## California Environmental Protection Agency

**⊘** Air Resources Board

GENERAL MOTORS LLC. Executive Order: A-006-1999

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

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Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 and 39516 and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: 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.

					TEST GROU	JP INFOR	RMATION				
MOD		TEST GI	ROUP	VE	HICLE CLASS(ES	)	FUEL C	ATEGORY	FUEL TYPE		
201	6 (	GMXT03	.6162		LDT3	DEDICATED SINGLE FUEL VEHICLE				ASOLINE	
	USEF	JL LIFE	(miles)		VEHICLE EMISSION	ON CATE	GORY	INTERIM / INT	ERMEDIA	TE IN-USE STD	
EX	H/ORVI	R	EVA	P	FTP	SI	FTP	FTP		SFTP	
1	20000		15000	00 COT	PA TIER2 BIN4 UNTED AS ARB LEV2 ULEV		2 SFTP NDARD	*		*	
SP	ECIAL	FEATUR		XHAUST EMI	SSION CONTROL		OBD ST	TATUS	ENGINE	DISPLACEMENT (L)	
1		21	WC, TV	VC, 2HO2S(2	), DFI		FULL.	*			
*		* PARTIAL ALL MODELS							3.6		
*	*					PAI	RTIAL WITH	*			
				EVAPORATIV	E & REFUELING (	EVAP/O	RVR) FAMILY	INFORMATION		<del></del>	
EV	AP / OF	RVR FAN	IILY	EVAPORA	TIVE STD CATEG	ORY	EVAP EMIS		SPECIA	L FEATURES	
	GGMXR	0138813	3		LEV 2		LD	т3	*		
					EMISSION CR	EDIT INF	ORMATION				
		ALLOW	ANCE	FOR TEST GI	ROUP		G CREDIT FO			OPTIONAL EXH	
BAS	SELINE	PZEV	A	T PZEV	TZEV	NON-P	NON-PZEV ZERO-EVAP D		R	TRUCKS	
* *				*	N			N N			
				NI	MOG AND FLEET	AVERAG	E INFORMAT	TION			
NIMOG BAE CHARAET		TP NMOG/NM RATIO	HCHO/NMHC RA		PC+LDT	OX FLEET STD (0-3750 LVW) (g/mi)	NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)				
	*	*		1.04	*			0.093		0.110	

See the Attachment for Vehicle Models, Evaporative Family, Engine Displacement, Emission Control Systems, Phase-In Standards, OBD Compliance, Emission Standards and Certification Levels, and Abbreviations.

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#### BE IT FURTHER RESOLVED:

The exhaust and evaporative emission standards and the certification emission levels for the listed vehicles are as listed on the Attachment. Compliance with the 50° Fahrenheit testing requirement may have been met based on the manufacturer's submitted compliance plan in lieu of testing. Any debit in the manufacturer's NMOG+NOx and greenhouse gas Fleet Average (PC or LDT or MDPV) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

#### BE IT FURTHER RESOLVED:

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 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for PC, LDT and MDV).

### BE IT FURTHER RESOLVED:

The listed vehicle models are federally certified, and are certified under the provisions of 13 CCR Section 1961.2(a)(12) and the incorporated test procedures.

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 3

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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## **ATTACHMENT**

EXHAUST AND EVAPORATIVE EMISSION STANDARDS	AND CERTIFICATION LEVELS
--------------------------------------------	--------------------------

EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS (FTP, HWFET, 5)	50°F, 20°F)
---------------------------------------------------------------------	-------------

CH4: methane; NMOG: non-CH4 organic gas; HC: hydrocarbon; NMHC: non-CH4 HC; CO: carbon monoxide; NOx: oxides of nitrogen; HCHO: formaldehyde; PM: particulate matter; RAF: reactivity adjustment factor; 2DHS/3DHS [g HC/test]: 2/3 days diurnal+hot-soak; RL [g HC/mi]: running loss; ORVR [g HC/gallon dispensed]: on-board refueling vapor recovery; g: gram; mg: milligram; mi: mile; K: 1000 miles; F: degrees Fahrenheit; FTP: federal test procedure; SFTP: supplemental FTP

### **FUEL TYPE**

CONTRACTOR STATE											
Paragraph of the state of the s	NMOG (g/mi)				Ox HCHO mi) (mg/mi)			PM (g/mi)			
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE - TIER 2 UNLEADED	0.0293	0.070	0.76	2.1	0.016	0.04	*	11	*	0.01
50°F @4K	*	* -	*	*	*	*	*	*	*.	· #1 4 1 1 1 1	

and the second second	FUEL TYPE	NOx	(g/mi)	CO (g/mi)			
	FOEL TIPE	CERT	STD	CERT	STD		
HWFET @ 50K	*	*	*		me of the		
HWFET @ UL	GASOLINE - TIER 2 UNLEADED	0.023	0.05	and the research frage	and the state of t		
20°F @ 50K	GASOLINE-COLD CO LOW OCTANE			2.33	12.5		

#### SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06			3	COMPOSITE			
	FUEL TYPE		NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMHC+NOx (g/mi)	CO (g/mi)	NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	
	GASOLINE	CERT	0.12	7.20		0.068	1.07		The Market And		
@ 4K	- TIER 2 UNLEADED	STD	0.40	10.5		0.31	3.5				
		CERT	*	*	*	*	*	*	*	*	
@ UL	*	STD	*	*	*	*	*	*	*	*	
		BIN						*			

## WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE	VEHICLE	EVAPORA"	TIVE TESTII	NG				
EVAPORATIVE FAMILY	FUEL TYPE	3DH:	3DHS (g/test) @ UL			2DHS (g/test) @ UL			RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD		
GGMXR0138813	E10-EPA	0.26	*	*	0.35	. *	*	0.000	*		
GGMXR0138813	GASOLINE - TIER 2 UNLEADED	0.232	0.90	*	0.357	1.15	*	0.000	0.05		

### ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

				FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL TYPE	3DHS RIG TEST (g/test) @ UL		2DHS RIG TEST (g/test) @ UL		BLEED CANISTER TEST (g/test) @ 4K			
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD		
GGMXR0138813	GASOLINE - TIER 2 UNLEADED	0.060	0.20	*	*	*	*	*	*	*		

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: not applicable; #: pounds; UL: useful life; PC: passenger car; LDT: light-duty truck; LDT1: LDT<6000#GVWR,0-3750#LVW; LDT2: LDT<6000#GVWR,3751-5750#LVW; LDT3: LDT 6001-8500#GVWR,3751-5750#ALVW; LDT4: LDT 6001-8500#GVWR,5751-8500#ALVW; MDV: medium-duty vehicle; MDV4: MDV 8501-10000#GVWR; MDV5: MDV 10001-14000#GVWR; MDPV: mediumduty passenger vehicle; ECS: emission control system; CERT: certification; STD: standard; FEL: family emission limit; GVWR: gross vehicle weight rating; LVW: loaded vehicle weight; ALVW: adjusted LVW; LEV: low emission vehicle; ULEV: ultra LEV; SULEV: super ULEV: ZEV: zero-emission vehicle: PZEV: partial ZEV; AT PZEV: advanced technology PZEV; TZEV: transitional ZEV; TWC/OC: 3-way/oxidizing catalyst; ADSTWC: adsorbing TWC; HAC: HC adsorbing catalyst; WU: warm-up catalyst; NAC: NOx adsorption catalyst; SCR-U or SCRC/SCR-N or SCRC-NH3: selective catalytic reduction-urea/ammonia; NH3OC: ammonia oxidation catalyst; CTOX/PTOX: continuous/periodic trap oxidizer; DPF: diesel particulate filter (active); GPF: PM filter for sparkignited engine: HO2S/O2S; heated/oxygen sensor; WR-HO2S or AFS; wide range/linear/heated air-fuel ratio sensor; NOXS; NOX sensor; PMS: PM sensor; RDQS: reductant quality sensor; NH3S: ammonia sensor; EGR: exhaust gas recirculation; EGRC: EGR cooler; AIR/AIRE: secondary air injection (belt driven)/(electric driven); PAIR: pulsed AIR; SFI/MFI: sequential/multiport fuel injection; DFI/IFI: direct/indirect fuel injection; TC/SC: turbo/super charger; CAC: charge air cooler; F/P/\$: full/partial/partial with fines on-board diagnostic; DOR: direct ozone reducing; HCT: hydrocarbon trap; BCAN: bleed carbon canister; prefix 2: parallel; (2) suffix: series; CNG/LNG: compressed/liquefied natural gas; LPG: liquefied petroleum gas; E85: "85%" ethanol ("15%"gasoline) fuel; E10: "10%" ethanol ("90%" gasoline) fuel; A: automatic (with lockup); M: manual transmission; SA: semi-automatic transmission; CV: continuously variable transmission; SCV: selectable continuously variable transmission; AM: automated manual transmission; AMS: automated manual-selectable transmission; OT: other transmission

# 2016 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE
CHEVROLET	COLORADO CAB CHASSIS 2WD	LDT3	3.6	A6	GGMXR0138813	1	P	*
GMC	CANYON CAB CHASSIS 2WD	LDT3	3.6	A6	GGMXR0138813	1	P	*