#### State of California AIR RESOURCES BOARD

# EXECUTIVE ORDER A-18-79 Relating to Certification of New Motor Vehicles

#### VOLVO CAR CORPORATION

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 Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1995 model-year Volvo Car Corporation exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: SVV2.9VHGFEA Displacement: 2.9 Liters (178 Cubic Inches) 2.5 Liters (151 Cubic Inches)

### Exhaust Emission Control Systems & Special Features:

Multiport Fuel Injection Heated Oxygen Sensor Three Way Catalytic Converter Exhaust Gas Recirculation Secondary Air Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The certification exhaust emission standards (alternative in-use compliance standards in parentheses) for this engine family in grams per mile are:

| Miles_  | Non-Methane         | Carbon          | Nitrogen      |
|---------|---------------------|-----------------|---------------|
|         | <u>Hydrocarbons</u> | <u>Monoxide</u> | <u>Oxides</u> |
| 50,000  | 0.25 (0.32)         | 3.4 (5.2)       | 0.4 (n/a)     |
| 100,000 | 0.31 (n/a)          | 4.2 (n/a)       | n/a           |

The certification exhaust emission values for this engine family in grams per mile are:

| Miles_  | Non-Methane         | Carbon          | Nitrogen      |
|---------|---------------------|-----------------|---------------|
|         | <u>Hydrocarbons</u> | <u>Monoxide</u> | <u>Oxides</u> |
| 50,000  | 0.22                | 2.7             | 0.1           |
| 100,000 | 0.26                | 3.3             | n/a           |

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average non-methane organic gas (NMOG) exhaust mass emission requirements as set forth in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the 50,000-mile evaporative emission standards applicable to 1980 through 1994 model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles", and the listed vehicle models comply with those standards.

BE IT FURTHER RESOLVED: That, based on the evaporative emission phase-in compliance schedule submitted by the vehicle manufacturer, the listed vehicle models shall not be subject to the running loss and useful life standards set forth in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles."

BE IT FURTHER RESOLVED: That, based on a separate compliance plan submitted by the vehicle manufacturer, the listed vehicle models are permitted alternative in-use compliance as set forth in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the submitted alternative in-use compliance plan satisfies the requirement that a maximum of 60 percent of the manufacturer's projected sales of 1995 model-year California-certified passenger cars and light-duty trucks will be subject to alternative in-use compliance as stipulated in the above-referenced standards and test procedures.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System for 1988 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles with Three-Way Catalyst Systems and Feedback Control" (Title 13, California Code of Regulations, Section 1968) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed vehicle models have been exempted from compliance with the "Malfunction and Diagnostic System Requirements-1994 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles and Engines" pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(2.0) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Emission Control Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

Vehicles certified under this Executive Order must conform to all applicable. California emission regulations.

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

Executed at El Monte, California this day of September, 1994.

R. B. Summer field Assistant Division Chief

Mobile Source Division

## VOLVO

| 1995 AIR R                  | ESOURCES BOARD                                 | SUPPLEMENTAL DA  | TA SHEET E.O.         | " A-18-79                         | Page                      | 1 of <u>/</u>        |
|-----------------------------|--|--|-----------------------|-----------------------------------|---------------------------|----------------------|
| _<br>Manufacturer           | Volvo Car Corp                                 |  | Engine Family         | SVV2.9VHGFEA                      |                           |                      |
| Passenger Car               | X (PC)   | Light-Duty Truck   | (T1/T2)               | Medium-Duty Vehicle               | e (M1/N                   | u2/M3/M4/M5)         |
| Stds Type:                  | Tier 1 (7                                      | (Tier 0/1,AB965,TLEV,LEV,ULEV) Veh.Type (FFV,HEV(type A/B/C)): |                       |                                   |                           |                      |
| Fuel Type:                  | Gasoline                                       |  | Evaporative Family    | SVV1058BYP0A                      | Y                         | 100 1011             |
| Engine Config.              | 1-6  | Liter (CID) 2.9/2.   | (178/151              | Evap Std: 50                      | ok - Magui                |                      |
| Engine: Front               | X Mid.   | Rear   | Drive: FWD            | RWD X                             | 4WD-FT                    | 4WD-PT               |
| Exhaust ECS & (use abbr     | ε Special Features (in<br>eviations per SAE 19 | cl. CARB, MF1, etc.)<br>30 MAY91)                              | MFI, HO2S, T          | WC, EGR, AIR                      | OBD                       | I Exempt             |
| Engine Code<br>(Cert. Std.) | Vehicle Models (if coded see attachment)       | Trans. Type A-automatic M-manual                               | ETW DPA<br>or<br>RLHP | Ignition<br>(ECM/PCM)<br>Part No. | EGR<br>System<br>Part No. | Catalyst<br>Part No. |
| SA96:2                      | 960  | A  |                       | 0 261 203 450                     | 7.21835.04                | 9 146 142            |
|                             | Sedan  | AW 30-40   | 3875 7.5              |                                   |                           |                      |
|                             | Wagon  | AW 30-40   | 3875 9.4              |                                   |                           |                      |