

NOTICE PUBLICATION/REGULATIONS SUBMISSION

REGULATIONS (See Instructions on reverse)

For use by Secretary of State only

STD. 400 (REV. 2-91)

AGENCY AIR RESOURCES BOARD				AGENCY FILE NUMBER (if any)	
OAL FILE NUMBERS	NOTICE FILE NUMBER 295-082910	REGULATORY ACTION NUMBER 96-0116-065	EMERGENCY NUMBER 96 JAN 16 PM 4:55	PREVIOUS REGULATORY ACTION NUMBER	
RECEIVED FOR FILING AUG 29 '95 Office of Administrative Law			PUBLICATION DATE SEP 08 '95		
NOTICE			REGULATIONS		

ENDORSED FILED
IN THE OFFICE OF

95 FEB 26 PM 3:08

Bill Jones
ILLUSTRATION
SECRETARY OF STATE

A. PUBLICATION OF NOTICE (Complete for publication in Notice Register)

1. TITLE OF NOTICE Test Methods for Phase 2 Gasoline		TITLE(S) 13	FIRST SECTION AFFECTED 2263(b)	2. REQUESTED PUBLICATION DATE September 8, 1995	
3. NOTICE TYPE <input checked="" type="checkbox"/> Notice re Proposed Regulatory Action <input type="checkbox"/> Other		4. AGENCY CONTACT PERSON Kathleen Walsh		TELEPHONE NUMBER (916) 322-2884	
OAL USE ONLY	ACTION ON PROPOSED NOTICE <input type="checkbox"/> Approved as Submitted <input type="checkbox"/> Approved as Modified		NOTICE REGISTER NUMBER 95 #362	PUBLICATION DATE 9-8-95	

B. SUBMISSION OF REGULATIONS (Complete when submitting regulations)

1. SPECIFY CALIFORNIA CODE OF REGULATIONS TITLE(S) AND SECTION(S) (Including title 26, if toxics-related)	
TITLE(S) 13	ADOPT
SECTIONS AFFECTED	AMEND 2263(b)
	REPEAL
2. TYPE OF FILING	
<input checked="" type="checkbox"/> Regular Rulemaking (Gov. Code, § 11346) <input type="checkbox"/> Resubmittal <input type="checkbox"/> Changes Without Regulatory Effect (Cal. Code Regs., title 1, § 100) <input type="checkbox"/> Emergency (Gov. Code, § 11346.1(b))	
<input type="checkbox"/> Certificate of Compliance: The agency officer named below certifies that this agency complied with the provisions of Government Code §§ 11346.4 - 11346.8 prior to, or within 120 days of, the effective date of the regulations listed above.	
<input type="checkbox"/> Print Only <input type="checkbox"/> Other (specify)	
3. DATE(S) OF AVAILABILITY OF MODIFIED REGULATIONS AND/OR MATERIAL ADDED TO THE RULEMAKING FILE (Cal. Code Regs. title 1, §§ 44 and 45) December 11, 1995 - December 26, 1995	
4. EFFECTIVE DATE OF REGULATORY CHANGES (Gov. Code § 11346.2) <input type="checkbox"/> Effective 30th day after filing with Secretary of State <input checked="" type="checkbox"/> Effective on filing with Secretary of State <input type="checkbox"/> Effective other (Specify)	
5. CHECK IF THESE REGULATIONS REQUIRE NOTICE TO, OR REVIEW, CONSULTATION, APPROVAL OR CONCURRENCE BY, ANOTHER AGENCY OR ENTITY N/A	
<input type="checkbox"/> Department of Finance (Form STD. 399) <input type="checkbox"/> Fair Political Practices Commission <input type="checkbox"/> State Fire Marshal	
<input type="checkbox"/> Other (Specify)	
6. CONTACT PERSON Kathleen C. Walsh, Senior Staff Counsel	TELEPHONE NUMBER (916) 322-2884

7. I certify that the attached copy of the regulation(s) is a true and correct copy of the regulation(s) identified on this form, that the information specified on this form is true and correct, and that I am the head of the agency taking this action, or a designee of the head of the agency, and am authorized to make this certification.

SIGNATURE OF AGENCY HEAD OR DESIGNEE 	DATE January 5, 1996
TYPED NAME AND TITLE OF SIGNATORY Tom Cackette, Chief Deputy Executive Officer	

FINAL REGULATION ORDER

Amend section 2263, title 13, California Code of Regulations, as follows:

Section 2263. Sampling Procedures and Test Methods

(a) *Sampling Procedures.* In determining compliance with the standards set forth in this subarticle 2, an applicable sampling methodology set forth in 13 C.C.R. section 2296 shall be used.

(b) *Test Methods.*

(1) In determining compliance with the standards set forth in this subarticle 2, the test methods presented in Table 1 shall be used. All identified test methods are incorporated herein by reference.

Table 1

<i>Section</i>	<i>Gasoline Specification</i>	<i>Test Method</i> ^a
2262.1	Reid Vapor Pressure	ASTM D 323-58 ^{ab} or 13 C.C.R. Section 2297
2262.2	Sulfur Content 1 ppm to <30 ppm	ASTM D 2622-87 <u>ASTM D 2622-94</u> ^{b,c,d,e} or <u>ASTM D 5453-93</u> ^{e,f}
2262.3	Benzene Content	ASTM 3606-87D 5580-9X5 ^g or ARB MLD 116 ^b
2262.4	Olefin Content	ASTM D 1319-89-9X ^{g,f}
2262.5	Oxygen Content	ASTM D 4815-94
2262.6	T90 and T50	ASTM D 86-90
2262.7	Aromatic Hydrocarbon Content	ARB MLD 116 ^b <u>ASTM D 5580-9X5</u> ^g

a Do not report values below the limit of detection (LOD) specified in the test method. Where a test method does not specify a LOD, do not report values below the lower limit of the scope of the test method.

b Delete paragraph 4(b) concerning sampling.

b Air Resources Board, Monitoring and Laboratory Division, "Procedure for the Analysis of Benzene and Other Aromatic Components of Gasoline," dated November 1991. This method is to be used instead of ASTM 3606-87 to determine benzene content if ethanol is present.

b Results showing sulfur concentration of 30 ppm or less using this method shall be reported as 30 ppm.

c Make the following modifications to paragraph 9.1:

1- Low Level Sulfur Calibration Procedure

Reagents

Thiophene, at least 99% purity

2-Methylthiophene, at least 98% purity

Toluene, reagent grade

2,2,4 - Trimethylpentane, reagent grade

Preparation of Stock Standard

Weigh standard materials thiophene (~0.7290 gm) and 2-methylthiophene (~0.7031 gm) separately into a tared volumetric flask and record the individual mass to 0.1 mg. Add "mixed solvent" containing 25% toluene and 75% iso-octane (by volume) into the flask to a net weight of approximately 50 gm and record the weight. This "Stock Standard" contains approximately 10 mg/gm sulfur. The actual sulfur concentration can be calculated as follows:

Sulfur from thiophene (gm) =

Weight of thiophene * 32.06 * purity / 84.14

Sulfur from 2-methylthiophene (gm) =

Weight of 2-methylthiophene * 32.06 * purity / 98.17

Sulfur concentration of Stock Standard (gm/gm) =

(sulfur from thiophene + sulfur from 2-methylthiophene) / net weight of the stock standard

Multiply the sulfur concentration by 1000 to convert the unit to mg/gm.

Preparation of Calibration Standards

Pipet 2.5 ml of the Stock Standard to 250 ml flask and dilute with the "mixed solvent" to the mark. The "Diluted Standard" contains approximately 100 mg/kg sulfur. Prepare 1, 5, 10, 20, 30, 40, 50, 75 ppm calibration standards by pipetting 1, 5, 10, 20, 30, 40, 50, 75 ml of the Diluted Standard into a 100 ml flask, respectively, and diluting with the "mixed solvent" to the mark. The actual concentration of the calibration standard should be determined from the stock standard. The standards with concentration ranging from 1 to 5 to 100 ppm and the "mixed solvent" are to be used for calibrating the instrument.

d Replace ASTM D 2622-94 reproducibility values with the following:

Sulfur Content, ppm

Reproducibility

10 to 30

89.5 40.5% X Sulfur Content (ppm)

>30 to 60

25.7 19.2% X Sulfur Content (ppm)

60 to 100

18.9% X Sulfur Content (ppm)

e As an alternative to the designated test method (ASTM D 2622-94), D 5453-93 may be used for gasoline with sulfur concentrations of 30 ppm or above provided the results from testing with D 5453-93 are correlated with ASTM D 2622-94 as modified in e above.

f Report results as sulfur content no less than 1 ppm.

e The reproducibility of benzene is as follows:

Reproducibility = 0.1409 (X^{1.113}), where X = vol %

gf Add the following reproducibility statements for oxygenate-containing samples:

	<u>Range</u>	<u>Repeatability</u>	<u>Reproducibility</u>
<u>Aromatics</u>	<u>13-40</u>	<u>1.3</u>	<u>3.7</u>
<u>Olefins</u>	<u>4.03-33</u>	<u>0.258(X)^{0.6}</u>	<u>0.819(X)^{0.6}</u>
<u>Saturates</u>	<u>15-68</u>	<u>1.5</u>	<u>4.2</u>

X = Volume %

g The reproducibility of total aromatic hydrocarbon is as follows:

Reproducibility = 1.4 vol%

(c) **Equivalent Test Methods.** Whenever this section provides for the use of a specified test method, another test method may be used following a determination by the executive officer that the other method produces results equivalent to the results with the specified method.

NOTE: Authority cited: sections 39600, 39601, 43013, 43018, and 43101, Health and Safety Code; and Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975). Reference: sections 39000, 39001, 39002, 39003, 39010, 39500, 39515, 39516, 41511, 43000, 43016, 43018, and 43101, Health and Safety Code; and Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975).