Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Div. 26, Part 5, Chap. 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515-39516 and Executive Order G-02-003;

**IT IS ORDERED AND RESOLVED:** That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

| MODEL YEAR | TEST GROUP | VEHICLE TYPE (PC=passenger car; LDT=light-duty truck; MDV=medium-duty vehicle; LVW=loaded vehicle weight; ALVW=adjusted LVW) | EXHAUST EMISSION STANDARD CATEGORY (LEV=low emission vehicle; TLEV= transitional LEV; ULEV=ultra LEV; SULEV=super ULEV) | EXHAUST / EVAPORATIVE USEFUL LIFE (UL) (miles) | FUEL TYPE (CNG/LNG=compressed/ liquefied natural gas; LPG=liquefied petroleum gas) |
|---|---|---|---|---|---|
| 2011 | BBMXJ03.0E89 | Passenger Car | LEV II ULEV | 150K / 150K | Gasoline |

| No. | EVAPORATIVE FAMILY (EVAF) | No. | SPECIAL FEATURES & EMISSION CONTROL SYSTEMS (ECS) | * = not applicable |
|---|---|---|---|---|
| 1 | BBMXR0128E85 | 1 | 2TWC, 2WU-TWC, 2AFS, 2HO2S, SFI, OBD(P) | |
| 2 | * | 2 | * | |
| 3 | * | 3 | * | |
| 4 | * | 4 | * | |

OC/TWC=oxidizing/3-way cat. ADSTWC=adsorbing TWC WU= warm-up cat. O2S/HO2S=oxygen sensor/heated O2S AFS/HAFS=air-fuel ratio sensor/heated AFS EGR=exhaust gas recirculation AIR/PAIR=secondary air injection/pulsed AIR MFI/SFI= multiport fuel injection/sequential MFI TBI= throttle body injection TC/SC=turbo /super charger CAC=charge air cooler OBD (F) / (P)=full /partial on-board diagnostic NOS =NOx sensor prefix 2=parallel (2) suffix=series

| EVAF No. | ECS No. | ENGINE SIZE (L) | VEHICLE MAKES & MODELS | VEHICLES SUBJECT TO SFTP STANDARDS ARE UNDERLINED |
|---|---|---|---|---|
| 1 | 1 | 3.0 | BMW Z4 sDrive30i, 128i, 128i Convertible, 328i, 328Ci, 328i Sport Wagon, 328Ci Convertible, 328i xDrive, 328Ci xDrive, 328i xDrive Sport Wagon, 528i | |
| 1 | 1 | 2.5 | BMW 323i | |

The exhaust and evaporative emission standards (STD) and certification emission levels (CERT) for the listed vehicles are as follows (compliance with the 50 °F testing requirement (for TLEV, LEV, ULEV, SULEV) may have been met based on the manufacturer's submitted compliance plan in lieu of testing). Any debit in the manufacturer's "NMOG Fleet Average" (PC and LDT) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required. (For bi-, dual- or flexible-fueled vehicles, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

| NMOG FLEET AVERAGE [g/mi] | | NMOG @ RAF = * CH4 RAF = * | | NMOG or NMHC STD [g/mi] | CH4=methane NMOG=non-CH4 organic gas NMHC=non-CH4 hydrocarbon CO=carbon monoxide NOx=oxides of nitrogen HCHO=formaldehyde PM=particulate matter RAF=reactivity adjustment factor 2/3 D [g/test]=2/3 day diurnal+hot-soak RL [g/mi]=running loss ORVR [g/gallon dispensed]=on-board refueling vapor recovery g=gram mg=milligram mi=mile K=1000 miles F=degrees Fahrenheit SFTP=supplemental federal test procedure | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CERT | STD | NMOG CERT [g/mi] | NMHC CERT [g/mi] | | CO [g/mi] | | NOx [g/mi] | | HCHO [mg/mi] | | PM [g/mi] | | Hwy NOx [g/mi] | |
| 0.031 | 0.035 | | | | CERT | STD | CERT | STD | CERT | STD | CERT | STD | CERT | STD |
| | @ 50K | 0.017 | * | 0.040 | 0.1 | 1.7 | 0.01 | 0.05 | * | 8. | * | * | 0.00 | 0.07 |
| | @ UL | 0.020 | * | 0.055 | 0.1 | 2.1 | 0.01 | 0.07 | * | 11. | * | 0.01 | 0.00 | 0.09 |
| | @ 50°F & 4K | 0.065 | * | 0.080 | 0.1 | 1.7 | 0.01 | 0.05 | * | 16. | * | * | * | * |

| CO [g/mi] @ 20°F & 50K | | SFTP 1 = @ 4K (SULEV, ULEV, LEV) or 50K (Tier 1, TLEV) SFTP 2 = @ UL (Tier 1, TLEV) | | NMHC+NOx [g/mi] (composite) | | CO [g/mi] (composite) | | NMHC+NOx [g/mi] [US06] | | CO [g/mi] [US06] | | NMHC+NOx [g/mi] [SC03] | | CO [g/mi] [SC03] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | CERT | STD | CERT | STD | CERT | STD | CERT | STD | CERT | STD | CERT | STD |
| CERT | 1.0 | | SFTP 1 | * | * | * | * | 0.01 | 0.14 | 0.8 | 8.0 | 0.03 | 0.20 | 0.2 | 2.7 |
| STD | 10.0 | | SFTP 2 | * | * | * | * | * | * | * | * | * | * | * | * |

| @ UL | EVAPORATIVE FAMILY 1 | | | | EVAPORATIVE FAMILY 2 | | | | EVAPORATIVE FAMILY 3 | | | | EVAPORATIVE FAMILY 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3-D | 2-D | RL | ORVR | 3-D | 2-D | RL | ORVR | 3-D | 2-D | RL | ORVR | 3-D | 2-D | RL | ORVR |
| CERT | 0.38 | * | 0.02 | 0.04 | * | * | * | * | * | * | * | * | * | * | * | * |
| STD | 0.50 | 0.65 | 0.05 | 0.20 | * | * | * | * | * | * | * | * | * | * | * | * |

**BE IT FURTHER RESOLVED:** That for the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 [emission control labels], 1968.2 [on-board diagnostic, full or partial compliance], 2035 et seq. [emission control warranty], 2235 [fuel tank fill pipes and openings] (gasoline and alcohol fueled vehicles only), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model PC, LDT and MDV).

**BE IT FURTHER RESOLVED:** The test group listed in this Executive Order is certified conditionally on the manufacturer providing test data to determine the greenhouse gas (GHG) emissions for the listed test group, expressed in grams per mile of carbon dioxide-equivalent (g/mi CO2-e), as required in section E.2.5.2 of the California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, as amended August 4, 2005 (the Test Procedures). Manufacturer shall provide the required data within 45 days after the date of the Executive Order unless (a) an extension is granted by the Executive Officer, or (b) the manufacturer demonstrates to the satisfaction of the Executive Officer that it is exempt from determining GHG emissions for the listed test group under section E.2.5.3 (Intermediate Volume Manufacturers) or E.2.5.4 (Small Volume Manufacturers) of the Test Procedures. Failure to comply with the certification requirement to determine the GHG emissions for the listed test group may be cause for the Executive Officer to revoke the Executive Order. Vehicles in the revoked Executive Order shall be deemed uncertified and subject to penalties authorized under California law. Notwithstanding the requirement therein, the manufacturer is not required to determine GHG emissions for any medium-duty vehicles in the listed test group that are not medium-duty passenger vehicles.

**BE IT FURTHER RESOLVED:** Additional NMOG fleet average or vehicle equivalent credits are granted to the listed vehicle models pursuant to 13 CCR Section 1961(a)(8) [optional 150K certification].

SUPERSEDED

**BE IT FURTHER RESOLVED:** That the vehicle models are conditionally certified in accordance with 13 CCR Section 1968.2(i)(3) (malfunction and diagnostic system) because the on-board diagnostic II system of the listed vehicle models has been determined to have six deficiencies. The listed vehicle models are approved subject to the manufacturer paying a fine of one hundred dollars ($100) per vehicle for the third through sixth deficiencies in the listed test group that is produced and delivered for sale in California.

On a quarterly basis, the manufacturer shall submit to the Air Resources Board reports of the number of vehicles produced and delivered for sale in California and pay the full fine owed for that quarter pursuant to this conditional certification. Payment shall be made payable to the State Treasurer for deposit in the Air Pollution Control Fund no later than thirty (30) days after the end of each calendar quarter during the 2011 model-year production period. Failure to pay the quarterly fine, in full, in the time provided, may be cause for the Executive Officer to rescind this conditional certification, effective from the start of the quarter in question, in which case all vehicles covered under this conditional certification for that quarter and all future quarters would be deemed uncertified and subject to a civil penalty of up to $5000 per vehicle pursuant to HSC Section 43154.

The listed vehicle models have been certified on the condition that the manufacturer provide all the on-board diagnostic data required by 13 CCR Section 1968.2(i)(2.4) within 90 days from the date of the Executive Order. Failure to submit the required demonstration data by the specified date, or failure of the submitted demonstration data to show compliance with the test procedures, shall be cause for the Air Resources Board to revoke this Executive Order and vehicles sold under the revoked conditional certification shall be deemed uncertified.

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

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

Executed at El Monte, California on this 29th day of March 2010.

Annette Hebert, Chief
Mobile Source Operations Division

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