EVALUATION FOR COMPLIANCE ASSURANCE MONITORING (CAM) PLAN

APPLICANTS NAME: Tesoro Refining & Marketing Company, LLC (ID 174727)

EQUIPMENT LOCATION: 8601 South Garfield Avenue
South Gate, CA 90280

CONTACT PERSON: Darrell Fah
(562) 495-6876

MAILING ADDRESS: 400 Oceangate, Suite 600
Long Beach, CA 90802

BACKGROUND/PROCESS DESCRIPTION

APPLICATION NO. 577945

Application No. 577945 is an application for a Compliance Assurance Monitoring (CAM) Plan for the remediation efforts. It was determined that both Flame oxidizers need to be incorporated in the CAM plan as (1) the vapor extraction systems are equipped with post process pollutant control devices, (2) their R1 VOC emissions are both greater than 10 tons per year, and (3)they are subject to the Title V permit program. The IC engine SVE and Storage Tank both have calculated R1 emissions below the 10 ton per year threshold. A condition has been added to the IC Engine permit limiting R1 emissions to 10 tons to ensure that it does not need to be included in the CAM plan.

The existing Model 4 Flame Ox (Permit G27296) will be updated to include the CAM condition in Section D of the permit; this will also be incorporated as a condition for the Model 2 Flame Ox (A/N 573110) in Section H, please see Recommendation section for proposed CAM condition.

This CAM plan is for air pollution control equipment used for remediation activities taking place at the Tesoro Logistics Vinvale Terminal which is a Major Source operating under a Title V Permit. The remediation equipment is located on the Vinvale property and it was determined that the equipment for remediation activities at this site are under common ownership with the terminal operations. The SCAQMD has agreed to issue two separate permits, the existing permit for Tesoro Logistics, Vinvale Terminal, and an Initial Title V permit (see A/N 575328) for Tesoro Refining and Marketing Company, LLC for the remediation efforts, which this CAM plan applies to. The equipment location is at 8601 South Garfield Ave South Gate, Ca (Facility ID 174727). The application was filed by Stantec Consulting on behalf of Tesoro Refining and Marketing Company. All operation, maintenance, recordkeeping, compliance, and quality assurance

activities for the remediation equipment are conducted by Stantec at the Tesoro site. The remediation equipment includes (2) Flame Oxidizers (one existing and one new), an IC engine SVE system, and a 42,000 gallon fixed roof storage tank.

The terminal operations taking place at the same address are conducted by Tesoro Logistics Operations (Facility ID 174710). This equipment found at the terminal is typical of a petroleum products bulk loading facility including storage tanks, loading/un-loading racks, control equipment, and associated equipment.

CAM PLAN: SUBMITTAL REQUIREMENTS

The CAM is promulgated in 40CFR 64 and contains specific federal monitoring and permit requirements for air pollution control systems that vent basic process equipment at Title V facilities.

A CAM Plan submittal must:

a. Describe the indicators to be monitored;
b. Describe the ranges or the process to set indicator ranges;
c. Describe the performance criteria for the monitoring, including
   - specifications for obtaining representative data
   - verification procedures to confirm the monitoring's operational status
   - quality assurance and control procedures
   - monitoring frequency
     4 times per hour (minimum) if post control emissions are equal to or exceed the major source threshold or
     1 time per day (minimum) if post control emissions are less than the major source threshold
   - the data averaging period;
d. Provide a justification for the use of parameters, ranges, and monitoring approach;
e. Provide emissions test data; and, if necessary,
f. Provide an implementation plan for installing, testing, and operating the monitoring.

In addition, Part 64 requires Title V permits to have the following items:

a. The approved monitoring approach, including the indicators and the means to measure the indicator(s) to be monitored;
b. A definition of exceedances or excursions;
c. The duty to conduct monitoring;

d. Minimum data availability and averaging period requirements; and
e. Milestones for testing, installation, or final verification (as applicable).

The CAM Plan submittal requirements and associated fulfillment is summarized in the table below.

Plan Submittal Requirement	Fulfillment as found in Tesoro's CAM Submittal Document Dated February 2012
Identify Indicator	Tesoro has identified the temperature at the outlet of the combustion chamber as the primary indicator (see page 3.1 of submitted CAM Plan).
Identify Monitoring Approach	Tesoro has stated that a thermocouple is used to monitor the indicator (see page 3.1of submitted CAM Plan).
Ranges or Designated Conditions for each Indicator	Tesoro has stated that the indicator range is between 1750°F and 1850°F at all times during normal operations (excluding startups or shutdowns).
Performance Criteria a. Data Representativeness	The thermocouple measures the temperature at the outlet of the combustion chamber (see page 3.1 of submitted CAM Plan) and is located within the exhaust stack.
b. Verification of Operational Status	The flame oxidizer will automatically shutdown in the event of a thermocouple failure and cannot be restarted until the thermocouple status reports operative.
c. QA/QC Practices and Criteria	Annual calibrations shall be performed in accordance with manufacturer's specifications to ensure thermocouple accuracy of +/- 0.75% of actual value (see page 3.1 of submitted CAM Plan).
d. Monitoring Frequency	The temperature at the outlet of the flame oxidizer combustion chamber is continuously monitored (see page 3.2 of submitted CAM Plan).
Data Collection Procedure	Temperature data measured at the outlet of the flame oxidizer combustion chamber is recorded to digital memory every 10 seconds in real time readings. (see page 3.2 of submitted CAM Plan).

Permits may also contain requirements for a facility to develop and implement a Quality Improvement Plan (QIP) in the event excessive exceedances/excursions (designated as a deviation in Regulation XXX) occur. The requirements and associated fulfillment of the Title V permit for Tesoro Logistics is summarized in the table below.

Permit Requirement	Fulfillment
Shall include indicators to be monitored	Flame oxidizer permit requires the temperature of the combustion chamber be continuously monitored (see Permit Condition).
Shall include Monitoring Approach	Flame oxidizer permit requires that the indicator (temperature) be monitored with a thermocouple (see Permit Condition).
Shall include definition of excursions & exceedances.	Flame oxidizer permit defines excursions/exceedances (as deviations per Regulation XXX) as measured temperatures that are below 1750 °F when the equipment it serves is in normal operation (see Permit Condition).
Shall include duty to conduct monitoring	The flame oxidizer permit mandates monitoring in a prescribed manner.
Shall include requirements for data availability & averaging period	The Title V permit requires pertinent data and records to be available for 5 years; flame oxidizer requires the temperature measurement/ determination to be continuous (i.e. instantaneous).
Shall include milestones for installation, testing, & verification	Flame oxidizer, thermocouple and recorder are currently installed and operating; on-going testing every calendar year for compliance is required via calibration requirements.
May include Quality Improvement Plan (QIP)	Flame oxidizer permit includes criteria for submittal of a QIP (see Permit Condition).

RECOMMENDATION

Propose the CAM Plan (A/N 577945) with the Initial Title V application (A/N 575328) to EPA for 45-day review and to the public (via newspaper notice) for 30-day comment period; add the CAM permit condition to the air pollution control system permit (P/O G27296) in Section D, and

remove conditions 11 and 12 (non CAM conditions); place the same CAM permit condition on the air pollution control system permit (A/N 573110, P/C: TBD) in Section H.

PERMIT CONDITION:
See Initial Title V A/N 575328 Section D (Permit G27296), and section H (A/N 573110) for CAM Permit Condition.