

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-977  
Relating to Certification of New Motor Vehicles

FORD MOTOR COMPANY

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below:

Model Year: 2001

Vehicle Type: 5751-8500 Pound Test Weight Medium-Duty Vehicle

Exhaust Emission Standard Category: Super-Ultra-Low-Emission Vehicle (SULEV)

Fuel Type: Compressed Natural Gas (CNG)

Test Group: 1FMXT05.4RP5

Engine Displacement: 5.4 Liters

Evaporative Family: 1FMXR0000ZYK

Special Features and Exhaust Emission Control Systems:

Dual Three Way Catalytic Converters (two)  
Three Way Catalytic Converter  
Dual Heated Oxygen Sensors  
Sequential Multiport Fuel Injection

Models Covered: Ford F-150 Pickup 2WD Natural Gas

The exhaust certification emission levels and standards, in grams per mile, of non-methane organic gases (NMOG), carbon monoxide (CO), oxides of nitrogen (NOx), and formaldehyde (HCHO) for the listed vehicle models are as follows. The NMOG exhaust certification emission levels include application of the reactivity adjustment factor (RAF) as specified. The CNG NMOG exhaust certification levels also include the addition of the product of the methane (CH<sub>4</sub>) exhaust emission value and a RAF for methane emission of CNG-fueled vehicles.

The evaporative hydrocarbon (HC) certification emission levels and standards for three-day diurnal plus hot soak (3D) and two-day diurnal plus hot soak (2D) in grams per test, running loss (RL) in grams per mile, and onboard refueling vapor recovery (ORVR) in grams per gallon of fuel dispensed, for the listed vehicle models are as follows.

<u>Type of Emissions</u>	<u>Miles</u>	<u>Certification Level</u>	<u>Certification Standards</u>
<u>EXHAUST @ NMOG RAF = 1.00 CH<sub>4</sub> RAF = 0.0047</u>			
..... NMOG	50,000	0.024	0.059
NMOG	120,000	0.030	0.084
CO	50,000	0.9	2.5
CO	120,000	0.9	3.7
NOx	50,000	0.1	0.3
NOx	120,000	0.22	0.45
NOx (highway)	50,000	0.1	0.6
NOx (highway)	120,000	0.21	0.90
HCHO	50,000	0.0005	0.006
..... HCHO	120,000	0.0005	0.008
..... CO (20°F)	50,000	n/a	n/a
NMOG (50°F)	4,000	n/a	n/a
CO (50°F)	4,000	n/a	n/a
NOx (50°F)	4,000	n/a	n/a
HCHO (50°F)	4,000	n/a	n/a
<u>EVAPORATIVE</u>			
HC-2D	120,000	n/a	n/a
HC-3D	120,000	n/a	n/a
HC-RL	120,000	n/a	n/a
HC-ORVR	120,000	n/a	n/a

BE IT FURTHER RESOLVED: That, as of the date of this order, the Air Resources Board has not proposed or adopted a RAF for medium-duty SULEVs operated on CNG. At the proposal of the manufacturer for the certification of the aforementioned test group, and based on available data and analysis showing there is a strong likelihood that the RAF for such vehicles will be less than 1.00, the applicable RAF for the listed test group shall be treated for all purposes relating to this certification as listed above.

BE IT FURTHER RESOLVED: That any "Vehicle Equivalent Debit" in the manufacturer's medium-duty vehicle phase-in compliance plan shall be equalized as required by the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

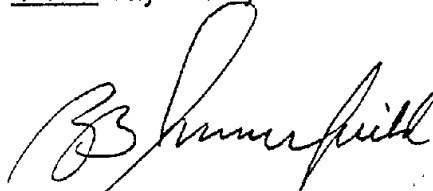
BE IT FURTHER RESOLVED: That the manufacturer is certifying the listed vehicle models with a partially complying on-board diagnostic system for the aforementioned model year pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(6.2) ("Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines").

BE IT FURTHER RESOLVED: That for the listed vehicle models, the manufacturer has attested to compliance with the following California emission regulations and requirements. Vehicles certified under this Executive Order shall conform to all applicable California emission regulations and requirements.

- Motor Vehicle Emission Control and Smog Index Label Specifications (Title 13, California Code of Regulations, Section 1965)
- Emission Control System Warranty (Title 13, California Code of Regulations, Sections 2035 et seq.)
- High-Altitude Requirements and California Inspection and Maintenance Emission Standards (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles)

The Bureau of Automotive Repair will be notified by copy of this order.

Executed at El Monte, California this 18<sup>th</sup> day of July 2000.



R. B. Summerfield, Chief  
Mobile Source Operations Division