

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION PERMIT APPLICATION EVALUATION AND CALCULATIONS	PAGES 4	PAGE 1
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Compliance Assurance Monitoring (CAM) Plan Evaluation
(40 CFR Part 64)

OWNER/OPERATOR:

LA COUNTY SANITATION DISTRICTS (LACSD), PALOS VERDES
P O BOX 4998
WHITTIER, CA 90607

FACILITY LOCATION:

26301 S. CRENSHAW BLVD. (PALOS VERDES LANDFILL)
ROLLING HILLS ESTATES, CA 90274

CO ID: 24520

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APPLICATION NO.: 526306

Compliance Assurance Monitoring (CAM) plan for Non-Methane Hydrocarbons (NMHC) emissions generated by MSW landfill and NMHC control using enclosed LFG flare.

INTRODUCTION:

This application was submitted on August 19, 2011 for Compliance Assurance Monitoring (CAM) plan under 40 CFR Part 64. This is a Title V facility for which Title V permit revision (A/N 483616) was issued May 18, 2010. This CAM plan is submitted for MSW LF emission unit, control technology is enclosed flare to control a specific pollutant- Non-Methane Hydrocarbons (NMHC).

Note: on 8/19/2011, A/N 526209 was also submitted for change of permit condition for LFG low NOx flare, PC483623, that is pending evaluation.

The following flare permits are active;
440825/ F82158 [Flare station consists of six (6) flares], granted 5/17/2006, TV Permit Section D .
483623 PC issued 5/18/2010, TV Permit Section H

The CAM rule became effective November 21, 1997, however, requirements of the plan were delayed while Title V program being implemented. Thus, owners and operators were subject to CAM plan requirement at the time of their initial Title V permit renewal.

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APPLICABILITY & REQUIREMENTS:

CAM rule (40 CFR Part 64) covers emission units that are evaluated on a pollutant by pollutant basis for equipment that meet the definition of pollutant specific emission units (PSUEs). The rule applies to each PSUE if the unit is located at a major source that is required to obtain a Part 70 or 71 (Title V) permit. The CAM plan requirements are;

- Describe the indicators to be monitored
- Describe ranges or the process to set indicator ranges
- Describe the performance criteria for the monitoring, including specifications for obtaining representative data, verification procedures to confirm monitoring operational status, QA/QC procedures and monitoring frequency.
- Provide a justification for the use of parameters, ranges, and monitoring approach.
- Provide emissions test data, if necessary
- Provide an implementation plan for installing, testing, and operating the monitoring.

EVALUATION:

440825/ F82158 [Flare station consists of six (6) flares] and 483623 PC
 Minimum operating temperature limit = 1500 deg F. per permit conditions.

MONITORING & PERFORMANCE:

Indicator: When the flare is in operation continuous temperature monitoring in the exhaust stack and temperature recorder must be in operation.
 Temperature shall be measured at a location above the flame zone, at least 0.6 second downstream of the burner and not less than 5 feet from the top of the stack.
 Temperature monitor shall have an accuracy of +/- 1% of the temperature being measured.
 Installation, replacement and preventative maintenance for the temperature monitors shall be in accordance with manufacturer's specifications.
 There shall be multiple monitors installed on each flare. When a thermocouple malfunctions or is non-functional, it shall be replaced.

Range: Minimum temperature of 1500 deg F is required. Temperature shall be recorded in degrees Fahrenheit. The data collected by an electronic data recorder shall record at least every 15 minutes.
 Excursion can be defined as any three-hour period of operation during which avg. combustion temperature is greater than 28 deg C (50 deg. F) below the minimum combustion temperature specified for the flare.
 Upon detecting any excursion from the acceptable range of readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable.

Frequency: Continuous temperature monitoring and recording. Valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.
 [Minimum 4 times per hr if post-control emissions are ≥ MST; or
 Minimum 1 time per day if post-control emissions are < MST].
 All exceedances shall be reported semi-annually that includes summary of information, at a minimum – number, duration and cause, and corrective actions taken.
 Same requirements apply for the monitor downtime incidences.

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Monitoring Operation & Maintenance:

The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7

Recordkeeping & Reporting:

The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9

Performance Test:

Flare shall be tested annually to show compliance with the NMOC hourly emission rate (offset limit), flare operating temperature, deg. F, TNMOC concentration (exhaust) in ppmv at 3% O₂, as hexane or demonstrate 98wt% DRE.

Most recent Source Test Results (Flare No. 1, F82158, A/N 440825): November 23, 2010 (enclosed S/T Summary Tests Results)

Flare operating temperature = 1597 deg F.

TNMOC : reported result is 99.72% wt% DRE, and TNMOC= 1.01 ppmv @ 3% O₂ as hexane which is < 20 ppmv limit - compliance.

Quality Improvement Plan:

If the District or EPA determine that a Quality Improvement Plan (QIP) is required under 40 CFR Part 64.7 (d)(2), the permittee shall develop and implement the QIP in accordance with 40 CFR Part 64.8.

Permit condition for the LFG flares, **F82158** (Section D) & **483623 PC** (Section H) shall be amended with the following;

THE OPERATOR SHALL OPERATE AND MAINTAIN THIS EQUIPMENT ACCORDING TO THE FOLLOWING REQUIREMENTS:

THE EXHAUST TEMPERATURE SHALL BE MAINTAINED AT A MINIMUM OF 1,500 DEGREES FAHRENHEIT WHENEVER THE EQUIPMENT IT SERVES IS IN OPERATION.

CONTINUOUS EXHAUST TEMPERATURE MONITORING AND RECORDING SYSTEM SHALL BE PURSUANT TO THE OPERATION AND MAINTENANCE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.7. SUCH A SYSTEM SHALL HAVE AN ACCURACY OF WITHIN ± 1% OF THE TEMPERATURE BEING MONITORED AND SHALL BE INSPECTED, MAINTAINED, AND CALIBRATED ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS USING AN APPLICABLE AQMD OR EPA APPROVED METHOD.

FOR THE PURPOSE OF THIS CONDITION, A DEVIATION SHALL BE DEFINED AS WHEN A TEMPERATURE OF LESS THAN 1,500 DEGREES FAHRENHEIT OCCURS DURING NORMAL OPERATION EXCEPT DURING STARTUPS OR SHUTDOWNS. NOT TO EXCEED 30 MINUTES. THE EXHAUST TEMPERATURE SHALL BE AVERAGED OVER A 15-MINUTE PERIOD, AND HOURLY AVERAGE SHALL BE COMPUTED FROM SUCH DATA POINTS. THE OPERATOR SHALL REVIEW THE RECORDS OF TEMPERATURE ON A DAILY BASIS TO DETERMINE IF A DEVIATION OCCURS OR SHALL INSTALL AN ALARM SYSTEM TO ALERT THE OPERATOR WHEN A DEVIATION OCCURS.

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FOR EACH SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K, WHENEVER A DEVIATION OCCURS FROM 1,500 DEGREES FAHRENHEIT, THE OPERATOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION, AND KEEP RECORDS OF THE DURATION AND CAUSE (INCLUDING UNKNOWN CAUSE, IF APPLICABLE) OF THE DEVIATION AND THE CORRECTIVE ACTION TAKEN.

ALL DEVIATIONS SHALL BE REPORTED TO THE AQMD ON A SEMI-ANNUAL BASIS PURSUANT TO THE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.9 AND CONDITION NOS. 22 AND 23 IN SECTION K OF THIS PERMIT.

THE OPERATOR SHALL SUBMIT AN APPLICATION WITH A QUALITY IMPROVEMENT PLAN (QIP) IN ACCORDANCE WITH 40 CFR PART 64.8 TO THE AQMD IF AN ACCUMULATION OF DEVIATIONS EXCEEDS 5 PERCENT DURATION OF THIS EQUIPMENT'S TOTAL OPERATING TIME FOR ANY SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K OF THIS PERMIT. THE REQUIRED QIP SHALL BE SUBMITTED TO THE AQMD WITHIN 90 CALENDAR DAYS AFTER THE DUE DATE FOR THE SEMI-ANNUAL MONITORING REPORT.

THE OPERATOR SHALL INSPECT AND MAINTAIN ALL COMPONENTS OF THIS EQUIPMENT ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE OPERATOR SHALL KEEP ADEQUATE RECORDS IN A FORMAT THAT IS ACCEPTABLE TO THE AQMD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS SPECIFIED IN THIS CONDITION AND 40 CFR PART 64.9 FOR A MINIMUM OF FIVE YEARS.
[RULE 3004(A) (4)-PERIODIC MONITORING, 40CFR PART 64]

Rules:

Proposed CAM plan for TNMOC control using enclosed flare(s) is expected to comply with the Applicable requirements of the,

- 40CFR Part 64
- 40 CFR Part 60, subpart WWW
- 40 CFR Part 63, subpart AAAA
- Rule 1150.1 and other applicable rules.

RECOMMENDATION:

It is recommended that a CAM plan be issued for LFG control equipment for TNMOC control. The above proposed CAM condition shall be included for each permitted flare.