

## **GENERAL MOTORS CORPORATION**

**EXECUTIVE ORDER A-006-1431** New Diesel or Incomplete Medium-Duty Vehicles Using Certified Engines

Pursuant to the authority vested in the Air Resources Board by 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-02-003,

IT IS ORDERED AND RESOLVED: The following diesel or incomplete medium-duty vehicles (MDV) with a manufacturer's GVWR from 8501 to 14000 pounds are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

re, witi	g Miller I	ada (Alia - N	e en jaran		7 - 1. 1. 1. 1. 1. E	NGINE DESCRIPTIO	N	ugi Wali	-11-11-11-11-11-11-11-11-11-11-11-11-11	Taran ana ma	-12 [ B.
MODEL	EXECUTIVE ORDER		ENGINE MANUFACTURER GENERAL MOTORS CORPORATION		EMISSION STD CATEGORY <sup>2</sup>	FUEL TYPE 1	STANDARDS	ENGINE		EF OBD	
MODEL YEAR						Diesel	& TEST PROCEDURE	SIZES (L)	ECS & SP		
									DDI TO (		
2007					ULEV		Diesel	6.6	DDI, TC, C		
	ne, LPG ( /ehicles i	or Alcohol Only				VEHIC	CLE DESCRIPTION				
EVAPOI FAMILY	UL (K)	FUEL TANK CAPACITY (gallons)	VEHICLE MODEL YEAR			MAKE & MODELS		VEH. OBD	ENGINE (L)	ENGINE MODELS / CODES (rated power, in hp)	ENG. OBD
•	*	•	2007	CK30: Chev	rolet CK35 Silver:	iverado; GMC CK25 ido Classic / HD Silv lassic / HD Sierra Cl	OBD(P)	6.6	LBZ / 11 (360)	OBD(P)	
•	*	•	2007	G30: Chevrole Express (	t Express 3500, È Commercial Cutav	ress 2500; GMC Sav xpress Passenger V vay 3500;GMC Sava IDPV), Savana Spec	PV), OBD(P)	6.6	LLY / 6 (250)	OBD(P)	

ot applicable; GVWR=gross vehicle weight rating; 13 CCR xyz=Title 13, California Code of Regulations, Section xyz; 40 CFR 86.abc=Title 40, Code of Federal Regulations, Section 86.abc; er; hp=horsepower; kw=kilowatt; EF=engine family; (2006dec22)

L=Mer, hp=norsepower; xw=vilowatt; Er=engine taminy;

CNGLNG-compressed/fluedfied natural gas; LPG=fluedfied petroleum gas; E85=85% ethanol fuel; MF=multi fuel a.k.a BF=bi fuel; DF=dual fuel; FF=flexible fuel;

SULEV / ULEV / LEV=super uttra / ultra / low emission vehicle;

ECS=emission control system; TWC/DC=Ihree-way/oxidizing catalyst; WU (preftx) =warm-up catalyst; DPF=diesel particulate filter; PTOX=periodic trap oxidizer; HO2S/O2S=heated/oxygen sensor; HRFS/AFS=heated/air-fuel-radio sensor (a.k.a., universal or linear oxygen sensor); TBI=hnottle body fuel injection; SFVMFI=sequential/multi port fuel injection; OGI=direct gascline injection;

GCARB=gaseous carburetor; IDI/DDI=indirect/direct diesel injection; TC/SC=turbo/super charger; CAC=charge air coder; EGR=exhaust gas recirculation; PAIR/AIR=pulsed/secondary air injection; SFVMFI series; OBD(F) / (F) / (\$)=full / partial / partial / partial with a fine / on-board diagnostic; ECM/PCM=engine/powertrain control module; EM=engine modification; 2 (prefix)=parallet; (2) tsufflxi≕n senes

Following are: 1) the FTP exhaust emission standards or family emission limit(s) as applicable under 13 CCR 1956.8; 2) the EURO and NTE limits under the applicable California exhaust emission standards and test procedures for heavyduty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, in g/bhp-hr, for this engine family. "Diesel" CO, EURO and NTE certification compliance may have been demonstrated by the manufacturer as provided under the applicable Test Procedures in lieu of testing. (For dual- and flexible-fuel, the CERT values in brackets [] are those when tested on conventional test fuel.)

	NMHC		NOx		NMHC+NOx		co		PM		нсно		
	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	
STD	0.5	0.5	•	•	•	*	14.4	14.4	0,10	0.10	0.050	0.050	
FEL	•	•	*	•	2.4	2.4	•	•	•	1 • 1	•	•	
CERT	0.2	0.1	•	•	2.3	2.1	1.5	0.4	0.09	0.05	0.045	0.001	
NTE	0.6		•			3.0		18.0		0.12		0.062	

g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; EURO=Euro III European Steady-State Cycle; NTE=Not-to-Exceed emission limit; STD=standard or emission test cap; FEL=family emission limit; CERT=certification level; NMHC/HC=non-methane/hydrocarbon; NOx=oxides of nitrogen; CO=carbon monoxide; PM=particulate matter; HCHO=formaldehyde;

BE IT FURTHER RESOLVED: Certification to the FEL(s) listed above, as applicable, is subject to the following terms, limitations and conditions. The FEL(s) is the emission level declared by the manufacturer and serves in lieu of an emission standard for certification purposes in any averaging, banking, or trading (ABT) programs. It will be used for determining compliance of any engine in this family and compliance with such ABT programs.

BE IT FURTHER RESOLVED: The listed engine models have been certified to the optional emission standards and test procedures in 13 CCR 1956.8 applicable to diesel or incomplete MDV with a 8501-14000 pound GVWR and shall be subject to 13 CCR 2139(c) (in-use testing of engines certified for use in diesel or incomplete MDV with a 8501-14000 pound GVWR).

BE IT FURTHER RESOLVED: The listed engine models have been certified to the split engine family standards under 13 CCR 1956.8(b) [diesel engines] or 13 CCR 1956.8(d) [OTTO engines] and the incorporated 40CFR 86.007-15(m)(9).

BE IT FURTHER RESOLVED: For the listed vehicle models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 1968.2 (on-board diagnostic, full or partial compliance), 13 CCR 1976(b)(1)(B)-(C) or 13 CCR 1976(b)(1)(F) (evaporative emission standards), 13 CCR 2035 et seq. (emission control warranty), and 13 CCR 2235 [fill pipes and openings of motor vehicle fuel tanks]. (The braces {} are for gasoline, LPG or alcohol fueled vehicles only.)

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.

legalar Surmovit

Executed at El Monte, California on this

day of December 2007.

Annette Hebert, Chief Mobile Source Operations Division