary Gas Turbines	≤ 9 ppmv at 15% O2
SMAQMD Rule No. 201 permit conditions based on: SMAQMD Rule No. 202 – New Source Review	≤ 5 ppmv at 15% O2

Pursuant to U.S. EPA's *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, the above applicable requirements will be streamlined. The most stringent requirements are the permit conditions based on SMAQMD Rule Nos. 201 and 202, which will be included in the Title V permit.

B. Combined Cycle Gas Turbine NOx Emission Concentration [after gas turbine upgrade]

Basis of Requirement	Applicable Requirements NOx
40 CFR Subpart KKKK NSPS for Stationary Gas Turbine	≤ 15 ppmv at 15% O2
SMAQMD Rule No. 413 – Stationary Gas Turbines	≤ 9 ppmv at 15% O2
SMAQMD Rule No. 201 permit conditions based on: SMAQMD Rule No. 202 – New Source Review	≤ 2.5 ppmv at 15% O2

Pursuant to U.S. EPA's *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, the above applicable requirements will be streamlined. The most stringent requirements are the permit conditions based on SMAQMD Rule Nos. 201 and 202, which will be included in the Title V permit.

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

C. Peaking Gas Turbine NOx Emission Concentration

Basis of Requirement	Applicable Requirements NOx
40 CFR Subpart GG NSPS for Stationary Gas Turbine	≤ 75 ppmv at 15% O2
SMAQMD Rule No. 413 – Stationary Gas Turbines	≤ 9 ppmv at 15% O2
SMAQMD Rule No. 201 permit conditions based on: SMAQMD Rule No. 202 – New Source Review	≤ 5 ppmv at 15% O2

Pursuant to U.S. EPA's *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, the above applicable requirements will be streamlined. The most stringent requirements are the permit conditions based on SMAQMD Rule Nos. 201 and 202, which will be included in the Title V permit.

D. Combined Cycle Gas Turbine SO2 Emission Concentration [before gas turbine upgrade]

Basis of Requirement	Applicable Requirements SO2
40 CFR Subpart GG NSPS for Stationary Gas Turbine	total sulfur content of the fuel shall be ≤ 0.8% by weight (8000 ppmw) (equivalent to ~ 0.71 lb SO2/MMBTU) (A)
SMAQMD Rule No. 406 - Combustion Contaminants	sulfur compounds shall be ≤ 0.2% by volume, measured as SO2 (equivalent to ~ 8.9 lb SO2/MMBTU) (B)
SMAQMD Rule No. 420 - Sulfur Content of Fuels	gaseous fuel shall contain ≤ 50 grains of sulfur compounds/100 cf, measured as H2S

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

Basis of Requirement	Applicable Requirements SO <sub>2</sub>
SMAQMD Rule No. 201 permit conditions based on: SMAQMD Rule No. 202 – New Source Review	the gas turbine shall only use natural gas as fuel  typical natural gas fuel is ≤ 0.5 grains of sulfur compounds/100 cf, measured as H <sub>2</sub> S  SO <sub>2</sub> emissions from the fuel shall be ≤ 0.0006 lb SO <sub>2</sub> /MMBTU

(A) The calculation for determining the equivalent lb SO<sub>2</sub>/MMBTU based on the fuels sulfur content by weight is -

$$\frac{\text{lb SO}_2}{\text{MMBTU}} = \frac{(0.008 \text{ lb S/lb nat. gas}) \times (0.0446 \text{ lb nat. gas/cf nat. gas}) \times (2 \text{ lb SO}_2/\text{lb S})}{(1 \text{ MMBTU}/1000 \text{ cf nat. gas})}$$

$$= 0.71 \text{ lb SO}_2/\text{MMBTU}$$

(B) The calculation for determining the equivalent lb SO<sub>2</sub>/MMBTU based on 0.2% SO<sub>2</sub> by volume in the exhaust gas is -

*488 MMBTU/hour is used in the calculation below because the 2008 source test data that provided the exhaust airflow rate is based on the gas turbine and duct burner operating at that heat input.*

$$\frac{\text{lb SO}_2}{\text{MMBTU}} = \frac{(0.002 \text{ parts SO}_2/1 \text{ part exhaust air}) \times (219,000 \text{ ft}^3 \text{ exhaust air/min}) \times (60 \text{ min/hour}) \times (1 \text{ lb mole}/385 \text{ ft}^3) \times (64 \text{ lb SO}_2/\text{lb mole})}{488 \text{ MMBTU/hour}}$$

$$= \frac{4369 \text{ lb SO}_2/\text{hour}}{488 \text{ MMBTU/hour}}$$

$$= 8.9 \text{ lb SO}_2/\text{MMBTU}$$

Pursuant to U.S. EPA's *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, the above applicable requirements will be streamlined. The most stringent requirements are the permit conditions based on SMAQMD Rule Nos. 201 and 202,

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

which will be included in the Title V permit.

E. Combined Cycle Gas Turbine and Peaking Gas Turbine PM Emission Concentration

Basis of Requirement	Applicable Requirements PM
SMAQMD Rule No. 406 - Combustion Contaminants	≤ 0.1 grains/dscf, corrected to 12% CO2
SMAQMD Rule No. 201 permit conditions based on: SMAQMD Rule No. 202 – New Source Review	Gas turbine and duct burner shall emit ≤ 3.5 lb PM10/hour (equivalent to ~ 0.005 grains/dscf, corrected to 12% CO2) (A)

(A) The calculation for determining the equivalent grains PM/dscf based on lb PM/hour value is -

*Exhaust flowrate and CO2 concentration below are from the 2009 source test data for the combined cycle gas turbine.*

$$\begin{aligned}
 \frac{\text{grains PM}}{\text{dscf}} &= \frac{(3.5 \text{ lb PM/hour}) \times (7000 \text{ grains/lb})}{(219,000 \text{ cf exhaust air/min}) \times (60 \text{ min/hour})} \\
 &= \frac{24500 \text{ grains PM/hour}}{13,140,000 \text{ cf exhaust air/hour}} \\
 &= 0.0019 \text{ grains/dscf at } \sim 4.3\% \text{ CO}_2 \\
 &= 0.005 \text{ grains PM/dscf at } 12\% \text{ CO}_2
 \end{aligned}$$

Pursuant to U.S. EPA's *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, the above applicable requirements will be streamlined. The most stringent requirements are the permit conditions based on SMAQMD Rule Nos. 201 and 202, which will be included in the Title V permit.

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Combined Cycle Gas Turbine and Duct Burner**  
**Peaking Gas Turbine**

F. Duct Burner NOx Emission Rate Recordkeeping [before gas turbine upgrade]

Basis of Requirement	Applicable Requirements Recordkeeping
40 CFR 60 Subpart Dc 60.48c(g)	Maintain the following records -  (g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.
SMAQMD Rule No. 201 permit conditions based on: SMAQMD Rule No. 202 – New Source Review	Maintain the following records -  Duct burner total natural gas and digester gas fuel consumption (MMBTU/hr)

The recordkeeping requirements of 40 CFR 60 Subpart Dc 60.48c(g) overlap with the recordkeeping requirements imposed by SMAQMD Rule Nos. 201 and 202.

Pursuant to U.S. EPA's *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, the above applicable requirements will be streamlined. The most stringent requirements are the permit conditions based on SMAQMD Rule Nos. 201 and 202, which will be included in the Title V permit.

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements**  
**IC Engine, Emergency Use**

**SMAQMD Rule 406 - Specific Contaminants**

SIP Approved: 12-05-1984 (49 FR 47490)  
 12-06-1978 rule version is SIP approved

Rule Description: This rule regulates emissions of sulfur compounds and combustion contaminants by limiting emission concentrations of SO<sub>2</sub> and particulate matter (PM).

Compliance Status: The following tables illustrate (1) the SMAQMD Rule 406 emission limits for sulfur compounds (measured as SO<sub>2</sub>) and combustion contaminants (measured as PM) and (2) the expected emissions from the equipment at the facility.

The permittee's equipment complies with this rule.

(See discussion of streamlining of multiple applicable requirements at the end of this section titled "Equipment Specific Requirements - IC Engine, Emergency Use)

*The Title V permit will contain a permit shield indicating that compliance with the conditions of the Title V permit will be deemed compliance with SMAQMD Rule 406.*

SO<sub>2</sub> Emission Concentration

Equipment	SMAQMD Rule 406 Allowable Sulfur Compounds Emissions  ppmv as SO <sub>2</sub>	Expected Sulfur Compounds Emissions from Facility Equipment  ppmv as SO <sub>2</sub>
IC engine, emergency use	2000	0.95 (A)

(A) Calculated value based on 15 ppmw S in the fuel as follows:

- F Factor = 9190 dscf/MMBTU from 40 CFR, Part 60, Appendix A, Meth. 19
- Diesel heat rate = 140,000 BTU/gal = 0.14 MMBTU/gal
- Fuel consumption = 43.5 gal/hr
- SO<sub>2</sub> emission rate = 0.009 lb/hr
- SO<sub>2</sub> MW = 64

$$\text{ppmv} = \frac{(\text{SO}_2 \text{ emission rate}) (1.0\text{E}6 \text{ parts/million parts})}{(\text{heat rate}) (\text{fuel consumption}) (\text{F factor}) (\text{SO}_2 \text{ molecular weight}) (\text{molar volume})}$$

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**IC Engine, Emergency Use**

$$= \frac{(0.009 \text{ lb SO}_2/\text{hr}) (1.0\text{E}6 \text{ parts/million parts})}{(0.14 \text{ MMBTU}/\text{gal}) (43.5 \text{ gal}/\text{hr}) (9190 \text{ dscf}/\text{MMBTU}) (64 \text{ lb}/\text{lb mol}) (1 \text{ lb mol}/379 \text{ scf})}$$

$$= 0.95 \text{ ppmv}$$

Particulate Matter Emission Concentration

Equipment	SMAQMD Rule 406 Allowable Combustion Contaminants (PM) Emissions grains/dscf at 12% CO <sub>2</sub>	Expected Combustion Contaminants (PM) Emissions from Facility Equipment grains/dscf at 12% CO <sub>2</sub>
IC engine, emergency use	0.1	0.05 (A)

(A) Calculated value based on:

F Factor = 9190 dscf/MMBTU from 40 CFR, Part 60, Appendix A, Meth. 19  
 Diesel heat rate = 140,000 BTU/gal = 0.14 MMBTU/gal  
 Fuel consumption = 43.5 gal/hr  
 Particulate matter (PM) emission rate = 0.29 lb PM/hr  
 % CO<sub>2</sub> (dry) = 8.0%

$$\text{grains} = \frac{(\text{PM emission rate}) (7000 \text{ grains}/\text{lb})}{\text{dscf}}$$

$$\text{dscf} = \frac{(\text{heat rate}) (\text{fuel consumption}) (\text{F factor}) (\text{correction to 12\% CO}_2 \text{ from 8\% actual})}{\text{grains}}$$

$$= \frac{(0.29 \text{ lb PM}/\text{hr}) (7000 \text{ grains}/\text{lb})}{(0.14 \text{ MMBTU}/\text{gal}) (43.5 \text{ gal}/\text{hr}) (9190 \text{ dscf}/\text{MMBTU}) (12\%/8\%)}$$

$$= 0.05 \text{ grains}/\text{dscf}$$

**SMAQMD Rule 412 - Stationary IC Engines Located at Major Stationary Sources of NOx**

SIP Approved: 04-30-1996 (61 FR 18959)  
 06-01-1995 rule version is SIP approved

Rule Description: This rule regulates NOx, CO and ROC emissions from the operation of stationary IC engines located at major stationary sources of NOx. However, emergency use IC engines are only required to install a non-resetting totalizing hour meter (or computerized tracking) and maintain operation records.

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**IC Engine, Emergency Use**

Compliance Status: The permittee's equipment complies with this rule.

(See discussion of streamlining of multiple applicable requirements at the end of this section titled "Equipment Specific Requirements - IC Engine, Emergency Use)

*The Title V permit will contain a permit shield indicating that compliance with the conditions of the Title V permit will be deemed compliance with SMAQMD Rule 412.*

**SMAQMD Rule 420 - Sulfur Content of Fuels**

SIP Approved: 12-05-1984 (49 FR 47490)  
 08-13-1981 rule version is SIP approved

Rule Description: This rule regulates emissions of sulfur compounds from the combustion of fuels by limiting the sulfur content of the fuel.

Compliance Status: The following table illustrates the SMAQMD Rule 420 sulfur limits for gaseous and liquid fuels and the expected sulfur content of the gaseous and liquid fuels combusted in equipment at the facility.

The permittee's equipment complies with this rule.

(See discussion of streamlining of multiple applicable requirements at the end of this section titled "Equipment Specific Requirements - IC Engine, Emergency Use)

*The Title V permit will contain a permit shield indicating that compliance with the conditions of the Title V permit will be deemed compliance with SMAQMD Rule 420.*

Equipment	Fuel	SMAQMD Rule 420 Allowable Sulfur Content of Fuel % S by weight	Expected Sulfur Content of Fuel Used % S by weight
IC engine, emergency use	CARB diesel	0.5	0.0015

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**IC Engine, Emergency Use**

**Permit Conditions on SMAQMD Rule 201 Permit to Operate**

Condition Description: The conditions of operation on the SMAQMD Rule 201 Permit to Operate for the IC engine limits emission concentrations, limits mass emissions, requires emission offsets be provided and requires recordkeeping and reporting.

The following table indicates the conditions on the SMAQMD Rule 201 permits that are not applicable federally enforceable requirements.

<b>Equipment</b>	<b>SMAQMD Rule 201 Permit No.</b>	<b>Permit conditions that are not federally enforceable</b>
IC engine, emergency use	P/O No. 11020(rev3)	Condition Nos. 1, 2, 3, 4, 5, 6, 15, 16.A and 16.E and the maintenance purpose hours limit of Condition No. 11.

Compliance Status: The permittee's equipment complies with the SMAQMD Rule 201 permit conditions.

**The following federal regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination for the record:**

**40 CFR 63 Subpart ZZZZ (begin at 63.6580) - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE):**

Promulgated: 06-15-2004 (69 FR 33473)

Rule Description: This federal regulation limits the emission of HAP from Reciprocating Internal Combustion Engines located at major sources of HAP.

Compliance Status: The IC engine, emergency use, **is not subject** to the federal NESHAP for Reciprocating Internal Combustion Engines because it is not located at a facility that is a major source for HAP.

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**IC Engine, Emergency Use**

**Streamlining Multiple Applicable Requirements:**

A. IC Engine, Emergency Use

Basis of Requirement	Applicable Requirements
SMAQMD Rule No. 406 – Specific Contaminants	$\leq 0.1$ grains PM/dscf at 12% CO <sub>2</sub> and $\leq 2000$ ppmv sulfur compounds as SO <sub>2</sub>
SMAQMD Rule No. 201 permit conditions based on: SMAQMD Rule No. 202 – New Source Review	$\leq 0.13$ lb PM/hour (equivalent to 0.05 grains/dscf at 12% CO <sub>2</sub> ) and $\leq 0.0015$ ppmw S in the fuel (equivalent to 0.95 ppmv as SO <sub>2</sub> )

Pursuant to U.S. EPA's *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, the above applicable requirements will be streamlined. The most stringent requirements are the permit conditions based on SMAQMD Rule Nos. 201 and 202, which will be included in the Title V permit.

Basis of Requirement	Applicable Requirements % S by weight
SMAQMD Rule No. 420 – Sulfur Content of Fuels	$\leq 0.5\%$
SMAQMD Rule No. 201 permit conditions based on: SMAQMD Rule No. 202 – New Source Review	$\leq 0.0015\%$

Pursuant to U.S. EPA's *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, the above applicable requirements will be streamlined. The most stringent requirements are the permit conditions based on SMAQMD Rule Nos. 201 and 202, which will be included in the Title V permit.

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**IC Engine, Emergency Use**

Basis of Requirement	Applicable Requirements
SMAQMD Rule No. 412 – Stationary IC Engines Located at Major Stationary Sources of NOx	Operate a non-resetting totalizing hour meter (or computerized tracking) and maintain operation records.
SMAQMD Rule No. 201 permit conditions based on: SMAQMD Rule No. 202 – New Source Review	Operate a non-resetting totalizing hour meter (or computerized tracking) and maintain operation records.

Pursuant to U.S. EPA's *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, the above applicable requirements will be streamlined. The permit conditions based on SMAQMD Rule Nos. 201 and 202 are as stringent as the SMAQMD Rule 412 requirements and will be included in the Title V permit.

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements**  
**Cooling Tower**

**SMAQMD Rule No. 404 - Particulate Matter**

SIP approved: 07-13-1987 (52 FR 26148)  
 [11-20-1984 amended version]

Rule Description: This rule regulates emissions of particulate matter by limiting the emission concentration of particulate matter (PM).

Compliance Status: In the following discussion all particulate emissions from the cooling tower are assumed to be PM10. If the PM10 concentration complies with the rule limits then the PM concentration would also comply with the rule limits.

Based on the PM10 BACT daily emission limit in SMAQMD Rule 201 Permit to Operate No. 11019(rev1) of 0.13 lb PM10/hour and an air flowrate of 564,547 cfm, the maximum allowable PM10 emission concentration from the cooling tower is 0.00003 grains/dscf. The rule limit for PM is 0.1 grains/dscf.

The permittee complies with the rule requirements.

(See discussion of streamlining of multiple applicable requirements at the end of this section titled "Equipment Specific Requirements - Cooling Tower.)

*The Title V permit will contain a permit shield indicating that compliance with the conditions of the Title V permit will be deemed compliance with SMAQMD Rule 404.*

**Permit Conditions on SMAQMD Rule 201 Permit to Operate**

Condition Description: The conditions of operation on SMAQMD Rule 201 Permit to Operate for the cooling tower limits mass emissions, requires emission offsets be provided and requires recordkeeping and reporting.

The following table indicates the conditions on the SMAQMD Rule 201 permits that are not applicable federally enforceable requirements.

Equipment	SMAQMD Rule 201 Permit No.	Permit conditions that are not federally enforceable
Cooling tower	P/O No. 11019(rev1)	Condition Nos. 1, 2, 3, 4, 5 and 6

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Cooling Tower**

Compliance Status: The permittee's equipment complies with the SMAQMD Rule 201 permit conditions.

*The following federal regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination for the record:*

**40 CFR 63 Subpart Q - National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers:**

Promulgated: 09-08-1994 (59 FR 46339)

Rule Description: This federal regulation prohibited the use of chromium in cooling tower water, at major sources of HAP, beginning September 08, 1994.

Compliance Status: The cooling tower **is not subject** to the federal NESHAP for Industrial Process Cooling Towers because it are not located at a facility that is a major source for HAP.

*The following California state regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination:*

**Code of California Regulations, Titles 17, Division 3, Chapter 1, Subchapter 7.5, Section 93103, Air Toxic Control Measure (ATCM) - Regulation for Chromate Treated Cooling Towers**

Rule Adopted: 03-09-1989 (adopted by California Air Resources Board)

Rule Description: The California Air Resources Board's Air Toxic Control Measure (ATCM) - Regulation for Chromate Treated Cooling Towers prohibited the use of chromium in cooling tower water beginning September 05, 1989.

Compliance Status: This regulation is not a SIP approved applicable requirement.

The cooling tower, which began operation in 1995 **has never used chromium** to treat the cooling tower water and is in compliance with the ATCM.

**I. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**  
**Equipment Specific Requirements (continued)**  
**Cooling Tower**

**Streamlining Multiple Applicable Requirements:**

A. Cooling Tower

Basis of Requirement	Applicable Requirements Particulate Matter
SMAQMD Rule No. 404 – Particulate Matter	≤ 0.1 grains/dscf
SMAQMD Rule No. 201 permit conditions based on: SMAQMD Rule No. 202 – New Source Review	≤ 0.13 lb/hour (equivalent to 0.00003 grains/dscf)

Pursuant to U.S. EPA's *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, the above applicable requirements will be streamlined. The most stringent requirements are the permit conditions based on SMAQMD Rule Nos. 201 and 202, which will be included in the Title V permit.

<b>J. <u>NON-FEDERALLY ENFORCEABLE REQUIREMENTS</u> Facility-wide Requirements</b>
--

**SMAQMD Rule 301 - Permit Fees - Stationary Source**

SIP approved: Not SIP approved.

Rule Description: This rule requires the facility to pay fees associated with the issuance and renewal of SMAQMD Rule 201 permits.

Compliance Status: The permittee has paid permit fees as required and is in compliance.

**SMAQMD Rule 306 - Air Toxic Fees**

SIP approved: Not SIP approved.

Rule Description: This rule requires the facility to pay fees associated with toxic emissions regulated through the California "Toxic Hotspot" Program.

Compliance Status: The permittee has paid toxic fees as required and is in compliance.

**SMAQMD Rule 602 - Breakdown Conditions: Emergency Variance**

SIP approved: Not SIP approved.

Rule Description: This rule requires the facility to notify the SMAQMD of any equipment breakdowns that cause an emission violation and to follow specific procedures.

Compliance Status: The permittee has complied with the requirements of the rule when equipment breakdowns have caused emission violations.

**State of California Air Toxic Control Measure - Chromate Treated Cooling Towers (CCR 93103)**

SIP approved: Not SIP approved.

Rule Description: This rule does not allow hexavalent chromium containing compounds to be added to the cooling tower circulating water.

Compliance Status: The cooling tower does not use hexavalent chromium containing compounds.

**K. Title V Permit Conditions**

It is recommended that the CVFA Carson Title V Federal Operating permit and the Title IV Acid Rain permit be renewed.

See proposed Title V Federal Operating Permit TV2008-07-01 for permit conditions.

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

# **ATTACHMENT A**

SMAQMD RULES THAT ARE  
"APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS"  
FOR THE SACRAMENTO POWER AUTHORITY

SMAQMD RULES THAT ARE  
 "APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS"  
 FOR THE CVFA CARSON COGENERATION PROJECT

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
●	●	101	General Provisions and Definitions 09-03-1998 version	<b>Yes</b> - no related conditions are included in the permit because of general nature of the rule.
●	●	102	Circumvention 11-29-1983 version	<b>Yes</b> - no related conditions are included in the permit because of general nature of the rule.
	●	103	Exceptions 11-29-1983 version	<b>No</b> - source does not operate the type of equipment described in this rule.
	●	104	General Conformity 11-03-1994 version	<b>No</b> - the rule's purpose is to have the SMAQMD review federal conformity findings.
●	●	105	Emission Statement 04-20-1993 version	<b>Yes</b> - related conditions are included in the permit.
		107	Alternative Compliance	<b>No</b> - it is not a SIP approved rule.
●		108	Minor Violations	<b>No</b> - it is not a SIP approved rule.
●	●	201	General Permit Requirements 11-20-1984 version	<b>Yes</b> - no related conditions are included in the permit because of the general nature of the rule.
●	●	202	New Source Review 11-20-1984 version	<b>Yes</b> - related conditions are included in the permit.

SMAQMD RULES THAT ARE  
 "APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS"  
 FOR THE CVFA CARSON COGENERATION PROJECT

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
		203	Prevention of Significant Deterioration	<b>No</b> - it is not a SIP approved rule.
		204	Emission Reduction Credits	<b>No</b> - it is not a SIP approved rule.
		205	Community Bank and Priority Reserve Bank	<b>No</b> - it is not a SIP approved rule.
		206	Mobile and Transportation Source Emission Reduction Credits	<b>No</b> - it is not a SIP approved rule.
●	*	207	Title V Federal Operating Permit Program	<b>Yes</b> - related conditions are included in the permit. (*Although this is not a SIP approved rule it is applicable because it is part of the approved SMAQMD Title V Permit Program.)
●		208	Acid Rain	<b>No</b> - it is not a SIP approved rule. <i>Note: there is an equivalent federal regulation.</i>
		209	Limiting Potential to Emit	<b>No</b> - it is not a SIP approved rule.
		210	Synthetic Minor Source Status	<b>No</b> - it is not a SIP approved rule.
		211	MACT at Major Sources of Hazardous Air	<b>No</b> - it is not a SIP approved rule.

SMAQMD RULES THAT ARE  
 "APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS"  
 FOR THE CVFA CARSON COGENERATION PROJECT

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
			Pollutants	
		213	Federal Major Modifications	<b>No</b> - it is not a SIP approved rule.
		215	Agricultural Permit Requirements and New Agricultural Permit Review	<b>No</b> - it is not a SIP approved rule.
●	*	301	Stationary Source Permit Fees	<b>Yes</b> - related conditions are included in the permit. (*Although this is not a SIP approved rule it is applicable because it is part of the approved SMAQMD Title V Permit Program.)
●		302	Hearing Board Fees	<b>No</b> - it is not a SIP approved rule.
		303	Agricultural Burning Permit Fees	<b>No</b> - it is not a SIP approved rule.
		304	Plan Fees	<b>No</b> - it is not a SIP approved rule.
		305	Environmental Document Preparation and Processing Fees	<b>No</b> - it is not a SIP approved rule.
●		306	Air Toxics Fees	<b>No</b> - it is not a SIP approved rule.
●	●	307	Clean Air Act Fees	<b>Yes</b> - related conditions are included in the permit.

SMAQMD RULES THAT ARE  
 "APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS"  
 FOR THE CVFA CARSON COGENERATION PROJECT

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
			09-26-2002 version	
		310	Permit Fees - Agricultural Source	<b>No</b> - it is not a SIP approved rule
●	●	401	Ringelmann Chart 04-05-1983 version	<b>Yes</b> - related conditions are included in the permit.
●		402	Nuisance	<b>No</b> - it is not a SIP approved rule.
●	●	403	Fugitive Dust 11-29-1983 version	<b>Yes</b> - related conditions are included in the permit.
●	●	404	Particulate Matter 11-20-1984 version	<b>Yes</b> - related conditions are included in the permit. (see discussion of streamlining applicable requirements and permit shield)
	●	405	Dust and Condensed Fumes 11-29-1983 version	<b>No</b> - the source does not operate such a process.
●	●	406	Specific Contaminants 11-29-1983 version	<b>Yes</b> - related conditions are included in the permit. (see discussion of streamlining applicable requirements and permit shield)
●	●	407	Open Burning	<b>Yes</b> - no related conditions are included in the permit

SMAQMD RULES THAT ARE  
 "APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS"  
 FOR THE CVFA CARSON COGENERATION PROJECT

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
			11-29-1983 version	because the source does not conduct open burning.
●		408	Incinerator Burning 11-29-1983 version	<b>No</b> - the source does not operate an incinerator.
●		409	Orchard Heaters 11-29-1983 version	<b>No</b> - the source does not operate orchard heaters.
●		410	Reduction of Animal Matter 11-29-1983 version	<b>No</b> - the source does not operate equipment for the reduction of animal matter.
●		411	Boiler NOx 02-02-1995 version	<b>No</b> - the source does not operate a boiler subject to this rule.
●	●	412	Stationary IC Engines at Major Stationary Sources of NOx 06-01-1995 version	<b>Yes</b> - related conditions are included in the permit. (see discussion of streamlining applicable requirements and permit shield)
●	●	413	Stationary Gas Turbines 03-24-2005 version	<b>Yes</b> - related conditions are included in the permit. (see discussion of streamlining applicable requirements and permit shield)
●		414	Natural Gas Fired Water Heaters 08-01-1996 version	<b>No</b> - the source does not operate natural gas fired water heaters.

SMAQMD RULES THAT ARE  
 "APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS"  
 FOR THE CVFA CARSON COGENERATION PROJECT

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
		417	Wood Burning Appliances	<b>No</b> - it is not a SIP approved rule.
●	●	420	Sulfur Content of Fuels 11-29-1983 version	<b>Yes</b> - related conditions are included in the permit. (see discussion of streamlining applicable requirements and permit shield)
●	●	441	Organic Solvents 11-29-1983 version	<b>Yes</b> - no related conditions are included in the permit because of limited applicability.
●	●	442	Architectural Coatings 09-05-1996 version	<b>Yes</b> - related conditions are included in the permit.
	●	443	Leaks from Synthetic Organic Chemical and Polymer Manufacturing 09-05-1996 version	<b>No</b> - the source does not operate synthetic organic chemical or polymer manufacturing equipment.
	●	444	Petroleum Solvent Dry Cleaning 08-13-1981 version	<b>No</b> - the source does not operate petroleum solvent dry cleaning equipment.
	●	446	Storage of Petroleum Products 11-16-1993 version	<b>No</b> - the source does not store affected petroleum products.

SMAQMD RULES THAT ARE  
 "APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS"  
 FOR THE CVFA CARSON COGENERATION PROJECT

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
	●	447	Organic Liquid Loading 04-02-1998 version	<b>No</b> - the source does not operate organic liquid loading equipment.
	●	448	Gasoline Transfer into Stationary Storage Containers 02-02-1995 version	<b>No</b> - the source does not operate gasoline transfer equipment.
	●	449	Transfer of Gasoline into Vehicle Fuel Tanks 09-26-2002 version	<b>No</b> - the source does not operate gasoline transfer equipment.
	●	450	Graphic Arts Operations 12-05-1996 version	<b>No</b> - the source does not operate a graphic arts process as defined in the rule.
●	●	451	Surface Coating of Miscellaneous Metal Parts and Products 11-29-1983 version	<b>Yes</b> - no related conditions are included in the permit because of limited applicability.
	●	452	Can Coating 09-05-1996 version	<b>No</b> - the source does not operate a can coating process.
	●	453	Cutback and Emulsified Asphalt Paving Materials 11-29-1983 version	<b>No</b> - the source does not manufacture or apply cutback or emulsified asphalt paving materials.

SMAQMD RULES THAT ARE  
 "APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS"  
 FOR THE CVFA CARSON COGENERATION PROJECT

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
●		454	Degreasing Operations 04-03-1997 version	<b>No</b> - the source does not operate degreasers subject to this rule.
●		455	Pharmaceuticals Manufacturing 11-29-1983 version	<b>No</b> - the source does not manufacture pharmaceuticals.
●		456	Aerospace Coating Operations 09-05-1996 version	<b>No</b> - the source does not coat aerospace parts.
		457	Methanol Compatible Tanks	<b>No</b> - it is not a SIP approved rule.
●		458	Large Commercial Bread Bakeries 09-05-1996 version	<b>No</b> - the source does not produce bread products.
●		459	Automotive, Truck and Heavy Equipment Refinishing Operations 10-02-1997 version	<b>No</b> - the source does not refinish vehicles.
●		460	Adhesives and Sealants	<b>No</b> - it is not a SIP approved rule.
		463	Wood Products Coatings	<b>No</b> - it is not a SIP approved rule.
●		464	Organic Chemical Manufacturing Operations	<b>No</b> - the source does not manufacture organic chemicals.

SMAQMD RULES THAT ARE  
 "APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS"  
 FOR THE CVFA CARSON COGENERATION PROJECT

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
			07-23-1998 version	
		465	Polyester Resin Operations	<b>No</b> - it is not a SIP approved rule.
●		466	Solvent Cleaning	<b>No</b> - it is not a SIP approved rule.
		485	Municipal Landfill Gas	<b>No</b> - it is not a SIP approved rule.
		496	Large Confined Animal Facilities	<b>No</b> - it is not a SIP approved rule.
	●	501	Agricultural Burning 11-29-1983 version	<b>No</b> - the source does not conduct agricultural burning.
●		601	Procedure before the Hearing Board	<b>No</b> - it is not a SIP approved rule.
●		602	Breakdown Conditions: Emergency Variance	<b>No</b> - it is not a SIP approved rule.
	●	701	Emergency Episode Plan 05-27-1999 version	<b>No</b> - facility emissions are below applicability level.
●		801	New Source Performance Standards	<b>No</b> - it is not a SIP approved rule. <i>Note: there are equivalent federal regulations.</i>

SMAQMD RULES THAT ARE  
 "APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS"  
 FOR THE CVFA CARSON COGENERATION PROJECT

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
		901	General Requirements	<b>No</b> - it is not a SIP approved rule. <i>Note: there are equivalent federal regulations.</i>
		902	Asbestos	<b>No</b> - it is not a SIP approved rule. <i>Note: there is an equivalent federal regulation.</i>
		903	Mercury	<b>No</b> - it is not a SIP approved rule. <i>Note: there is an equivalent federal regulation.</i>
●		904	Airborne Toxic Control Measures	<b>No</b> - it is not a SIP approved rule. <i>Note: there are equivalent federal regulations for some of the listed ATCMs.</i>
		1002	Fleet Inventory	<b>No</b> - it is not a SIP approved rule.
		1003	Reduced-Emission Fleet Vehicles/Alternative Fuels	<b>No</b> - it is not a SIP approved rule.
		1005	Mobile Source Emission Reduction Credits/Banking	<b>No</b> - it is not a SIP approved rule.
		1006	Transportation Conformity	<b>No</b> - it is not a SIP approved rule.

Statement of Basis  
Title V Federal Operating Permit 2nd Renewal  
CVFA Carson Cogeneration Project  
Permit No. TV2008-07-01

December 01, 2009  
Attachment A - Page 12 of 11

SMAQMD RULES THAT ARE  
"APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS"  
FOR THE CVFA CARSON COGENERATION PROJECT

## **ATTACHMENT B**

SMAQMD RULE 201 PERMITS TO OPERATE  
FOR  
CVFA CARSON COGENERATION FACILITY