

## APPENDIX B-6

California Environmental Protection Agency  
AIR RESOURCES BOARD

### PROPOSED

## CALIFORNIA NON-METHANE ORGANIC GAS TEST PROCEDURES FOR 2017 AND SUBSEQUENT MODEL YEAR VEHICLES

Adopted: September 2, 2015

Amended: [INSERT DATE OF AMENDMENT]

~~Emissions Compliance, Automotive Regulations and Science Division~~  
~~9528 Telstar Avenue~~  
~~El Monte, California 91731~~  
Mobile Source Laboratory Division  
4001 Iowa Avenue  
Riverside, California 92507

[Note: This version of the Proposed Regulation Order complies with Government Code section 11346.2 subdivision (a)(3). The proposed amendments are shown in underline to indicate additions and strikethrough to indicate deletions from the existing regulatory text. For ease of readability, CARB has also provided a version of the proposed amendments that can toggle between amendments in strikeout/underline and a "clean" version with amendments incorporated into the regulatory text, which can be found in Appendix B-6.1.]

NOTE: Mention of any trade name or commercial product does not constitute endorsement or recommendation of this product by the Air Resources Board.

NOTE: The proposed amendments to this document are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions compared to the test procedures as adopted September 2, 2015. Existing intervening text that is not amended in this rulemaking is indicated by “\* \* \* \* \*”.

\* \* \* \* \*

**Part A**

**GENERAL APPLICABILITY AND REQUIREMENTS**

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- The analyses specified in the table below shall be performed to determine mass emission rates of NMOG in grams per mile (g/mi) or milligrams per mile (mg/mi) for vehicles operated on the listed fuel:

Fuel	NMHC by FID	Alcohols	Carbonyls
Alcohol	X	X	X
CNG	X		X
Diesel	X		
Gasoline	X		X
LPG	X		X

Note: Alternatives to direct measurement of carbonyls under certain conditions are presented in the “California 2015 and Subsequent through 2025 Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,” Section D.1.10 and the “California 2026 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,” Section D.1.10.

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4. For natural gas-fueled vehicles, the methane concentration in the exhaust sample shall be measured with a methane analyzer. A GC combined with a FID is used for direct measurement of methane concentrations. SAE Recommended Practice J1151 [Ref. 4] is a reference on generally accepted GC principles and analytical techniques for this application. A density of 18.89 g/ft<sup>3</sup> shall be used to determine the methane mass emissions.

The methane mass emissions shall be multiplied by the appropriate methane reactivity adjustment factor and then added to the NMOG emissions as specified in the "California 2015 and Subsequent through 2025 Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," incorporated by reference in Section 1961.2, title 13, California Code of Regulations (CCR) and the "California 2026 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," incorporated by reference in Section 1961.4, title 13, CCR.

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