State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-328-23-1
Relating to Certification of New Motor Vehicles

IMPCO TECHNOLOGIES, INC.

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: Low-Emission Vehicle (LEV)

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

Test Group: 1TJXT05.7188

Engine Displacement: 5.7 Liters

Evaporative Family: 1TJXE0111909

Special Features and Exhaust Emission Control Systems:

Sequential Multiport Fuel Injection (Gasoline)
Throttle Body Fuel Injection (CNG)
Dual Warm Up Three Way Catalytic Converters
Dual Three Way Catalytic Converters
Dual Heated Oxygen Sensors (two)
Exhaust Gas Recirculation

Models Covered: GMC G2500/3500 Savana Passenger Dual-Fuel, G2500/3500 Savana Cargo Dual-Fuel; Chevrolet G2500/3500 Express Dual-Fuel, G3500 Van Dual-Fuel

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 exhaust emission value and a RAF for methane emission of CNG-fueled vehicles. (The emission levels, standards and RAF in parentheses are for gasoline.)

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.

Type of Emissions	Miles	Certification Level	Certification Standards
EXHAUST @ NMOG RAF = 0.43 (1.00); Methane RAF = 0.0047			
NMOG	50,000	0.024 (0.25)	0.195 (0.39)
NMOG	120,000	0.028 (0.29)	0.280 (0.56)
CO	50,000	3.0 (3.9)	5.0 (5.0)
CO	120,000	3.5 (4.5)	7.3 (7.3)
NOx	50,000	0.3 (0.1)	0.6 (0.6)
NOx	120,000	0.3 (0.1)	0.9 (0.9)
NOx (highway)	50,000	0.001 (0.1)	1.2 (1.2)
NOx (highway)	120,000	0.001 (0.1)	1.8 (1.8)
HCHO	50,000	0.001 (0.001)	0.022 (0.022)
..... HCHO	120,000	0.001 (0.001)	0.032 (0.032)
..... CO (20°F)	50,000	n/a (9.5)	n/a (12.5)
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
EVAPORATIVE			
HC-2D	120,000	1.2 (1.0)	3.5 (3.5)
HC-3D	120,000	1.4 (1.0)	3.0 (3.0)
HC-RL	120,000	0.00 (0.00)	0.05 (0.05)
HC-ORVR	120,000	n/a (n/a)	n/a (n/a)

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the above exhaust emission standards pursuant to the requirement specified in Title 13, California Code of Regulations, Section 1961 (b)(3)(D) applicable to small-volume manufacturers of medium-duty vehicles.

BE IT FURTHER RESOLVED: That the listed vehicle 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 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.

- Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks (Title 13, California Code of Regulations, Section 2235)

- 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.

Executive Order A-328-23 dated July 20, 2000, is superseded and replaced by Executive Order A-328-23-1.

Executed at El Monte, California this 3rd day of August 2000.

R. B. Summerfield, Chief
Mobile Source Operations Division