

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

|                            |                         |
|----------------------------|-------------------------|
| <b>Title V Permit No.:</b> | <u>TV2007-14-01</u>     |
| <b>Date:</b>               | <u>January 09, 2009</u> |
| <b>Reviewing Engineer:</b> | <u>Bruce Nixon</u>      |

**FACILITY INFORMATION:**

|                              |   |
|------------------------------|---|
| <b><u>FACILITY NAME:</u></b> | Sacramento Power Authority                            |
| <b>LOCATION:</b>             | 3215 47th Avenue<br>Sacramento                        |
| <b>MAILING ADDRESS:</b>      | PO Box 15830, Mail Stop B355<br>Sacramento, CA 95852  |
| <b>RESPONSIBLE OFFICIAL:</b> | James Shetler<br>SPA Representative<br>(916) 732-6757 |
| <b>CONTACT PERSON:</b>       | Kurt Hook<br>Facility Manager<br>(916) 391-2993       |

**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 report will also include background narrative and explanations of regulatory decisions made by the reviewer. 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.

**PERMIT ACTION**

This Statement of Basis is for the first renewal of the Sacramento Power Authority's existing Title V Federal Operating Permit No. TV1998-14-01B. The existing permit expires on March 01, 2009. The renewed Title V permit will be given the number TV2007-14-01.

The following permit actions have occurred since the initial Title V Federal Operating Permit No. TV1998-14-01 was issued:

| <u>Permit Action</u>                     | <u>Date Issued</u> | <u>Permit No.</u> |
|--|--------------------|-------------------|
| Initial Title V Federal Operating Permit | 03-01-2004         | TV1998-14-01      |
| 1st Administrative Amendment             | 09-11-2006         | TV1998-14-01A     |
| 2nd Administrative Amendment             | 05-22-2007         | TV1998-14-01B     |

## **FACILITY DESCRIPTION**

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

The Sacramento Power Authority generates electricity for the Sacramento Municipal Utility District (SMUD) and produces process steam for use in the operations of Campbell Soup Company. The project is located on a 5.8-acre site adjacent to the Campbell Soup food processing facility at 3215 47<sup>th</sup> Avenue, Sacramento.

The cogeneration plant is a combined cycle power block. The combined cycle unit consists of the following components:

### Combined Cycle Power System:

1. (1) Siemens V84.2 gas turbine, 1410 MMBTU/hour, natural gas fuel, with a nominal rating of 103 MW.
2. (1) duct burner, 200 MMBTU/hour, natural gas fuel.
3. (1) Heat recovery steam generator.
4. (1) 55.9 MW nominal capacity steam turbine generator.
5. (1) Selective catalytic reduction (SCR) NO<sub>x</sub> air pollution control system.
6. (1) Oxidation catalyst CO and ROC air pollution control system.

### Support Equipment:

7. Cooling tower, GEA Thermal-Dynamic Towers, 3 cell, 45,000 gallons of water/minute, 4,763,000 cfm air flowrate.

### Emissions Control Technology

NO<sub>x</sub> emissions from the gas turbine are controlled with dry low NO<sub>x</sub> combustor technology and a SCR system to comply with the NO<sub>x</sub> concentration limit of 3 ppmvd at 15% O<sub>2</sub>.

ROC and CO emissions from the gas turbine are controlled with an oxidation catalyst system.

NO<sub>x</sub> emissions from the duct burner are controlled with low NO<sub>x</sub> burners and a SCR system to comply with the NO<sub>x</sub> concentration limit of 3 ppmvd at 15% O<sub>2</sub>.

SO<sub>2</sub> and PM<sub>10</sub> emissions from the gas turbine and duct burner are controlled by the use of natural gas fuel with no emergency use fuel.

### Steam and Power Generation Process

Process steam for the Campbell Soup Company food processing plant is extracted from the steam turbine generator during the operation of the combined cycle power block. This process is capable

## **FACILITY DESCRIPTION**

of producing 250,000 pounds per hour of steam supply.

Electricity generated by the gas turbine power plant is interconnected with SMUD's transmission lines and distribution system.

## **SIGNIFICANT EMISSIONS UNIT DESCRIPTION**

### **Gas Turbine**

SMAQMD Rule 201 Permit to Operate No. 14072 (permit number is for reference purposes only - not federally enforceable)

Manufacturer: Siemens  
Model No.: V84.2  
Type: Combined Cycle  
Nominal Rating: 103 MW  
Heat Input Rating: 1410 MMBTU/hour  
Fuel: Natural Gas

### **Duct Burner for Heat Recovery Steam Generator**

SMAQMD Rule 201 Permit to Operate No. 14071 (permit number is for reference purposes only - not federally enforceable)

Heat Input Rating: 200 MMBTU/hour  
Fuel: Natural Gas

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

SMAQMD Rule 201 Permit to Operate No. 11458 (permit number is for reference purposes only - not federally enforceable)

Control Device: Selective Catalytic Reduction  
Manufacturer: Nooter/Eriksen  
Venting: Gas Turbine and Duct Burner

### **Air Pollution Control System - ROC and CO**

SMAQMD Rule 201 Permit to Operate No. 11459 (permit number is for reference purposes only - not federally enforceable)

Control Device: Oxidation Catalyst  
Manufacturer: Nooter/Eriksen  
Venting: Gas Turbine and Duct Burner

### **Cooling Tower**

SMAQMD Rule 201 Permit to Operate No. 13316 (permit number is for reference purposes only - not federally enforceable)

Manufacturer: GEA Thermal-Dynamic Towers  
Type: Mechanical draft, counterflow, 4,763,000 cfm with drift eliminator  
Size: 3 cell  
Capacity: 45,000 gallons/minute

**INSIGNIFICANT EMISSIONS UNIT DESCRIPTION**

| <b>Equipment Description</b>  | <b>Basis for the Exemption</b>   |
|---|--|
| Vehicles  | SMAQMD Rule 201 Section 111.1<br>Vehicles used to transport passengers or freight.   |
| Portable pressure washer, 13 hp<br><br>Portable welder, 16 hp<br><br>Water treatment backup electrical generator, 18 hp, natural gas fuel | SMAQMD Rule 201 Section 112.1<br>Internal combustion engines with a manufacturer's maximum continuous rating of 50 hp or less.   |
| Air conditioners  | SMAQMD Rule 201 Section 115<br>Air conditioning systems not designed to remove air contaminants.   |
| Aqueous ammonia storage tank<br><br>Compressed gas cylinders (e.g. CO <sub>2</sub> , H <sub>2</sub> , calibration gases)                  | SMAQMD Rule 201 Section 117.1<br>Tanks used for the storage of liquefied or compressed gases.  |
| Lube oil storage tanks<br><br>Waste lube oil storage tanks<br><br>Hydraulic oil storage tanks<br><br>Water/waste oil separator            | SMAQMD Rule 201 Section 117.2<br>Tanks used for the storage of unheated organic materials with a vapor pressure ≤ 5 mm Hg (0.1 psia) or initial boiling point ≥ 150 °C (302 °F). |
| Maintenance shop painting   | SMAQMD Rule 201 Section 118<br>Surface coating operations using a combined total of one gallon per day or less of coating material or solvent.                                   |

**INSIGNIFICANT EMISSIONS UNIT DESCRIPTION**

| <b>Equipment Description</b>  | <b>Basis for the Exemption</b>   |
|---|--|
| Parts washer and wipe cleaning<br><br>Natural gas compressor (electric motor drive)<br><br>Abrasive blasting cabinet<br><br>Fugitive emissions associated with plant piping systems for fuel gas, fuel oil, lube oil and anhydrous ammonia<br><br>Water treatment chemical storage tanks<br><br>Brazing, soldering, welding and cutting torches for plant maintenance activities<br><br>Adhesive use for plant maintenance activities | SMAQMD Rule 201 Section 122<br>Other equipment which would emit any pollutant, without the benefit of air pollution control devices, at a rate less than 2 pounds in any 24 hour period. |

**ALTERNATE OPERATING SCENARIOS**

None requested by permittee.

**FACILITY EMISSIONS**

| Equipment                                   | Maximum Allowable Annual Emissions<br>tons per year (A) |      |     |      |      |               |               |
|---|---|------|-----|------|------|---------------|---------------|
|   | ROC   | NOx  | SO2 | PM10 | CO   | Single<br>HAP | Total<br>HAPs |
| Gas Turbine<br>Duct Burner<br>Cooling Tower | 20.0  | 49.9 | 3.7 | 22.5 | 43.7 | 5.0 (B)       | 13.1 (B)      |

(A) Values have been rounded to one decimal place.

(B) The HAP values are based on estimated HAP emission levels submitted with the Title V permit application.

These HAP values are not federally enforceable emission limits. The federally enforceable emission limits are 9.4 tons/year for a single HAP and 24.4 tons/year for a combination of HAPs.

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**SMAQMD Rule No. 101 - General Provisions and Definitions**

SIP approved: 03-19-1999 (64 FR 13514)  
[09-03-1998 adopted version]

Rule Description: This rule provides definitions of terms, specifies authority to arrest and specifies what data is public information.

Compliance Status: The rule does not require the permittee to take any actions.

**SMAQMD Rule No. 102 - Circumvention**

SIP approved: 12-05-1984 (49 FR 47490)  
[05-15-1972 adopted, 11-29-1983 renumbered version]

Rule Description: This rule prohibits concealment of emissions and specifies how compliance determinations are made for combined and separated emissions.

Compliance Status: The permittee complies with the rule requirements.

**SMAQMD Rule No. 105 - Emission Statement**

SIP approved: 05-26-2004 (69 FR 29880)  
[04-20-1993 amended version]  
**NOTE - the current 09-05-1996 version of this rule is not SIP approved.**

Rule Description: This rule requires the facility to provide annual emission data for ROC and NOx.

Compliance Status: The permittee complies with the rule requirements.

**SMAQMD Rule No. 201 - General Permit Requirements**

SIP approved: 07-13-1987 (52 FR 26148)  
[11-20-1984 amended version]  
**NOTE - the current 08-24-2006 version of this rule 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 complies with the rule requirements.

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**SMAQMD Rule No. 202 - New Source Review**

SIP approved: 06-19-1985 (50 FR 25417)  
[11-20-1984 amended version]  
**NOTE - the current 02-24-2005 version of this rule 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 permittee complies with the rule requirements.

**SMAQMD Rule No. 207 - Title V Federal Operating Permits**

SIP approved: The rule is not SIP approved but the rule is applicable because it is part of the SMAQMD Title V Federal Operating Permit program approved by U.S. EPA on 11-21-2003 (68 FR 65637).

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 permit application for Title V permit renewal.

The permittee complies with the rule requirements.

**SMAQMD Rule No. 301 - Permit Fees (Title V related fees only)**

SIP approved: The rule is not SIP approved but the portions of the rule related to Title V permit fees are applicable because they are part of the SMAQMD Title V Federal Operating Permit program approved by U.S. EPA on 11-21-2003 (68 FR 65637).

Rule Description: This rule requires Title V sources to pay specified fees.

Compliance Status: The permittee complies with the rule requirements.

**SMAQMD Rule No. 307 - Clean Air Act Fees**

SIP approved: 08-26-2003 (68 FR 51184)  
[09-26-2002 adopted version]

Rule Description: This rule requires major sources of ROC and NOx to pay specified fees

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beginning after the U.S. EPA determines that the SMAQMD has failed to demonstrate attainment of the one hour ozone ambient air quality standard by the attainment year.

Compliance Status: The permittee complies with the rule requirements.

**SMAQMD Rule No. 401 - Ringelmann Chart**

SIP approved: 02-01-1984 (49 FR 3987)  
[04-19-1983 amended version]

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

Compliance Status: The permittee complies with the rule requirements.

**SMAQMD Rule No. 403 - Fugitive Dust**

SIP approved: 12-05-1984 (49 FR 47490)  
[11-29-1983 adopted version]

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

Compliance Status: The permittee complies with the rule requirements.

**SMAQMD Rule No. 442 - Architectural Coatings**

SIP approved: 11-09-1998 (63 FR 60214)  
[09-05-1996 amended version]

**NOTE - the current 09-25-2008 version of this rule 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 SMAQMD.

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.

The permittee complies with the rule requirements.

**SMAQMD Rule No. 701 - Emergency Episode Plan**

***This SMAQMD rule is not an applicable federal requirement but is discussed here to document the non-applicability determination:***

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SIP approved: 09-05-2000 (65 FR 53602)  
[05-27-1999 amended version]

Rule Description: This rule requires a plan be prepared for specific actions to be taken when health related levels of ozone, carbon monoxide or PM10 are exceeded.

Compliance Status: This rule is applicable to facilities that emit 50 tons/year or more of ROC or NOx or 100 tons/year or more of PM10 or CO. The maximum allowable emissions from this facility are less than the applicability levels.

The permittee is not subject to this rule.

**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 less than the designated amounts of the specified chemical substances in 40 CFR 68 and is currently exempt from the requirements of the regulation.

**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

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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.

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**SMAQMD Rule No. 406 - Specific Contaminants**

SIP approved: 12-05-1984 (49 FR 47490)  
[11-29-1983 amended version]

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

Compliance Status: In the following discussion, all particulate matter emissions from the gas turbine and duct burner are assumed to be PM<sub>10</sub>. If the PM<sub>10</sub> concentration complies with the rule limits then the PM concentration would also comply with the rule limits.

Using the hourly BACT PM<sub>10</sub> emission limit in the SMAQMD Rule 201 Permit to Operate 14072 of 7.0 lb/hour, an exhaust flowrate of 550,000 cfm from the turbine and duct burner and a CO<sub>2</sub> level of 3.848%, the maximum allowable PM<sub>10</sub> emission concentration from the gas turbine and duct burner is 0.0046 grains/dscf at 12% CO<sub>2</sub>. The rule limit for particulate matter is 0.1 grains/dscf at 12% CO<sub>2</sub>.

Based on the use of commercial natural gas, the sulfur compounds emission (calculated as SO<sub>2</sub>) from the gas turbine is 0.0006 lb SO<sub>2</sub>/MMBTU. The rule limit for sulfur compounds emission is 0.2% by volume, calculated as SO<sub>2</sub>. The rule limit is equivalent to approximately 8.6 lb SO<sub>2</sub>/MMBTU.

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 - 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 406.*

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**SMAQMD Rule No. 413 - Stationary Gas Turbines**

SIP approved: 03-10-2008 (73 FR 1819)  
[03-24-2005 amended version]

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

Compliance Status: NOx emission limitation -

The gas turbine is required to meet a BACT NOx emission concentration limit of 3.0 ppmvd. 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 permittee complies with the rule requirements.

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

Startup operation -

SMAQMD Rule 201 Permit to Operate No. 14072 requires that the gas turbine not exceed a startup period of 1 hour. SMAQMD Rule 413 allows a maximum startup period of 1 hour. The SMAQMD has determined that the Permit to Operate condition is as strict as the SMAQMD Rule 413 requirement.

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 - Gas Turbine.)

*The Title V permit will contain a permit shield indicating that compliance*

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*with the conditions of the Title V permit will be deemed compliance with SMAQMD Rule 413.*

**SMAQMD Rule No. 420 - Sulfur Content of Fuels**

SIP approved: 12-05-1984 (49 FR 47490)  
[11-29-1983 amended version]

Rule Description: This rule regulates emissions of sulfur compounds from the combustion of fuels by limiting the sulfur content of the fuel. This rule limits the sulfur content of gaseous fuels to less than 50 grains of sulfur compounds per 100 cubic feet, calculated as hydrogen sulfide.

Compliance Status: The commercial natural gas combusted by the gas turbine has a typical sulfur content that is much less than 0.5 grains per 100 cubic feet, calculated as hydrogen sulfide.

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 - 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 420.*

**Permit Conditions - SMAQMD Rule No. 201 Permit to Operate Nos. 11458, 11459, 14071 and 14072)**

Condition Description: SMAQMD Rule 201 Permits to Operate for the gas turbine and associated equipment limit emission concentrations, limit mass emissions, require BACT, require emission offsets be provided and require recordkeeping and reporting.

[Condition Nos. 1, 2, 3, 4, 5, 6, 12 and the NH3 source testing portion of Condition No. 20 of the SMAQMD Rule 201 Permits to Operate are not federally enforceable.]

(See discussion of streamlining of multiple applicable requirements at the end of this section titled "Equipment Specific Requirements - Gas

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Turbine.)

Compliance Status: The permittee complies with the conditions on the SMAQMD Rule 201 Permits to Operate.

**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.

*"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 subject to this rule because it is capable of combusting 200 MMBTU/hour which exceeds the minimum applicability level of greater than 100 MMBTU/hour and meets the definition of steam generating unit.

PM, SO2 and Opacity Limits

The duct burner combusts only natural gas and has no particulate matter (PM), SO2 or opacity limitations imposed by 40 CFR 60 Subpart Db.

NOx Limits

The duct burner is required to meet a NOx concentration limit of no more than 0.20 lb NOx/MMBTU of heat input by 40 CFR 60 Subpart Db Section 44b(a)(4)).

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CEM System

The permittee is exempt from operating a continuous emission monitoring (CEM) system by 40 CFR 60.48b(h).

"(h) The owner or operator of a duct burner, as described in 40 CFR 60.41b, that is subject to the NO<sub>x</sub> standards of 40 CFR 60.44b(a)(4) or 40 CFR 60.44b(l) is not required to install or operate a continuous emissions monitoring system to measure NO<sub>x</sub> emissions."

Recordkeeping and Reporting

The recordkeeping and reporting requirements of 40 CFR 60.49b(g) are applicable to the operation of the duct burner.

"(g) Except as provided under paragraph (p) of this section, the owner or operator of an affected facility subject to the NO<sub>x</sub> standards under §60.44b shall maintain records of the following information for each steam generating unit operating day:

- (1) Calendar date.
- (2) The average hourly NO<sub>x</sub> emission rates (expressed as NO<sub>2</sub>) (ng/J or lb/MMBTU heat input) measured or predicted.
- (3) The 30-day average NO<sub>x</sub> emission rates (ng/J or lb/MMBTU heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
- (4) Identification of the steam generating unit operating days when the calculated 30-day average NO<sub>x</sub> emission rates are in excess of the NO<sub>x</sub> emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.
- (5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
- (6) Identification of the times when emission data have been

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excluded from the calculation of average emission rates and the reasons for excluding data.

- (7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
- (8) Identification of the times when the pollutant concentration exceeded full span of the CEMS.
- (9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3.
- (10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part."

Because the permittee is exempt from installing a CEM system, by 40 CFR 60.48b(h), sections (8), (9) and (10) above, which relate to a CEM system, are not applicable.

The permittee complies with the NSPS requirements.

(See discussion of streamlining of multiple applicable requirements at the end of this section titled "Equipment Specific Requirements - 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 40 CFR 60 Subpart Db.*

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

- 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 NOx at 15% O2 and 150 ppmvd of SO2 at 15% O2 (or ≤ 8000 ppmw total sulfur in the fuel).
- Compliance Status: The gas turbine is limited by SMAQMD Permit to Operate No. 14072 conditions to 3 ppmvd NOx at 15% O2, which is a BACT determination.

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The fuel combusted in the turbine is natural gas. The typical sulfur content of natural gas is less than 5 ppmw, measured as total sulfur.

The permittee complies with the NSPS requirements.

(See discussion of streamlining of multiple applicable requirements at the end of this section titled "Equipment Specific Requirements - 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 40 CFR 60 Subpart GG.*

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

Promulgated: 01-11-1993 (58 FR 3650)  
[10-19-2007 (72 FR 59205) most recent amendment]

Rule Description: This federal regulation limits the emission of NOx and SO2 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 submits quarterly reports to the U.S. EPA in accordance with the applicable requirements of 40 CFR Part 75.

The permittee complies with the Acid Rain Program requirements.

**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:**

***This federal regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination:***

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.

APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS  
**Equipment Specific Requirements**  
**Gas Turbine**  
**Duct Burner**  
**APC NOx SCR System**  
**APC ROC and CO Oxidation Catalyst System**

Compliance Status: The 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."

The gas turbine is not a "furnace or boiler" and is therefore 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.

**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:**

***This federal regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination:***

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: The 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.

APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS  
**Equipment Specific Requirements**  
**Gas Turbine**  
**Duct Burner**  
**APC NOx SCR System**  
**APC ROC and CO Oxidation Catalyst System**

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

***This federal regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination:***

Promulgated: 09-12-1990 (55 FR 37683)  
[06-13-2007 (72 FR 32717) most recent amendment]

Rule Description: This federal regulation applies to any steam generating unit capable of combusting between 10 and 100 MMBTU/hour of fuels. The regulation limits PM, SO<sub>2</sub> 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 60.41c.

*"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 not subject to this rule because it is capable of combusting 200 MMBTU/hour which exceeds the maximum applicability level of 100 MMBTU/hour.

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

The permittee is not subject to the NSPS Subpart Dc requirements.

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

***This federal regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination:***

Promulgated: 07-06-2006 (71 FR 38497)

APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS  
**Equipment Specific Requirements**  
**Gas Turbine**  
**Duct Burner**  
**APC NOx SCR System**  
**APC ROC and CO Oxidation Catalyst System**

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 gas turbine was constructed prior to February 18, 2005.

The permittee is not subject to the NSPS Subpart KKKK requirements.

**40 CFR 63 Subpart YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Gas Turbines:**

***This federal regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination:***

Promulgated: 03-05-2004 (69 FR 10511)

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

Rule Compliance: The gas turbine is not subject to the federal NESHAP for Stationary Gas Turbines because it is not located at a facility that is a major source for HAP.

**40 CFR 64 Compliance Assurance Monitoring:**

***This federal regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination:***

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.

Rule Compliance: The federal regulation exempts sources that are subject to the Title IV Acid Rain Program monitoring requirements and NSPS monitoring requirements [40 CFR 64.2(b)(1)(i) and 40 CFR 64.2(b)(1)(iii)]. Since the gas turbine is subject to these other requirements it is exempt from Part 64 Compliance Assurance Monitoring.

APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS  
**Equipment Specific Requirements**  
**Gas Turbine**  
**Duct Burner**  
**APC NOx SCR System**  
**APC ROC and CO Oxidation Catalyst System**

**Streamlining Multiple Applicable Requirements:**

The gas turbine is subject to the following overlapping Applicable Federally Enforceable Requirements:

**A. Gas Turbine NOx Emission Concentration**

| Basis of Requirement   | Applicable Requirements<br>NOx |
|--|--------------------------------|
| 40 CFR Subpart GG NSPS for Stationary Gas Turbine  | ≤ 75 ppmv<br>at 15% O2         |
| SMAQMD Rule No. 413 – Stationary Gas Turbines  | ≤ 9 ppmv<br>at 15% O2          |
| SMAQMD Rule No. 201 permit conditions based on:<br>SMAQMD Rule No. 202 – New Source Review | ≤ 3 ppmv<br>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. Gas Turbine SO2 Emission Concentration**

| Basis of Requirement                              | Applicable Requirements<br>SO2  |
|---|---|
| 40 CFR Subpart GG NSPS for Stationary Gas Turbine | total sulfur content of the fuel shall be ≤ 0.8% by weight (8000 ppmw)<br>(equivalent to ~ 0.71 lb SO2/MMBTU) (A) |

APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS  
**Equipment Specific Requirements**  
**Gas Turbine**  
**Duct Burner**  
**APC NOx SCR System**  
**APC ROC and CO Oxidation Catalyst System**

| Basis of Requirement   | Applicable Requirements<br>SO2   |
|--|--|
| 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   |
| SMAQMD Rule No. 201 permit conditions based on:<br>SMAQMD Rule No. 202 – New Source Review | the gas turbine shall only use natural gas as fuel<br><br>typical natural gas fuel is ≤ 0.5 grains of sulfur compounds/100 cf, measured as H2S<br><br>SO2 emissions from the fuel shall be ≤ 0.0006 lb SO2/MMBTU |

(A) The calculation for determining the equivalent lb SO2/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 SO2/MMBTU based on 0.2% SO2 by volume in the exhaust gas is -

*1,229 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.*

$$\frac{\text{lb SO}_2}{\text{MMBTU}} = \frac{(0.002 \text{ parts SO}_2/1 \text{ part exhaust air}) \times (550,000 \text{ ft}^3 \text{ exhaust air/min}) \times (60 \text{ min/hour}) \times (1 \text{ lb mole}/385 \text{ ft}^3) \times (64 \text{ lb SO}_2/\text{lb mole})}{1,229 \text{ MMBTU/hour}}$$

$$= \frac{10971 \text{ lb SO}_2/\text{hour}}{1,229 \text{ MMBTU/hour}}$$

APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS  
**Equipment Specific Requirements**  
**Gas Turbine**  
**Duct Burner**  
**APC NOx SCR System**  
**APC ROC and CO Oxidation Catalyst System**

= 8.9 lb SO2/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, which will be included in the Title V permit.

C. Gas Turbine PM Emission Concentration

| Basis of Requirement   | Applicable Requirements<br>PM   |
|--|---|
| SMAQMD Rule No. 406 - Combustion Contaminants  | ≤ 0.1 grains/dscf, corrected to 12% CO2   |
| SMAQMD Rule No. 201 permit conditions based on:<br>SMAQMD Rule No. 202 – New Source Review | Gas turbine and duct burner shall emit ≤ 17.76 lb PM10/hour (equivalent to ~ 0.012 grains/dscf, corrected to 12% CO2) |

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

$$\begin{aligned}
 \frac{\text{grains PM}}{\text{dscf}} &= \frac{(17.76 \text{ lb PM/hour}) \times (7000 \text{ grains/lb})}{(550,000 \text{ cf exhaust air/min}) \times (60 \text{ min/hour})} \\
 &= \frac{124320 \text{ grains PM/hour}}{33,000,000 \text{ cf exhaust air/hour}} \\
 &= 0.0038 \text{ grains/dscf at 3.848\% CO}_2 \text{ (CO}_2 \text{ concentration from source tests)} \\
 &= 0.012 \text{ grains PM/dscf at 12\% CO}_2
 \end{aligned}$$

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.

APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS  
**Equipment Specific Requirements**  
**Gas Turbine**  
**Duct Burner**  
**APC NOx SCR System**  
**APC ROC and CO Oxidation Catalyst System**

D. Duct Burner NOx Emission Rate

| Basis of Requirement   | Applicable Requirements<br>NOx  |
|--|---|
| 40 CFR 60 Subpart Db<br>NSPS for Industrial - Commercial -<br>Institutional Steam Generating Units | Duct burner shall emit $\leq 0.20$ lb NOx/MMBTU<br>(30 day average)   |
| SMAQMD Rule No. 201 permit conditions<br>based on:<br>SMAQMD Rule No. 202 – New Source<br>Review   | Duct burner shall emit $\leq 3$ ppmv at 15% O2 (3<br>hour average)<br>equivalent to $\sim 0.011$ lb/MMBTU (A) |

(A) The calculation for determining the equivalent lb/MMBTU based on ppmvd is -

The duct burner in combination with the gas turbine must meet a NOx concentration limit of 3 ppm. The NOx mass limit corresponding to this NOx concentration limit is a condition of the SMAQMD Rule 201 Permit to Operate No. 14071 and 14072 and is 17.76 lb NOx/hour.

$$\begin{aligned}
 \text{NOx } \frac{\text{lb}}{\text{MMBTU}} &= \frac{\text{maximum allowable NOx/hour}}{\text{maximum duct burner heat input} + \text{maximum gas turbine heat input}} \\
 &= \frac{17.76 \text{ lb NOx/hour}}{200 \text{ MMBTU/hour} + 1410 \text{ MMBTU/hour}} \\
 &= 0.011 \text{ lb NOx/MMBTU}
 \end{aligned}$$

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.

APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS  
**Equipment Specific Requirements**  
**Gas Turbine**  
**Duct Burner**  
**APC NOx SCR System**  
**APC ROC and CO Oxidation Catalyst System**

E. Duct Burner NOx Emission Rate Recordkeeping

| Basis of Requirement              | Applicable Requirements Recordkeeping  |
|-----------------------------------|--|
| 40 CFR 60 Subpart Db<br>60.49b(g) | Maintain the following records - <ol style="list-style-type: none"> <li>(1) Calendar date.</li> <li>(2) The average hourly NOx emission rates (expressed as NO2) (ng/J or lb/MMBTU heat input) measured or predicted.</li> <li>(3) The 30-day average NOx emission rates (ng/J or lb/MMBTU heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.</li> <li>(4) Identification of the steam generating unit operating days when the calculated 30-day average NOx emission rates are in excess of the NOx emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.</li> <li>(5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including</li> </ol> |

APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS  
**Equipment Specific Requirements**  
**Gas Turbine**  
**Duct Burner**  
**APC NOx SCR System**  
**APC ROC and CO Oxidation Catalyst System**

| Basis of Requirement  | Applicable Requirements Recordkeeping  |
|---|--|
|   | <p>reasons for not obtaining sufficient data and a description of corrective actions taken.</p> <p>(6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.</p> <p>(7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.</p>  |
| <p>SMAQMD Rule No. 201 permit conditions based on:<br/>                     SMAQMD Rule No. 202 – New Source Review</p> | <p>Maintain the following records -</p> <p>Combined cycle turbine and duct burner NOx, CO, ROC, SOx and PM10 hourly emissions (lb/hour). For those pollutants directly monitored (NOx and CO), the hourly emissions will be from the CEM system required pursuant to Condition No. B.12. For those pollutants that are not directly monitored (ROC, SOx and PM10), the hourly emissions shall be calculated based on District approved emission factors contained in the footnotes to Condition No. B2.</p> <p>Total daily emissions from all equipment at the Sacramento Power Authority facility (lb/day).</p> <p>Date and time of non-operation of the continuous emission monitoring system.</p> |

The recordkeeping requirements of 40 CFR 60 Subpart Db 60.49b(g) overlap with the recordkeeping requirements imposed by SMAQMD Rule Nos. 201 and 202 except for the requirements relating to the 30 day average NOx emission limit in lb/MMBTU.

APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS  
**Equipment Specific Requirements**  
**Gas Turbine**  
**Duct Burner**  
**APC NOx SCR System**  
**APC ROC and CO Oxidation Catalyst System**

The SMAQMD Rule Nos. 201 and 202 NOx emission limit of 0.011 lb/MMBTU (3 hour average) is only 5.5% of the 40 CFR 60 Subpart Db Section 44b(a)(4)) NOx emission limit of 0.20 lb/MMBTU (30 day average). Compliance with the NOx limit of 0.011 lb/MMBTU (3 hour average) will insure that the 30 day average NOx emission limit of 0.20 lb/MMBTU will never be exceeded. Therefore, no additional recordkeeping is necessary for the 30 day average NOx emission limit of 0.20 lb/MMBTU to verify compliance.

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.

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. 13316 of 0.41 lb PM10/hour and an air flowrate of 4,763,000 cfm, the maximum allowable PM10 emission concentration from the cooling tower is 0.00001 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 - SMAQMD Rule No. 201 Permit to Operate No. 13316**

Condition Description: SMAQMD Permit to Operate No. 13316 for the cooling tower, limits mass emissions and requires recordkeeping and reporting.

[Condition Nos. 1, 2, 3, 4, 5, 6 and 12 of the SMAQMD Rule 201 permit are not federally enforceable.]

Compliance Status: The permittee complies with the requirements of the permit conditions.

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

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

***This federal regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination:***

- Promulgated: 09-08-1994 (59 FR 46339)
- Rule Description: This federal regulation prohibits the use of chromium in cooling tower water, at major sources of HAPs, beginning September 08, 1994.
- Rule Compliance: The cooling tower is not subject to the federal NESHAP for Industrial Process Cooling Towers because it is not located at a facility that is a major source of HAPs.

**Streamlining Multiple Applicable Requirements:**

The cooling tower is subject to the following overlapping Applicable Federally Enforceable Requirements:

A. PM Emission Concentration

| Basis of Requirement   | Applicable Requirements<br>PM (A)                                 |
|--|---|
| SMAQMD Rule No. 404  | ≤ 0.1 grains/dscf   |
| SMAQMD Rule No. 201 permit conditions based on:<br>SMAQMD Rule NO. 202 – New Source Review | ≤ 0.41 lb PM10/hour (B)<br>(equivalent to 0.00001 grains PM/dscf) |

- (A) Assume that all PM emitted is PM10.  
 (B) The calculation for determining the equivalent grains PM/dscf based on a lb PM10/hour mass emission value is -

$$\frac{\text{grains PM}}{\text{dscf}} = \frac{(0.41 \text{ lb PM10/hour}) \times (7000 \text{ grains/lb})}{(4,763,000 \text{ cfm}) \times (60 \text{ minutes/hour})}$$

$$= 0.00001 \text{ grains PM/dscf}$$

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

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

stringent requirement is the permit condition based on SMAQMD Rule 201 and 202, which will be included in the Title V permit.

**NON-FEDERALLY ENFORCEABLE REQUIREMENTS  
Facility-wide and Equipment Specific Requirements**

**SMAQMD Rule No. 301 - Permit Fees - Stationary Source**

SIP approved: Not SIP approved.

Rule Description: This discussion applies to the sections of the rule that require fees for SMAQMD Rule 201 permits, not to the sections that require fees for Title V permits.

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

Compliance Status: The permittee complies with the rule requirements.

**SMAQMD Rule No. 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 complies with the rule requirements.

**SMAQMD Rule No. 442 - Architectural Coating**

SIP approved: Not SIP approved.  
[09-25-2008 amended version]  
**NOTE - the 09-05-1996 version of this rule is 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 SMAQMD.

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.

The permittee complies with the rule requirements.

**SMAQMD Rule No. 466 - Solvent Cleaning**

SIP approved: Not SIP approved.

Rule Description: This rule requires the facility to reduce the emission of ROC from solvent cleaning operations.

**NON-FEDERALLY ENFORCEABLE REQUIREMENTS  
Facility-wide and Equipment Specific Requirements**

Compliance Status: The permittee complies with the rule requirements.

**SMAQMD Rule No. 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 complies with the rule requirements.

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

SIP approved: Not SIP approved  
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.

Rule Compliance: The cooling tower, which began operation in 2005, has never used chromium to treat the cooling tower water.

The permittee complies with the rule requirements.

**TITLE V PERMIT RECOMMENDATION:**

It is recommended that the Sacramento Power Authority Title V Federal Operating permit and the Title IV Acid Rain permit be renewed.

See proposed Title V Federal Operating Permit No. TV2007-14-01 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 SACRAMENTO POWER AUTHORITY

| Rule is Applicable | Rule is SIP Approved | Rule No. | Rule Title   | Is the Rule an "Applicable Federally Enforceable Requirement"?   |
|--------------------|----------------------|----------|--|--|
| ●                  | ●                    | 101      | General Provisions and Definitions<br>09-03-1998 version | <b>Yes</b> - no related conditions are included in the permit because of general nature of the rule.     |
| ●                  | ●                    | 102      | Circumvention<br>11-29-1983 version                      | <b>Yes</b> - no related conditions are included in the permit because of general nature of the rule.     |
|                    | ●                    | 103      | Exceptions<br>11-29-1983 version                         | <b>No</b> - source does not operate the type of equipment described in this rule.                        |
|                    | ●                    | 104      | General Conformity<br>11-03-1994 version                 | <b>No</b> - the rule's purpose is to have the SMAQMD review federal conformity findings.                 |
| ●                  | ●                    | 105      | Emission Statement<br>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<br>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<br>11-20-1984 version                  | <b>Yes</b> - related conditions are included in the permit.  |

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

| 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.<br>(*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.<br><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 Pollutants           | <b>No</b> - it is not a SIP approved rule.  |

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

| Rule is Applicable | Rule is SIP Approved | Rule No. | Rule Title  | Is the Rule an "Applicable Federally Enforceable Requirement"?  |
|--------------------|----------------------|----------|---|---|
|                    |                      | 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.<br>(*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<br>09-26-2002 version                            | <b>Yes</b> - related conditions are included in the permit.   |

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

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| Rule is Applicable | Rule is SIP Approved | Rule No. | Rule Title   | Is the Rule an "Applicable Federally Enforceable Requirement"?   |
|--------------------|----------------------|----------|--|--|
| ●                  |                      | 408      | Incinerator Burning<br>11-29-1983 version                                      | <b>No</b> - the source does not operate an incinerator.  |
| ●                  |                      | 409      | Orchard Heaters<br>11-29-1983 version  | <b>No</b> - the source does not operate orchard heaters.   |
| ●                  |                      | 410      | Reduction of Animal Matter<br>11-29-1983 version                               | <b>No</b> - the source does not operate equipment for the reduction of animal matter.  |
| ●                  |                      | 411      | Boiler NOx<br>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<br>06-01-1995 version | <b>No</b> - the source does not operate an IC engine with a rated capacity that is greater than the 50 hp applicability level of the rule. |
| ●                  | ●                    | 413      | Stationary Gas Turbines<br>03-24-2005 version                                  | <b>Yes</b> - related conditions are included in the permit.<br>(see discussion of streamlining applicable requirements and permit shield)  |
| ●                  |                      | 414      | Natural Gas Fired Water Heaters<br>08-01-1996 version                          | <b>No</b> - the source does not operate natural gas fired water heaters.   |
|                    |                      | 417      | Wood Burning Appliances  | <b>No</b> - it is not a SIP approved rule.   |

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| Rule is Applicable | Rule is SIP Approved | Rule No. | Rule Title  | Is the Rule an "Applicable Federally Enforceable Requirement"?  |
|--------------------|----------------------|----------|---|---|
| ●                  | ●                    | 420      | Sulfur Content of Fuels<br>11-29-1983 version   | <b>Yes</b> - related conditions are included in the permit.<br>(see discussion of streamlining applicable requirements and permit shield) |
| ●                  | ●                    | 441      | Organic Solvents<br>11-29-1983 version  | <b>Yes</b> - no related conditions are included in the permit because of limited applicability.   |
| ●                  | ●                    | 442      | Architectural Coatings<br>09-05-1996 version  | <b>Yes</b> - related conditions are included in the permit.   |
|                    | ●                    | 443      | Leaks from Synthetic Organic Chemical and Polymer Manufacturing<br>09-05-1996 version | <b>No</b> - the source does not operate synthetic organic chemical or polymer manufacturing equipment.                                    |
|                    | ●                    | 444      | Petroleum Solvent Dry Cleaning<br>08-13-1981 version                                  | <b>No</b> - the source does not operate petroleum solvent dry cleaning equipment.   |
|                    | ●                    | 446      | Storage of Petroleum Products<br>11-16-1993 version                                   | <b>No</b> - the source does not store affected petroleum products.  |
|                    | ●                    | 447      | Organic Liquid Loading<br>04-02-1998 version  | <b>No</b> - the source does not operate organic liquid loading equipment.   |

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|--------------------|----------------------|----------|---|--|
| ●                  |                      | 448      | Gasoline Transfer into Stationary Storage Containers<br>02-02-1995 version      | <b>No</b> - the source does not operate gasoline transfer equipment.                                 |
| ●                  |                      | 449      | Transfer of Gasoline into Vehicle Fuel Tanks<br>09-26-2002 version              | <b>No</b> - the source does not operate gasoline transfer equipment.                                 |
| ●                  |                      | 450      | Graphic Arts Operations<br>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<br>11-29-1983 version | <b>Yes</b> - no related conditions are included in the permit because of limited applicability.      |
| ●                  |                      | 452      | Can Coating<br>09-05-1996 version   | <b>No</b> - the source does not operate a can coating process.                                       |
| ●                  |                      | 453      | Cutback and Emulsified Asphalt Paving Materials<br>11-29-1983 version           | <b>No</b> - the source does not manufacture or apply cutback or emulsified asphalt paving materials. |
| ●                  |                      | 454      | Degreasing Operations<br>04-03-1997 version                                     | <b>No</b> - the source does not operate degreasers subject to this rule.                             |

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| Rule is<br>Applicable | Rule is SIP<br>Approved | Rule No. | Rule Title  | Is the Rule an "Applicable Federally Enforceable Requirement"? |
|-----------------------|-------------------------|----------|---|--|
| ●                     |                         | 455      | Pharmaceuticals Manufacturing<br>11-29-1983 version                                   | <b>No</b> - the source does not manufacture pharmaceuticals.   |
| ●                     |                         | 456      | Aerospace Coating Operations<br>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<br>09-05-1996 version                                 | <b>No</b> - the source does not produce bread products.        |
| ●                     |                         | 459      | Automotive, Truck and Heavy Equipment<br>Refinishing Operations<br>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<br>07-23-1998 version                       | <b>No</b> - the source does not manufacture organic chemicals. |
|                       |                         | 465      | Polyester Resin Operations  | <b>No</b> - it is not a SIP approved rule.                     |

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|--------------------|----------------------|----------|--|---|
| ●                  |                      | 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<br>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<br>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.<br><i>Note: there are equivalent federal regulations.</i>  |
|                    |                      | 901      | General Requirements                         | <b>No</b> - it is not a SIP approved rule.<br><i>Note: there are equivalent federal regulations.</i>  |
|                    |                      | 902      | Asbestos                                     | <b>No</b> - it is not a SIP approved rule.<br><i>Note: there is an equivalent federal regulation.</i> |

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| Rule is<br>Applicable | Rule is SIP<br>Approved | Rule No. | Rule Title  | Is the Rule an "Applicable Federally Enforceable Requirement"?  |
|-----------------------|-------------------------|----------|---|---|
|                       |                         | 903      | Mercury   | <b>No</b> - it is not a SIP approved rule.<br><i>Note: there is an equivalent federal regulation.</i>                             |
| ●                     |                         | 904      | Airborne Toxic Control Measures                   | <b>No</b> - it is not a SIP approved rule.<br><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.  |

## **ATTACHMENT B**

### EMISSION REDUCTION CREDIT CERTIFICATES

## **ATTACHMENT C**

### **SMAQMD RULE 201 PERMITS TO OPERATE**