State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-8-101 Relating to Certification of New Motor Vehicles

BAYERISCHE MOTOREN WERKE AG

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 1997 model-year Bayerische Motoren Werke AG exhaust emission control systems are certified as described below for passenger cars:

Fu<u>el Type</u>: Gasoline

Engine Family: VBM5.4V8GFEK <u>Displacement</u>: 5.4 Liters (328.2 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

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

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

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

<u>Miles</u>	Non-Methane	Carbon	Nitrogen	Carbon	
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	<u>Monoxide (20⁰F)</u>	
50,000	0.25	3.4	0.4	10.0	
100,000	0.31	4.2	0.6	n/a	

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

<u>Miles</u>	Non-Methane	Carbon	Nitrogen	Carbon	
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	<u>Monoxide (20⁰F)</u>	
50,000	0.11	2.0	0.2	5.9	
100,000	0.12	2.7	0.2	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".

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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 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 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 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) for the aforementioned model year.

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.

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

Executed at El Monte, California this 47 day of April 1996.

R. B. Summerfield Assistant Division Chief

Mobile Source Division

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1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT DUTY TRUCKS AND MEDIUM DUTY VEHICLES

Manufacturer : BMW Exh. Engine Family : VBM5.4V8GFEK Evap. Fam: VBM1045CYMAO(750 iV) VBM1035DYPAO (850C All Eng Codes in Eng Fam: CA _____ 49S _____ 50S _X AB965 Exh Std: CA Tier-1 X TLEV ___ LEV ___ ULEV ___ ZEV ____ ; US EPA Tier-1 X Evap Std: 50K X Useful Life with R/L In-Use Exh Std: Full In Use Alt In Use Veh Class: PC X LDT1 LDT2 MDV1 MDV2 MDV3 MDV4 MDV5 Single Cert Std for Multi - Class Eng Fam: N/A Dedicated X Flex-Fuel Dual Fuel Bi - Fuel Gasoline X Diesel Fuel Type (s): CNG ____ LNG ___ LPG ___ M85 ____ Other (specify) _ Ph2 X CNG LPG M85 Other (specify) Emiss Test Fuel (s): Indo Diesel: 13 CCR 2282 ____ 40 CFR86.113-90 ____ 40 CFR86.113-94 ____ Service Accum: Std AMA ____ Mod AMA ____ Mfr ADP X____ Other (specify) NMOG Test Procedure: N/A X Std Equiv R/L Test Proc: SHED X Pt Source Hybrid: Type A ____ B ___ C ___, APU Cycle (e.g., Otto, Diesel, Turbine) ____ Engine Configuration: V-12 Displacement: 5.4 Liters 328.2 Cubic Inches Valves per Cylinder: 2 Rated HP: 322 @ 5 000 RPM Engine: Front X Mid Rear Drive: FWD RWD X 4WD-FT 4WD-PT Exhaust ECS: 2TWC, 2HO2S-2, SFI, AIR

Engine Code	Vehicle Models	Trans. Type	ETW (Ibs.)	DPA or RLHP (hp)	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic Converter Part No.
5.4/7 A5	750iL	L5	4 750	7.7	1 740 830	n.a.	1 741 769 left 1 741 768 right
5.4/8 A5	850Ci	L5	4 500	7.5	1 740 829	n.a.	1 704 747 left 1 704 748 right