

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-330-38

Relating to Certification of New Medium-Duty Motor Vehicle Engines

BAYTECH CORPORATION

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 of the Health and Safety Code; and

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

IT IS ORDERED AND RESOLVED: That the following 2001 model-year Baytech Corporation Otto-cycle engines are certified for use in medium-duty vehicles with a manufacturer's gross vehicle weight rating (GVWR) between 8,501 and 14,000 pounds:

Emission Standard Category: Ultra-Low-Emission Vehicle (ULEV)

Fuel Type: Dual-Fuel Compressed Natural Gas (CNG) or Gasoline

| <u>Engine Family</u> | <u>Engine Displacement Liters (Cubic Inches)</u> | <u>Exhaust Emission Control Systems and Special Features</u> |
|----------------------|--|---|
| 1BYTH05.7ULV | 5.7 (350) | Sequential Multiport Fuel Injection (Gasoline) Throttle Body Fuel Injection (CNG) Dual Three Way Catalytic Converters Dual Heated Oxygen Sensors (two) Exhaust Gas Recirculation Engine Control Module |

Engine models and codes are listed on attachments.

The ULEV certification exhaust emission standards for this engine family in grams per brake horsepower-hour are:

| <u>Non-Methane Hydrocarbons + Nitrogen Oxides</u> | <u>Carbon Monoxide</u> | <u>Formaldehyde</u> |
|---|----------------------------|---------------------|
| 2.5 | 14.4 | 0.050 |

The ULEV certification exhaust emission values for this engine family in grams per brake horsepower-hour are: (The values in parentheses are for gasoline.)

Non-Methane Hydrocarbons
+ Nitrogen Oxides

Carbon
Monoxide

Formaldehyde

1.3 (1.5)

5.9 (1.5)

0.0004 (0.001)

BE IT FURTHER RESOLVED: That the listed engine models are certified to the optional ULEV standards and test procedures applicable to incomplete and diesel medium-duty vehicles between 8,501 and 14,000 pounds GVWR pursuant to Title 13, California Code of Regulations, Section 1956.8(h).

BE IT FURTHER RESOLVED: That the listed engine models shall be subject to the in-use compliance provisions applicable to 1995 and subsequent model-year medium-duty vehicle engines set forth in Title 13, California Code of Regulations, Section 2139(c).

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted 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.).

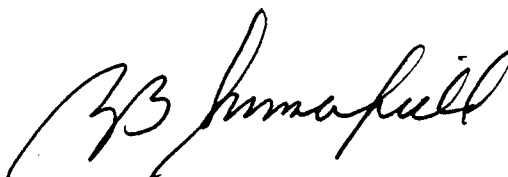
BE IT FURTHER RESOLVED: That the listed engine models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1).

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

Engines 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 attachments.

Executed at El Monte, California this 8th day of May 2001.



R. B. Summerfield, Chief
Mobile Source Operations Division

Engine Model Summary Form

A-330-38
(Attachment)

Manufacturer: Baytech Corporation
 Engine category: On-highway HDGE
 EPA Engine Family: 1BYTH05.7ULV
 Mfr Family Name: ULEV
 Process Code: New Submission

| 1.Engine Code | 2.Engine Model | 3.BHP@RPM (SAE Gross) | 4.FuelRate: mm/stroke @ peak HP (fordiesel only) | 5.FuelRate: (lbs/hr) @ peak HP (fordiesels only) | 6.Torque @ RPM (SEA Gross) | 7.FuelRate: mm/stroke@peak torque | 8.FuelRate: (lbs/hr)@peaktorque | 9.EmissionControl Device PerSAEJ1930 |
|---------------|-------------------------|--------------------------|--|--|-------------------------------|---|------------------------------------|---|
| | gasoline data | 245 @ 4412 | N/A | N/A | 319 @ 2540 | N/A | N/A | EGR/TWC/HO2S(2) TBI/SFI/ECM |
| | CNG data | 211 @ 4476 | N/A | N/A | 275 @ 2850 | N/A | N/A | |
| 3 | L31- CNG or Gasoline | see above | N/A | N/A | see above | N/A | N/A | |