

South Coast Air Quality Management District

Statement of Basis

Proposed Title V Renewal Permit

Facility Name:	Burbank City, Burbank Water & Power, SCPPA
Facility ID:	128243
SIC Code:	4911
Equipment Location:	164 W Magnolia Blvd Burbank, CA 91502
Application #(s):	556920
Application Submittal Date(s):	10/08/13
Permit Revision #:	varies depending on the section
Revision Date:	TBD
Permit Section(s) Affected:	All sections (A-K, plus Appendices A and B)
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1. Introduction and Scope of Permit

Title V is a national operating permit program for air pollution sources. Facilities subject to Title V must obtain a Title V permit and comply with specific Title V procedures to modify the permit. Title V permits are issued in 5 year terms, after which the facility must apply to have the permit renewed. The Title V permit for this facility expired on April 9, 2014. The facility has submitted the necessary information to renew their permit and has satisfied the requirements to obtain an application shield, which allows the continued operation of the facility under the terms and conditions of the existing permit until the permit renewal is approved.

The SCAQMD implements Title V through Regulation XXX – Title V Permits, adopted by the SCAQMD Governing Board in order to comply with EPA's requirement that local air permitting authorities develop a Title V program. Regulation XXX was developed with the participation of the public and affected facilities through a series of public workshops, working group meetings, public hearings and other meetings.

The Title V major source threshold for a particular pollutant depends on the attainment status of the pollutant. NO₂, SO₂, CO, and lead are in attainment with federal standards. The status for PM-10 is attainment at the federal level, but remains nonattainment at the state level. The status

for ozone is currently extreme nonattainment. For the South Coast Air Basin (SOCAB) the threshold levels are as follows:

Pollutant	SOCAB Major Source Thresholds
VOC	10
NOx	10
SOx	100
CO	50
PM-10	70
Single HAP	10
Combination of HAPS	25

A Title V permit is proposed to be issued to cover the operations of the City of Burbank, Burbank Water and Power, SCPPA facility, located at 164 W Magnolia Blvd, Burbank. This facility is subject to Title V requirements because it is a major source of one of more criteria pollutants.

2. Facility Description

This is an existing facility that is in the business of producing electrical power. The facility is a joint ownership project, consisting of 1 combined cycle gas turbine generator which produces power for the 12 member agencies (11 cities and 1 irrigation district), including the cities of Burbank, Anaheim, Glendale, Pasadena, and others . The plant is operated by the City of Burbank. Approximate total power output is 343 MW. The unit uses SCR and CO catalysts for emission control. BACT for the turbine, as determined at the time the permit was issued, is 2 ppm NOx, 2 ppm CO, and 2 ppm VOC, all based on 1 hour averages. The ammonia slip limit is 5 ppm based on a 1 hour average also.

3. Construction and Permitting History

AQMD issued the construction permit, along with the initial Title V permit on May 27, 2003, and the facility began operation in 2004. The permit was renewed for a new 5 year term on April 10, 2009. Since the last permit renewal there has been only 1 revision - two existing storage silos serving the cooling towers were added to the permit in 2011.

4. Regulatory Applicability Determinations

Applicable legal requirements for this facility are required to be identified in the Title V permit (for example, Section D, E, and H of the proposed Title V permit). Applicability determinations (i.e., determinations made by the District with respect to what legal requirements apply to a specific piece of equipment, process, or operation) can be found in the Engineering Evaluations.

The following summarizes the key rules that apply to the major equipment at this site:

Turbine

218 – Continuous Emission Monitoring (monitoring, recordkeeping and reporting of CO)

401 – Visible Emissions

402 - Nuisance

407 – Liquid and Gaseous Air Contaminants (CO and SO₂ emissions)

409 – Combustion Contaminants (PM emissions)

431.1 – Sulfur Content of Natural Gas (SO_x emissions)

431.2 – Sulfur Content of Liquid Fuels (SO_x emissions)

475 – Electric Power Generating Equipment (PM emissions)

Regulation XIII – BACT

2012 – NO_x RECLAIM (monitoring, recordkeeping and reporting of NO_x)

Regulation XXX – Title V

40CFR 60 Subpart GG (NO_x and SO₂)

40CFR 72 – Acid Rain (NO_x and SO₂)

The facility is not a major source of HAPs and therefore is not subject to any MACT standards. There are no area source MACT standards which apply to this facility. NSPS requirements of 40 CFR Part 60 subpart GG apply to the gas turbines at the facility. The facility is subject to 40 CFR Parts 72-78 (Acid Rain). Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64 do not apply to the turbines because 1) the turbines use continuous emissions monitors for NO_x and CO [exempt by continuous compliance determination of section 64.2(b)(vi)], 2) there is no PM₁₀ or SO_x control equipment, and 3) the turbines do not have pre-control VOC emissions greater than the major source threshold of 10 tpy.

The permit terms and conditions may be found in Section D of the Title V permit.

5. Monitoring and Operational Requirements

Applicable monitoring and operational requirements for the facility are identified in the Title V permit (for example, Section D, F, and J and Appendix B of the proposed Title V permit).

Under Reclaim, the turbine is required to maintain a CEMS for NO_x emissions, and report daily mass emissions through the RTU, as well as measure water injection rate, exhaust temperature into the SCR, the ammonia injection rate and exhaust O₂. As part of the CEMS, the turbine is also required to be equipped with a fuel flow meter. Under Rule 218, the turbine is required to maintain CEMS for CO emissions, and submit quarterly emission reports for CO. Under NSPS Subpart GG, the turbine is required to measure the water injection rate, fuel consumption, NO_x, SO_x, and O₂ emissions. Under the Acid Rain provisions, the plant is required to monitor SO₂ emissions through use of fuel gas meters and gas constituent analysis (use of emission factors for reporting emissions is also acceptable in certain cases).

Discussion of any applicable monitoring and operational requirements can be found in the Engineering Evaluations.

6. Permit Features

Permit Shield

A permit shield is an optional part of a Title V permit that gives the facility explicit protection from requirements that may be incorrectly specified in the permit. A permit shield is a provision in a permit that states that compliance with the conditions contained in the permit shall be deemed compliance with all identified regulatory requirements. To incorporate a permit shield into the Title V permit involves submission of applications for change of conditions for each equipment affected by the permit shield. Permit shields are addressed in Rule 3004 (c). This facility has not applied for a permit shield.

Streamlining Requirements

Some emission units may be subject to multiple requirements which are closely related or redundant. The conditions may be streamlined to simplify the permit conditions and compliance. Emission limits, work practice standards, and monitoring, recordkeeping, and reporting requirements may be streamlined. Compliance with a streamlined condition will be deemed compliance with the underlying requirements whether or not the emission unit is actually in compliance with the specific underlying requirement. This facility has not applied for any streamlined conditions.

7. Summary of Emissions and Health Risks

Criteria Pollutant Emissions (tons/year)
Annual Reported Emissions for Reporting Period 2013

Pollutant	Emissions (tons/year)
NO _x	23.372
CO	8.704
VOC	8.463
PM	6.749
SO _x	0.429

**Toxic Air Contaminants Emissions (TAC)
Annual Reported Emissions for Reporting Period 2013**

The Following TACs Were Reported	Emissions (lbs/yr)
1,3-Butadiene	3.538
Ammonia	145,079
Arsenic	0.014
Benzene	98.331
Cadmium	0.001
Hexavalent Chrome	0.001
Formaldehyde	5835.4
Lead	0.006
Naphthalene	10.719
Nickel	0.035
Polynuclear aromatic hydrocarbons (PAHs)	7.399

Health Risk from Toxic Air Contaminants

The facility is subject to review by the Air Toxics Information and Assessment Act (AB2588). However, this facility is relatively new, and AQMD has not set a prioritization level for this facility as of yet, therefore, no risk assessment has been performed at this time.

8. Compliance History

As noted, the facility has been in operation since 2004. The facility has been subject to both self-reporting requirements and AQMD inspections. The facility has had 0 citizen complaints filed, 0 Notices to Comply issued, and 0 Notices of Violation issued in the last two calendar years.

9. Compliance Certification

By virtue of the Title V permit application and renewal of this permit, the reporting frequency for compliance certification for the facility shall be annual.