

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION EVALUATION AND CALCULATIONS</b>	PAGES 3	PAGE 1
	APPL NO 528859	DATE 11/15/2011
	PROCESSED BY AS08	CHECKED BY

### Compliance Assurance Monitoring (CAM) Plan

**Applicant's Name**                      Gas Recovery System LLC (Coyote Canyon)

**Mailing Address**                      5087 Junction Road  
Lockport, NY 14094

**Equipment Location**                20662 Newport Coast Drive  
Newport Coast, CA 92657

### **APPLICATION 528859, FACILITY ID 45448**

#### **Plan Description**

This compliance assurance monitoring (CAM) plan for non-methane hydrocarbons (NMHC) emissions generated by municipal solid wastes (MSW) landfill which are collected in a gas collection system (pollutant specific emission unit, PSEU) and controlled using a landfill gas (LFG) resource recovery system (boiler) and LFG flare system as air pollution control equipment.

#### **Background**

On November 1, 2011, Gas Recovery System LLC (Coyote Canyon) submitted this application for a CAM plan for the LFG resource recovery system (boiler) Permit F11990, A/N 318060 and LFG flare system Permit F25797, A/N 362517 used to control emissions generated by the closed MSW Coyote Canyon Landfill. The Initial Title V permit for this facility was issued April 28, 2000. The facility has applied for a Title V renewal (A/N 514682) which will incorporate this CAM plan into the Title V Facility Permit.

This compliance assurance monitoring plan is to comply with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM). This regulation became effective November 21, 1997, however requirements of the plan were delayed while the Title V program was being implemented. Therefore, owners and operators were subject to CAM plan requirements during the Initial Title V renewal. This regulation affects emission units at the source subject to a federally enforceable emission limit or standard that uses a control device to comply, and either pre-control or post-control emissions exceed Title V thresholds. See Sample Permit Condition tagged with 40 CFR 64, which are imposed on the boiler and flare system to comply with the requirements of 40 CFR 64.

#### **CAM Applicability**

Requirements are applicable to pollutant-specific emission units at a major source that is required to obtain a State (Part 70) or Federal (Part 71) operating permit. The equipment has pre-control unit emissions of regulated air pollutant that are equal to or greater than 100% of the amount in tons per year, required for a source to be classified as a major source.

The applicable Major Source Threshold (MST) is 10 tons/year of total non methane hydrocarbons (TNMHC). The uncontrolled TNMHC emissions based on maximum permitted LFG flow (1992 scfm x 4 = 7,968 ~ 8,000 scfm) and an assumed TNMHC content of 1% are as follows.

$$\begin{aligned}
 R1 &= 10,000 \text{ ppm} \times 8,000 \text{ scfm} / 379E6 \text{ scf/lbmole} \times 16 \text{ lb/lbmole} \times 60 \text{ min/hr} \\
 &= 202.64 \text{ lbs/hr} \qquad \qquad \qquad = 4,863.36 \text{ lbs/day} \qquad \qquad = 1,775,126.40 \text{ lbs/year} = 887.56 \text{ tons/year}
 \end{aligned}$$

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION EVALUATION AND CALCULATIONS</b>	PAGES 3	PAGE 2
	APPL NO 528859	DATE 11/15/2011
	PROCESSED BY AS08	CHECKED BY

The controlled TNMHC emissions are based on the maximum (PTE) permitted emission rates per Rule 1303(b)(2) from the boiler and the flare system consisting of 4 flares.

R2 (boiler) = 0.75 lbs/hr	= 18 lbs/day	= 6,570 lbs/year	= 3.29 tons/year
R2(flare) = 0.208 lbs/hr-flare x 4 flares			
= 0.83 lbs/hr	= 19.92 lbs/day	= 7,270.8 lbs/year	= 3.64 tons/year
R2(total) = 1.58 lbs/hr	= 37.92 lbs/day	= 13,840.8 lbs/year	= 6.93 tons/year

### **CAM Requirements**

CAM plan shall:

- I. Describe the indicators to be monitored
- II. Describe the measurement approach for the indicators
- III. Describe the ranges or the process to set indicator ranges
- IV. Describe the performance criteria for the monitoring, including
  - A. Specifications for obtaining representative data
  - B. Verification procedures to confirm the monitoring operational status
  - C. Quality assurance and control procedures
  - D. Monitoring frequency
  - E. Data collection procedure
  - F. Data averaging period
- V. Provide a justification for the use of parameters, ranges, and monitoring approach (see section III of applicants CAM Plan submittal)
- VI. Provide emissions test data (see Indicator No. 1)
- VII. Provide an implementation plan for installing, testing, and operating the monitoring, if necessary

Permits are required to have the following items (see re-issued boiler Permit G4589, A/N 497200 and flare system Permit F79024, A/N 440828):

- I. The approved monitoring approach, including the indicators or the means to measure the indicators to be monitored
- II. A definition of exceedances or excursions
- III. The duty to conduct monitoring
- IV. Minimum data availability and averaging period requirements
- V. Milestones for testing, installation, or final verification

### **Applicable Regulations, Emission Limits, and Monitoring Requirements**

Rule 401	Visible emissions
Rule 402	Nuisance
Rule 404	PM Concentration
Rule 407	Liquid and Gaseous Air Contaminants
Rule 409	Combustion Contaminants
Rule 431.1	Sulfur Content of Gaseous Fuels
40 CFR Part 63, Subpart AAAA	MSW Landfill NMOC Emission Limit
40 CFR Part 64	Compliance Assurance Monitoring
Rule 1150.1	Landfill NMOC Emission Limit
Rule 1303	New Source Review ROG Emission Limit

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION EVALUATION AND CALCULATIONS</b>	PAGES 3	PAGE 3
	APPL NO 528859	DATE 11/15/2011
	PROCESSED BY AS08	CHECKED BY

**Table 1 Monitoring Approach for the CAM Plan for Boiler and Flares**

		<b>Boiler under Permit F11990, A/N 318060</b>	<b>Flares under Permit F25797, A/N 362517</b>
		Indicator No. 1	Indicator No. 1
I	Indicator	Exhaust Temperature	Temperature
II	Measurement Approach	Continuous Temperature Indicator and Recorder	Continuous Temperature Indicator and Recorder
III	Indicator Range and Corresponding Permit Condition (underlined)	Exhaust Temperature $\geq 340$ °F <u>Cond# 17</u>	Exhaust temperature $\geq 1400$ °F <u>Cond# 25</u>
IV	Performance Criteria		
	A. Specifications/ Data Representativeness	Temperatures measured and recorded with a temperature monitor installed in the boiler exhaust with minimum accuracy of +/- 1%.	Temperatures measured and recorded with a temperature monitor installed in the flare stack with minimum accuracy of +/- 1%.
	B. Verification of Operational Status	The temperature data will be reviewed daily by facility personnel.	The temperature data will be reviewed each day the flare is operational by facility personnel.
	C. QA/QC Practices and Criteria	The temperature monitor will be calibrated and maintained per manufacturer specifications.	The temperature monitor will be calibrated and maintained per manufacturer specifications.
	D. Monitoring Frequency	Continuous.	Continuous.
	E. Data Collection Procedures	Data Acquisition System (DAS) automatically collects and stores the temperature data electronically.	A chart records (paper) automatically records the temperature data manually. The records will be stored at the facility offices.
	F. Averaging Period	Hourly.	N/A.

**Quality Improvement Plan (QIP)**

The semi-annual monitoring report shall include the total operating time of this equipment and the total accumulated duration of all deviations for each semi-annual reporting period. The operator shall implement a Quality Improvement Plan (QIP) if an accumulation of deviations exceeds 5% duration of this equipment's total operating time for any semi-annual reporting period. The required QIP shall be submitted to the AQMD within 90 calendar days after the due date for the semi-annual monitoring report. Each deviation shall trigger inspection and documentation of corrective actions.

**Conclusions and Recommendations**

This CAM plan is in compliance with the applicable requirements of 40 CFR part 64. Approval of the CAM plan is recommended under A/N 526756. Permit F11990, A/N 318060 resource recovery system (boiler) and Permit F25797, A/N 362517 LFG flare system are recommended to be re-issued to incorporate the applicable CAM conditions into the existing permits.