

SMOKE EMISSIONS

The standard for smoke emitted from a motor vehicle is:

- a. The shade, or the equivalent opacity of the shade,¹ designated as No. 1 on the Ringelmann Chart;² or
- b. The shade, or equivalent opacity of the shade, designated as Ringelmann No. 2, if the smoke is for a period not exceed five seconds at a time.

ADDITIONS TO TITLE 17, CALIFORNIA ADMINISTRATIVE CODE—ADOPTED BY THE CALIFORNIA STATE BOARD OF PUBLIC HEALTH, JUNE 10, 1966

ARTICLE 2. STANDARDS FOR MOTOR VEHICLE EMISSIONS

30570. *Exhaust Odor and Irritation*

The standards for exhaust odor and irritation are:

- (a) The average intensity of odor as determined by subjective appraisal shall be less than the intensity from diesel vehicles with horizontal exhaust pipes representative of the diesels in use in 1966 and whose odorant concentrations have been reduced by at least 80 percent.
- (b) There shall be no detectable eye, nasal or throat irritation to at least 75 percent of the panel.
- (c) Exhaust odors that are different in quality from characteristic diesel odor shall be less objectionable to the panel than the odor from diesel vehicles with horizontal exhaust pipes representative of the diesels in use in 1966 and whose odorant concentrations have been reduced by at least 80 percent.
- (d) The conditions for the appraisal are:
 1. The odor and irritation panel shall consist of not less than 10 persons.
 2. Appraisal of odor and irritation shall be made on a vertical plane ten feet distant from the exhaust outlet to either side of the motor vehicle parallel to the longitudinal axis. For vehicles with more than one exhaust outlet, the appraisal shall be made on a vertical plane parallel to the longitudinal axis at a horizontal distance ten feet from the midpoint of the exhaust outlets.
 3. The exhaust gas shall be evaluated during the modes of idle and full throttle acceleration.
 4. Other methods of odor appraisal or measurement may be used if approved by the Department of Public Health.

ADDITION TO TITLE 17, CALIFORNIA ADMINISTRATIVE CODE—ADOPTED BY THE CALIFORNIA STATE BOARD OF PUBLIC HEALTH, OCTOBER 21, 1966

ARTICLE 2. STANDARDS FOR MOTOR VEHICLE EMISSIONS

30520. *Exhaust Emissions.* (a) *The standards of emissions of motor vehicle exhaust contaminants are:*

- 1(Vehicles with engine displacement of 50 to 100 cubic inches: Hydrocarbon—410 parts per million by volume as hexane. Carbon Monoxide—2.3 percent by volume.
- (2) Vehicles with engine displacement of 101 to 140 cubic inches: Hydrocarbons—350 parts per million by volume as hexane. Carbon Monoxide—2.0 percent by volume.
- (3) Vehicles with engine displacement above 140 cubic inches: Hydrocarbons—275 parts per million by volume as hexane. Carbon Monoxide—1.5 percent by volume.
- (4) Oxides of Nitrogen—350 parts per million by volume as nitrogen dioxide, for all engine displacements.

However, effective January 1, 1970, the standards of emissions of motor vehicle exhaust are:

Hydrocarbons—180 parts per million by volume as hexane.

Carbon Monoxide—1.0 percent by volume.

Oxides of Nitrogen—350 parts per million by volume as nitrogen dioxide.

- (b) Exhaust gas concentrations shall be adjusted to a dry exhaust volume containing 15 percent by volume of carbon dioxide plus carbon monoxide. How-

¹ Equivalent opacity is defined as the obscuration to an observer's view produced by smoke of any color that is equal to an obscuration by smoke of a shade specified in the Ringelmann Smoke Chart, published by the U.S. Bureau of Mines.

² As published by the U.S. Bureau of Mines, Information Circular 7718, August, 1955.