## California Environmental Protection Agency AIR RESOURCES BOARD

GENERAL MOTORS CORPORATION

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.

					El	GINE DESCRIPTION						
	ENGINE FAMILY 6GMXH06.6591				EMISSION	FUEL TYPE <sup>1</sup>	STANDARDS & TEST PROCEDURE			ECS & SPECIAL FEATURES 3	EF OBD	
YEAR				JFACTURER	CATEGORY <sup>2</sup>	Diesel			(L)			
		TIVE ORD		RAL MOTOR	S ULEV		Diesel		6.6	OC, ECM, EGR, DDI, TC, CAC	OBD(P)	
2006		06-1332	Abioleg Only	1	VEHICLE DESCRIPTION							
Gasoline, LPG or EVAPORATI		IVE	FUEL TANK CAPACITY	VEHICLE MODEL	VEHICLE MAKE & MODELS				(GINE (L)	ENGINE MODELS / CODES (rated power, in hp)	ENG. OBD	
FAMILY		UL (K)	(gallons) *	YEAR 2006	C/K 20 Chevrolet Sil C/K 20 GMC Sierra:	ОВГ	(P)	6.6	LLY: / 1 (360), / 2 (300), / 15 (310)	OBD(P		
*		*	*	2006	C/K 30 Chevrolet Si C/K 30 GMC Sierra:		)(P)	6.6	LLY: / 1 (360), / 2 (300), / 15 (310)	OBD(P		
*		•	*	2006	G20 Chevrolet Express: 2500 Cargo Van, Passenger Van G20 GMC Savana: 2500 Cargo Van, Passenger Van			)(P)	6.6	LLY / 6 (250)	OBD(P	
	Comparison of the second				/ 3500 OBD(P)		6.6	LLY / 6 (250)	OBD(F			

=not 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, (2004jund); L=liter; hp=horsepower; kw=kilowatt; EF=engine family; CNG/LNG=compressed/liquefied natural gas; LPG=liquefied 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 ultra / ultra / low emission vehicle;
ECS=emission control system; TWC/OC=three-way/oxidizing catalyst; WU (prefix) =warm-up catalyst; DPF=diesei particulate filter; HO2S/O2S=heated/oxygen sensor; GCARB=gaseous carburetor; fuel-ratio sensor (a.k.a., universal or linear oxygen sensor; CAC=charge air cooler; EGR=exhaust gas recirculation; PAR/AR=pulsed/secondary air injection; SPL=smoke puth limiter; IDVDDI=indirect/direct disesi injection; TC/SC=turbo/super charger; CAC=charge air cooler; EGR=exhaust gas recirculation; PAR/AR=pulsed/secondary air injection; SPL=smoke puth limiter; IDVDDI=indirect/direct disesi injection; TC/SC=turbo/super charger; CAC=charge air cooler; EGR=exhaust gas recirculation; PAR/AR=pulsed/secondary air injection; SPL=smoke puth limiter; IDVDDI=indirect/direct disesi injection; TC/SC=turbo/super charger; CAC=charge air cooler; EGR=exhaust gas recirculation; PAR/AR=pulsed/secondary air injection; SPL=smoke puth limiter; IDVDDI=indirect/direct disesi injection; TC/SC=turbo/super charger; CAC=charge air cooler; EGR=exhaust gas recirculation; PAR/AR=pulsed/secondary air injection; SPL=smoke puth limiter; IDVDDI=indirect/direct disesi injection; TC/SC=turbo/super charger; CAC=charge air cooler; EGR=exhaust gas recirculation; PAR/AR=pulsed/secondary air injection; SPL=smoke puth limiter; IDVDDI=indirect/direct disesi injection; TC/SC=turbo/super charger; CAC=charge air cooler; EGR=exhaust gas recirculation; PAR/AR=pulsed/secondary air injection; SPL=smoke puth limiter; IDVDDI=indirect/direct disesi injection; TC/SC=turbo/super charger; CAC=char

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 heavy-duty 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		CO CO		E PM		нсно	
	NMHC		NOx						FTP	EURO	FTP	EURO	
	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FIF				
				· · · · · ·	*	*	14.4	14.4	0.10	0.10	0.050	0.050	
TD	0,5	0.5				<u> </u>	1	*	+	*	*	+	
EL	*	*	*	•	2.4	2.4				0.06	0.045	0,001	
		0.1	*	*	2.3	2.1	1.5	0.4	0.09	0.00			
ERT	0.2 0.1						18.0		0.125		0.0625		
ITE	0.625		•		3.0						it: STD=standard or emission test		

<sup>4</sup> 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 te 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: 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. Executed at El Monte, California on this \_\_\_\_\_\_ day of June 2005. Executed at El Monte, California on this

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Allen Lyons, Chief Mobile Source Operations Division