

TITLE V OPERATING PERMIT STATEMENT OF BASIS

Facility Name: Sycamore Energy LLC

Title V Application Number: APCD2013-APP-002924

Title V Permit Number: APCD2014-TVP-00042

Facility ID: APCD1984-SITE-03594

Equipment Address: 8514 Mast Blvd., Santee, CA 92071

Facility Contact: Suparna Chakladar
Contact Phone: (951) 833-4153

Permit Engineer: Doug Erwin

1. Introduction/Description

This statement of basis is for an initial Title V permit. The facility operated a single turbine generator under PTO-980112 from 2005 to 2013. In 2013 the facility applied for installation of two (2) new turbines to replace two existing units which had been operated under APCD2004-PTO-870383. With the proposed installation, the facility's potential to emit (PTE) carbon monoxide (CO) exceeded the major source threshold. The facility submitted its Title V application during the same year, as required. The following table summarizes the three emission units at this facility:

District Permit #	Emission Unit Description
APCD2013-PTO-001620	Gas Turbine #1, Solar Saturn 10, 1.2 MW, landfill gas fired with propane pilot, S/N TL-19-52754-10/15; with extraction wells, condensate management equipment, a gas compressor, and process control equipment including a landfill gas flow meter and an in-line oxygen analyzer.
APCD2013-PTO-001621	Gas Turbine #2, Solar Saturn 10, 1.2 MW, landfill gas fired with propane pilot, S/N UF-19-52902-6/3; with extraction wells, condensate management equipment, a gas compressor, and process control equipment including a landfill gas flow meter and an in-line oxygen analyzer.
APCD2005-PTO-980112	Gas Turbine #3, Solar Centaur 40 Series 4701, landfill gas fired, 3.7 MW, 47.7 MMBtu/hr heat input, S/N OHF11-C1790

2. Federal Program Applicability

Rule 1401 - Title V (Permitting) Applicability

Rule 1412 - Title IV (Acid Rain) Applicability

2.1 Title V Applicability:

As discussed above, the facility's PTE for CO exceeded the major source threshold with the replacement of turbines #1 and #2 in 2013. Based on limited file documents, it is understood that prior to this installation emissions remained below major source thresholds due to the aggregate capacity and emissions of the turbines. The source submitted its application for a Title V permit in 2013.

2.2 Title IV (Acid Rain) Applicability:

Title IV, which is codified at 40 CFR §72.6, states that specified "utility units" are subject to acid rain provisions. This regulation defines utility unit as a *fossil fuel*-fired combustion device that serves a generator in any State, and that produces electricity for sale. Because these engines are fired on landfill gas and not fossil fuel, they are not considered utility units under the Acid Rain program. Therefore, Title IV does not apply.

3. Summary of Applicable Requirements

The requirements from each of the following listed rules are incorporated into the District and Title V permits accordingly.

Facility-wide Requirements		
Regulation	Rule Citation	Title
SDCAPCD Reg. II	10	Permits Required
SDCAPCD Reg. II	19	Provision of Sampling & Testing Facilities
SDCAPCD Reg. II	19.3	Emission Information
SDCAPCD Reg. II	21	Permit Conditions
SDCAPCD Reg. IV	60	Circumvention
SDCAPCD Reg. V	98	Breakdown Conditions: Emergency Variance
Emission Unit Specific Requirements		
SDCAPCD Reg. II	20.3	New Source Review
SDCAPCD Reg. IV	50	Visible Emissions
SDCAPCD Reg. IV	51	Nuisance
SDCAPCD Reg. IV	53	Specific Contaminants
SDCAPCD Reg. IV	62	Sulfur Content of Fuels
SDCAPCD Reg. IV	69.3	Stationary Gas Turbine Engines - RACT
SDCAPCD Reg. IV	69.3.1	Stationary Gas Turbine Engines - BARCT
SDCAPCD Reg. XII	1200	Toxic Air Contaminants – New Source Review
SDCAPCD Reg. XIV	1401	Title V Permitting – General Provisions
SDCAPCD Reg. XIV	1415	Title V Permitting - Public Notification

SDCAPCD Reg. XIV	1421	Title V Permit Content
40 CFR Part 60	40 CFR Part 60 Subpart KKKK	Standards of Performance for Stationary Combustion Turbines

4. Monitoring, Record-keeping and Reporting

The notable monitoring requirement is the annual testing provision of each of the three turbine emission units (EUs). Also included in each of these EUs are requirements to record fuel usage and hours of operation. Semi-annual reporting is required under the Title V section of permit.

40 CFR Part 64 – Compliance Assurance Monitoring

Compliance Assurance Monitoring (CAM) applicability was considered in accordance with 40 CFR Part 64. The turbines are not equipped with a control device and are therefore not subject to CAM based on 40 CFR § 64.2(a)(1). Additionally, none of the individual turbine emission units generates enough emissions to reach major source thresholds.

5. Public Notice and EPA Review

In accordance with District Rule 1415, the District will provide notice to the public, the Environmental Protection Agency, and affected states.

6. Conclusions / Recommendations

The source is expected to comply with all applicable requirements, most notably those requirements cited under District Regulation XIV and 40 CFR Part 70. Therefore, the recommendation of this report is for the subject initial Title V permit to be issued following public notice, EPA review, and response to comments, if necessary.