

§ 88.105-94 Clean-fuel fleet emission standards for heavy-duty engines.

(a) Exhaust emissions from engines used in heavy-duty low emission vehicles shall meet one of the following standards:

(1) Combined emissions of oxides of nitrogen and nonmethane hydrocarbons (or nonmethane hydrocarbon equivalent) shall not exceed 3.8 grams per brake horsepower-hour.

(2) Combined emissions of oxides of nitrogen and nonmethane hydrocarbons (or nonmethane hydrocarbon equivalent) shall not exceed 3.5 grams per brake horsepower-hour when tested (certified) on fuel meeting the specifications of California certification fuel.

(b) Exhaust emissions from engines used in heavy-duty low emission vehicles shall meet conventional vehicle standards set forth in Part 86 for total hydrocarbon, carbon monoxide, particulate, and organic material hydrocarbon equivalent.

(c) Exhaust emissions from engines used in ultra-low emission heavy-duty vehicles shall meet each of the following standards:

(1) The combined emissions of oxides of nitrogen and nonmethane hydrocarbons (or nonmethane hydrocarbon equivalent) shall not exceed 2.5 grams per brake horsepower-hour.

(2) Carbon monoxide emissions shall not exceed 7.2 grams per brake horsepower-hour.

(3) Particulate emissions shall not exceed 0.05 grams per brake horsepower-hour.

(4) Formaldehyde emissions shall not exceed 0.025 grams per brake horsepower-hour.

(d) Exhaust emissions from engines used in inherently-low emission heavy-duty vehicles shall meet each of the following standards:

(1) The combined emissions of oxides of nitrogen and nonmethane hydrocarbons (or nonmethane hydrocarbon equivalent) shall not exceed 2.5 grams per brake horsepower-hour.

(2) Carbon monoxide emissions shall not exceed 14.4 grams per brake horsepower-hour.

(3) Particulate emissions shall not exceed 0.10 grams per brake horsepower-hour.

(4) Formaldehyde emissions shall not exceed 0.05 grams per brake horsepower-hour.

(e) The standards set forth in paragraphs (a), (b), (c), and (d) of this section refer to the exhaust emitted while the vehicle is being tested in accordance with the applicable test procedures set forth in 40 CFR part 86, subpart N.

(f)(1) A heavy-duty zero-emission vehicle (ZEV) has a standard of zero emissions for nonmethane hydrocarbons, oxides of nitrogen, carbon monoxide, formaldehyde, and particulates.

(2) A heavy-duty vehicle shall be certified as a ZEV if it is determined by engineering analysis that the vehicle satisfies the following conditions:

(i) The vehicle fuel system(s) must not contain either carbon or nitrogen compounds (including air) which, when burned, form nonmethane hydrocarbons, oxides of nitrogen, carbon monoxide, formaldehyde, or particulates as exhaust emissions.

(ii) All primary and auxiliary equipment and engines must have no emissions of nonmethane hydrocarbons, oxides of nitrogen, carbon monoxide, formaldehyde, and particulates.

(iii) The vehicle fuel system(s) and any auxiliary engine(s) must have no evaporative emissions.

(iv) Any auxiliary heater must not operate at ambient temperatures above 40 degrees Fahrenheit.

(g) All heavy-duty engines used in low emission, ultra-low emission, or zero emission vehicles shall also comply with all applicable standards and requirements of 40 CFR part 86, except that any exhaust emission standards in 40 CFR part 86 pertaining to pollutants for which standards are established in this section shall not apply.

[59 FR 50077, Sept. 30, 1994]

Subpart B—California Pilot Test Program

§ 88.201-94 Scope.

Applicability. The requirements of this subpart shall apply to the following:

(a) State Implementation Plan revisions for the State of California and