



FACILITY PERMIT TO OPERATE ULTRAMAR INC (NSR USE ONLY)

SECTION I: PLANS AND SCHEDULES

This section lists all plans approved by AQMD for the purposes of meeting the requirements of applicable AQMD rules specified below. The operator shall comply with all conditions specified in the approval of these plans, with the following exceptions:

- a. The operator does not have to comply with NOx or SOx emission limits from rules identified in Table 1 or Table 2 of Rule 2001(j) which become effective after December 31, 1993.
- b. The operator does not have to comply with NOx or SOx emission limits from rules identified in Table 1 or Table 2 of Rule 2001(j) after the facility has received final certification of all monitoring and reporting requirements specified in Section F and Section G.

Documents pertaining to the plan applications listed below are available for public review at AQMD Headquarters. Any changes to plan applications will require permit modification in accordance with Title V permit revision procedures.

List of approved plans:

Application	Rule
299235	463
334141	2002
410212	1178
423099	1123
423346	1173
458530	1118
460671	1105.1
493043	461
500933	1118
509777	1166
<u>523986</u>	<u>1173</u>

NOTE: This section does not list compliance schedules pursuant to the requirements of Regulation XXX – Title V Permits; Rule 3004(a)(10)(C). For equipment subject to a variance, order for abatement, or alternative operating condition granted pursuant to Rule 518.2, equipment specific conditions are added to the equipment in Section D or H of the permit.



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

February 3, 2012

Mr. Matt Smith
Ultramar Inc.
2402 E. Anaheim St.
Wilmington, CA 90744

Re: Rule 1173 Compliance Plan
Application Number: 523986
Plan Owner/Operator: Ultramar Inc.
Facility ID: 800026
Site Address: 2402 E. Anaheim St.
Wilmington, CA 90744

Dear Mr. Smith:

Please refer to the submitted application (Application #523986) for the evaluation of your facility's Rule 1173 compliance plan dated March 11, 2011 to comply with the South Coast Air Quality Management District's (AQMD) Rule 1173 - Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants. Rule 1173 compliance plan has been reviewed and approved, subject to the conditions listed below. This Rule 1173 Compliance Plan supersedes the one approved under Application No. 423346 dated December 22, 2004.

ATMOSPHERIC PRD INVENTORY

Location and ID					PRD Type and Specification			Valve Type	Electronic Process Parameter Monitoring Rule 1173(h)(1)(A)
PRD ID No.	Process Unit Equipment ID No.	FP Process ID	FP System No.	FP Device No.	Set Press (psig)	Inlet Size (Inches)	Outlet Size (Inches)		
PSV 541	Ethyl Mercaptan Containers, ESD of LPG Loading Rack	12	2 & 3	D1624 & D1625	150	1.5	2.5	PSV	Ultrasonic Vibration

CONDITIONS

1. The operator shall install and operate its atmospheric PRD monitoring system in accordance with all data and specifications submitted with this application under which this plan is approved unless otherwise specified below.
2. The operator shall install electronic monitoring devices as proposed in the PRD inventory and compliance plan on its atmospheric PRD that is subject to Rule 1173 (h)(1)(B).
3. The operator shall use a continuous pressure monitoring system (CPMS) to continuously monitor and record the process pressure and the electronic monitoring device that are used as indicators of release for the PRD identified in the plan.
4. CPMS shall be defined to include the electronic monitoring devices, pressure sensors or transmitters, receivers, and the data acquisitions or recording systems. Continuous recording shall be defined as the recorded pressure readings and electronic valve monitoring readings at a minimum of one minute intervals. The data recording systems shall be accurately synchronized with the time and date of the measurement.
5. The operator shall ensure that the CPMS for the subject atmospheric PRD is properly maintained and kept in good operating condition at all times when the process equipment that it serves is in operation, except when it is taken out of service due to the following reasons:
 - a. Failure, breakdown, or unplanned maintenance of the data acquisition or recording system, which shall not exceed 48 hours cumulatively in any given calendar quarter. The operator shall also report the time period that the data recording system is out of service in the quarterly report.
 - b. Planned maintenance of the CPMS shall not exceed 7 days in a calendar year unless the operator has notified the District by e-mail detailing the specific reason for the maintenance within 24 hours of taking the CPMS from service. All notifications shall be forwarded to refinery.compliance@aqmd.gov.
6. The operator shall use following equation(s) or other alternative District-approved methodology to determine the volatile organic compound (VOC) emissions from a PRD release. The operator shall submit a plan application in order for the District to evaluate an alternative VOC emission estimation methodology.

PRD Equation for Vapor or Gas Service

$$W_s = \frac{(ACK_d K_b K_c)(P+14.7)}{3600 \sqrt{\frac{(T+460)Z}{M}}}$$

$$W_{voc} = W_s * VOC * t$$

$$W_{TVOC} = \sum W_{voc}$$

Where:

A = Relief Valve Orifice Size

$$C = \text{Sizing Coefficient} = 520 \sqrt{k \left(\frac{2}{k+1} \right)^{\frac{k+1}{k-1}}}$$

k = Cp/Cv = Specific Heat Ratio for the released gas

Kd = Effective Coefficient of Discharge (use Kd = 0.975 in absence of manufacturer's PRD specific data)

Kb = Capacity Correction Factor

Kc = Combination Correction Factor. (Kc = 1 if no rupture disk; Kc = 0.9 if rupture disk)

M = Molecular Weight of the released gas

P = Pressure (psig), as measured with Continuous Process Monitoring System

T = Temperature (°F)

t = Recorded Duration of Release in Seconds by Electronic Monitoring Device

VOC = weight percent VOC in the released gas

Ws = Flow through the PRD, lb/sec

Wvoc = Flow of VOCs through the PRD

W_{TVOC} = Total VOC Released during the Event, lbs

Z = Compressibility Factor

For each PRD release event, it shall be assumed that the PRD is fully open from the time that the CPMS records a pressure value which is equal to or greater than the PRD setpoint until the time that the CPMS records a pressure value that is less than the PRD setpoint and/or other approved monitoring device detects the opening of the PRD until the monitoring device detects the closing of the PRD.

7. The operator shall calibrate and maintain each pressure sensor and electronic monitoring device in accordance with manufacturer's specifications.
8. All components of the CPMS shall be made available to District personnel for inspection upon request.
9. The operator shall keep adequate records to show compliance with all plan conditions. Such records shall be made available to District personnel upon request. The operator shall maintain records for at least five years.

10. The provisions of this plan will not apply to the PRD if it is determined to be no longer subject to Rule 1173 (h), including the PRD being removed, being tied into a closed system, being modified so that it falls under the provisions of Rule 1173(h)(1)(G), or being located on equipment that is out of service and hydrocarbon free. If the operator makes any changes allowed under this condition, the operator shall submit an updated inventory to the District within 12 months identifying changes to the PRD.

If you have any question, please contact Mr. Johnny Pan at (909) 396-3612.

Sincerely yours,

Jay Chen, P.E.
Senior AQ Engineering Manager
Refinery & Waste Management
Permitting

cc: Compliance
A/N 523986

DRAFT