

# South Coast Air Quality Management District

## Statement of Basis Title V Facility Permit Renewal Issuance Date: September 12, 2012

**Facility Name:** Ameresco Chiquita Energy, LLC  
**Facility ID:** 140373  
**SIC Code:** 4953  
**Equipment Location:** 29201 Henry Mayo Drive (@ Chiquita Canyon Landfill)  
Valencia (Castaic), CA 91355

**Application #(s):** 530377  
**Application Submittal Date(s):** 12/14/2011

**Permit Renewal:** Draft  
**Revision Date:** 9/12/2012  
**Permit Section(s) Affected:** Various

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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. This permit replaces the facility's other existing permits. Title V does not necessarily include any new requirements for reducing emissions. It does, however, include new permitting, noticing, recordkeeping, and reporting requirements.

The AQMD implements Title V through Regulation XXX – Title V Permits, adopted by the AQMD 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. NO<sub>2</sub>, SO<sub>2</sub>, and lead are in attainment with federal standards. The status of CO is designated to attainment status. The status for PM-10 is serious nonattainment. The status for ozone is currently extreme nonattainment.

A Title V renewal permit is proposed to be issued to cover the operations of a landfill gas to energy (LFGTE) project to produce electricity for sale. This facility is subject to Title V requirements because it is a major source.

## **2. Facility Description**

This facility's operations include resource recovery landfill gas to energy system; consisting of two identical gas combustion turbines, LFG pre-treatment system to remove siloxanes and other impurities prior to treated LFG's combustion in gas turbines and, an enclosed low emission flare to treat off-gas from the pre-treatment system (during media regeneration). The facility is located at 29201 Henry Mayo Drive (@ Chiquita Canyon Landfill), Valencia (Castaic), CA.

## **3. Construction and Permitting History**

An initial Title V permit was issued on 6/15/2007 for new construction of the facility. Equipment for the LFGTE project was placed in service in February 2011. The permitted equipment are listed under Section H of the Title V permit.

## **4. Regulatory Applicability Determinations**

Applicable legal requirements for which this facility is required are identified in the Title V permit (for example, Section H, E, and K, of the proposed Title V renewed 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. This facility is subject to NSPS and NESHAP requirements. NSPS requirements of 40 CFR Part 60 apply to certain units at the facility and the permit terms and conditions may be found in Section H of the Title V permit. NESHAP requirements of 40 CFR Part 63 applies to certain units at the facility and the permit terms and conditions may be found in Sections H and J of the Title V permit.

## **5. Monitoring and Operational Requirements**

Applicable monitoring and operational requirements for which the facility is required to comply are identified in the Title V permit (for example, Section H, F, and J and Appendix B of the proposed Title V permit). Discussion of any applicable monitoring and operational requirements can be found in the Engineering Evaluations. Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64 apply to the permitted emission control source at this facility. CAM plan for TNMHC emission control using APC (gas turbines and flare) is addressed under A/N 533423.

## **6. Permit Features**

### Permit Shield

A permit shield is an optional part of a Title V permit that gives the facility an explicit protection from requirements that do not apply to the facility. A permit shield is a provision in a permit that states that compliance with the conditions of 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 2011**

<i>Pollutant</i>	<i>Emissions (tons/year)</i>
CO	1.40
NOx	7.66
ROG	2.73
SOx	7.41
TSP	2.18

**Toxic Air Contaminants Emissions (TAC)  
Annual Reported Emissions for Reporting Period 2011**

<i>TACs Reported</i>	<i>Emissions (lbs/yr)</i>	<i>TACs Reported</i>	<i>Emissions (lbs/yr)</i>
Benzene	26.7	Perchloroethylene	1.20
Carbon Tetrachloride	0.86	Trichloroethylene	0.91
Formaldehyde	121.9	Vinyl chloride	0.77
Methylene chloride	1.10		
Naphthalene	1.15		
PAHs, total	0.31		

**Health Risk from Toxic Air Contaminants**

The status of this new facility for the priority score is being tracked for Air Toxics Information and Assessment Act (AB2588). AB2588 Air Toxics “Hot Spots” health risk assessment is not required for this new facility.

**8. Compliance History**

The facility has been subject to both self-reporting requirements and AQMD inspections. Facility inspection report for 9/20/2011 indicated that permitted equipment were operating satisfactorily during inspection in compliance with permit conditions and applicable rules. Inspection report indicated that results for the source tests, performed on April 6, 2011 for the gas turbines and

LFG flare (S/T done on April 13-15, 2011) were in compliance with the permit limits. Non-Reclaim CEMS certification tests (gas turbines) had done on April 6 and 7, 2011 indicated NOx Relative Accuracy for each GT was within allowable performance specifications. As per District records there is no citizen complaint, NC or NOV issued since beginning of equipment operations.

**9. Compliance Certification**

By virtue of the Title V renewal permit application and issuance of the renewed permit in coming months, the reporting frequency for compliance certification for the facility shall be annual.

**10. Comments**

The following Section H permit revisions are incorporated into proposed Title V Permit.

<b>Appl. No.</b>	<b>Equipment</b>	<b>Description of Change</b>
458539	Turbine Engine (≤ 50 MW) Landfill Gas	Permit condition added to include CAM requirements.
458540	Turbine Engine (≤ 50 MW) Landfill Gas	Permit condition added to include CAM requirements.
458542	Landfill Gas Flare	* Corrected typographical error in equipment description, Item 2- “4000 scfm capacity” was changed to “400 scfm capacity”. *Condition added to include CAM requirements. *Corrected typographical errors in condition 2.
461080	Landfill Gas Treatment System	Corrected typographical errors in conditions 5 and 8.