

May \_\_, 2013

Mr. Robert Stockdale  
Environmental Engineer  
2101 E. Pacific Coast Hwy.  
Wilmington, CA 90744

**Re:** Rule 1118 Flare Monitoring and Recording Plan  
Application Number: 474150  
Plan Owner/Operator: Tesoro Refining and Marketing Co., Los Angeles Refinery  
Facility ID: 800436  
Facility Address: 2101 E. Pacific Coast Hwy, Wilmington, CA 90744

Dear Mr. Stockdale:

The South Coast Air Quality Management District (AQMD) has reviewed the revised Flare Monitoring and Recording Plan (FMRP) submitted on October 2, 2007 by the Tesoro Los Angeles Refinery to comply with District Rule 1118(f)(1)(A). Based on the information submitted, along with supplemental information provided in response to additional information requests made by the District, the compliance plan, with exception to the proposed data substitution procedure, is approved subject to the following conditions. This revised FMRP, as approved, will supersede the amended plan approved under A/N 348198 on November 30, 2005.

The owner/operator shall comply with all provisions of this approved revised Flare Monitoring and Recording Plan unless the plan is suspended, revoked, modified, reissued, or denied, as well as all other applicable requirements of Rule 1118. Violation of any terms of the plan is a violation of Rule 1118.

CONDITIONS

1. The owner/operator shall perform monitoring and recording of the operating parameters for the following flares in accordance with this approved compliance plan and other applicable requirements of Rule 1118(g). The monitoring and recording shall be performed at all times except when the flare monitoring system is out of service for reasons described in Rule 1118(g)(5)(A).

Flare ID	East (No. 1)	West (No. 2)
Flare Type	General Service	General Service

2. A flare event occurs when the flow velocity of vent gas in a flare equals to 0.10 feet per second (2,542 SCFH) or greater. The flare event ends when the flow velocity drops below 0.12 feet per second (3,050 SCFH). Until the Panametrics flow meter(s) referenced in Condition No. 4 is relocated or additional Panametrics flow meters are installed downstream of flare KO/H<sub>2</sub>O seal drums, V-847 and V-848, the owner/operator can provide verifiable monitoring records, approved by the AQMD, to demonstrate that vent gas was combusted in the flare for the purpose of determining the onset of a flare event and that no more vent gas was combusted in the flare to determine when a flare event ends. The Panametrics flow meter(s) relocation or addition shall be completed no later than April 1, 2014.
3. A flare event lasting 24 hours or less which continues into the next calendar day shall be considered a single flare event even when the event occurs in two consecutive days. When a flare event continues for more than 24 hours, each calendar day shall be a separate flare event.
4. The continuous HHV analyzers, total sulfur analyzers and gas flow meter used in this flare plan shall meet or exceed the minimum specifications described in Attachment A of Rule 1118. The flare monitoring system shall also be certified by the SCAQMD. For quality assurance procedures, the owner/operator shall follow the Guidelines for Rule 1118 Flare Monitoring System Quality Assurance and Quality Control Plan published by the SCAQMD.
5. When the maximum range of a flow meter is exceeded, the flow rate shall be assumed to be the maximum design capacity of the flare.
6. Volumetric flow rates of vent gases shall be corrected to standard conditions of 14.7 psia and 68°F.
7. Whenever the continuous flow meter, HHV and/or TSC analyzer(s) is down due to breakdowns or maintenance, the owner/operator shall use the data substitution method referenced in Attachment B of Rule 1118 to calculate and report flare emissions except when an alternative data substitution procedure has been approved in writing by the District. Analyzer(s) downtime shall be limited pursuant to Rule 1118(g)(5)(A).
8. The owner/operator shall calculate emissions of criteria pollutants from each flare and each flare event using the methods described in Attachment B of Rule 1118.
9. The owner/operator shall install and maintain a flow meter to monitor and record the pilot and purge gas flow to the flares.
10. In the event the pilot gas flow meter is out of service, the monitoring/recording system shall default to the maximum design flow rate of 900 SCFH during the outage.
11. In the event the purge gas flow meter is out of service, the monitoring/recording system shall default to the maximum design flow rate of 17,700 SCFH during the outage.
12. The owner/operator shall monitor the flares at all times for presence of a pilot flame using a thermocouple that will alarm the owner or operator in the event of a flame out. In the event of a pilot flame out, the owner or operator shall re-ignite the pilot immediately.

13. The owner/operator shall notify the Executive Officer within one hour of any unplanned flare event with emissions exceeding either 100 pounds of VOC or 500 pounds of sulfur dioxide, or exceeding 500,000 standard cubic feet of flared vent gas. The owner/operator shall also notify the Executive Officer by telephone at least 24 hours prior to the start of a planned flare event with emissions exceeding either 100 pounds of VOC or 500 pounds of sulfur dioxide, or 500,000 standard cubic feet of combusted vent gas.
14. The owner/operator shall conduct a Specific Cause Analysis for any flare event, excluding planned shutdown, planned startup and turnaround, resulting in any of the followings: (a) 100 pounds of VOC emissions. (b) 500 pounds of sulfur dioxide emissions. (c) 500,000 standard cubic feet of vent gas combusted. The analysis shall identify the cause and duration of the flare event and describe any mitigation and corrective action taken to prevent recurrence of a similar flare event in the future. Unless an extension is granted, the owner/operator shall submit Specific Cause Analysis to the Executive Officer within 30 days of the event.
15. The owner/operator shall conduct an analysis and determine the relative cause for a flare event that results in combustion of more than 5,000 standard cubic feet of vent gas. A Specific Cause Analysis may be submitted to satisfy this condition.
16. For the purpose of Rule 1118(d)(1), flare emissions from this facility and Tesoro SRP (ID 151798) shall be considered as flare emissions from a single petroleum refinery.
17. The owner/operator shall submit a complete Flare Minimization Plan for approval by the Executive Officer no later than 90 days from the end of a calendar year in which flare emissions exceeding the annual performance targets set by Rule 1118(d)(1). The plan shall comply with the requirements of Rule 1118(e).
18. The owner/operator shall maintain records in a manner approved by the Executive Officer for the following.
  - a. Flare event data collected pursuant to paragraph (g)(3), (g)(4), (g)(5), (g)(6) and subparagraph (g)(8)(C) of Rule 1118 as applicable.
  - b. Total daily and quarterly emissions of criteria pollutant from each flare and each flare event along with all information specified by Rule 1118(i)(5)(B).
  - c. Pilot flame failure report.
  - d. Planned and unplanned flare monitoring system downtime report that include date, time and explanation for taking the system out of service and date, time the system returned to normal operations.
  - e. Information to substantiate any exemptions taken under Rule 1118(k).
  - f. Specific Cause Analysis completed pursuant to Condition No. 14.
  - g. Relative Cause Analysis completed pursuant to Condition No. 15.
  - h. Annual acoustical pressure relief device leak survey.
  - i. Combined annual sulfur dioxide emissions for all flares at Tesoro LAR (ID 800436) and Tesoro SRP (ID 151798) normalized over the crude oil processing capacity in calendar year 2004 pursuant to Condition No. 16.
  - j. Video records pursuant to Rule 1118(g)(7).

Within 30 days after the end of each calendar quarter, the owner/operator shall submit a quarterly report to the AQMD Refinery Compliance Team to the below address. Items (a) through (g) shall be submitted quarterly in electronic format. Hard copy of item (h) shall be submitted with the quarterly report for the quarter which the survey was conducted. Hard copy of item (i) shall be submitted with the last quarterly report for the year. Item (j) shall be made available to the Executive Officer upon request.

All records required by this condition shall be certified for accuracy in writing by the responsible facility official and maintained for at least five years.

SOUTH COAST AIR QUALITY MGMT DISTRICT  
REFINERY COMPLIANCE  
1500 WEST CARSON STREET, SUITE 115  
LONG BEACH, CA 90810

Please review the plan carefully and discard the earlier approved version. If you have any questions, please contact Mr. Thomas Lee at (909) 396-3138 or [tleel@aqmd.gov](mailto:tleel@aqmd.gov).

Sincerely,

Danny Luong, P.E.  
Senior Manager  
Refinery and Waste Management Permitting

cc: Ed Pupka  
A/N 474150 file