California Environmental Protection Agency

@ Air Resources Board

GENERAL MOTORS LLC. Executive Order: A-006-2101

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 GRO	OUP IN	FORMAT	ION						
MODE	- I T	EST G	ROUP	VEH	ICLE CLASS(ES)			FUEL CATEGORY			FUEL TYPE			
2018	JG	MXV01	.8031		PC DI			DEDICATED SINGLE FUEL VEHICLE			GZ	ASOLINE		
l	JSEFUL	LIFE	(miles)	V	EHICLE EMISS	SION C	ATEGOR	Υ	IN	FERIM / INT	RMEDIATE IN-USE STO			
EXH	ORVR		EVAP		FTP		SFTP			FTP		SFTP		
15	0000		150000	LET	73 SULEV30	LEV	3 COMPO	SITE		*	*			
SPE	CIAL FE	ATUR		HAUST EMIS	SION CONTRO	L		OBD ST	TATU	s	ENGINE	DISPLACEMENT (L)		
1		SFI	, TWC (2), HO2S(2)	, AIR		FUL	L		*				
*				*			PART	TAL	ALI	MODELS	<u>.</u>	1.8		
*		* PARTIAL WITH * FINES												
			EV	APORATIVE	& REFUELING	EVA	P/ORVR)	FAMILY	INFO	ORMATION				
EVA	P / ORV	R FAN	MILY	EVAPORAT	IVE STD CATE	GORY		AP EMIS			SPECIA	L FEATURES		
J	GMXR0	95700			LEV 2	EV 2			PC			HCT		
					EMISSION C	REDIT	INFORM	ATION		· · · · · · · · · · · · · · · · · · ·	******			
	A	LLOW	ANCE FO	R TEST GR	OUP		IMOG CR			NMOG CRE		OPTIONAL EXH.		
BASE	LINE P	ZEV	AT	PZEV	TZEV	TZEV NON-P		N-PZEV ZERO-EVAP		DOR		TRUCKS		
	* *						N			N		N		
				NM	OG AND FLEE	TAVE	RAGE INI	FORMA	TION	¥		dans.		
NMOG RAF	CH4 RAF NMOG/NMHC RATIO		HCHO/NMH RATIO	DC-11111 (U-3		3750 LVW) LE		(3751	(FLEET STI LVW-8500 MDPV (g/mi)	NMOG+NOX FLEET ST MDV (10,001-14,000 GVWR) (g/mi)				
*	*	:	1.10	*		0.079			0.	092	*			

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:

Evaporative family JGMXR0095700 is certified pursuant to 13 CCR Section 1976(b)(1)(G)3 and deemed to comply with the requirements of 13 CCR Section 1976(b)(1)(G)1 ["LEV III evaporative requirements"].

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

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, 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

为是 医异种物质的 不是可				Annah maran							
e de de la companya d		NMOG+NOx (g/mi)		CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)	
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- LEV3 E10	0.018	0.030	0.2	1.0	*	*	*	4	*	0.01
50°F @4K	*	*	*	*	*	*	*	*	*		

	FUEL TYPE	NMOG+N	lOx (g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	*	*	*		relative manager of the	
HWFET @ UL	GASOLINE-LEV3 E10	0.002	0.030			
20°F @ 50K	GASOLINE-COLD CO LOW OCTANE		生态的发	0.6	10.0	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC03	3	COMPOSITE		
	FUEL TYPE		NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMOG+NOx (g/mi)	CO (g/mi)	NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)
@ 4K	*	CERT	*	*		*	*			
		STD	*	*	等等。 数据,2015年被第一	*.	*			THE PARTY OF
		CERT	*	*	*	*	*	0.018	1.2	*
@ UL	GASOLINE- LEV3 E10	STD	*	*	*	*	*	0.097	4.2	*
		BIN				N. Karana	· 阿斯特	0.050		

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE						
EVAPORATIVE FAMILY	FUEL TYPE	3DH:	S (g/test)	@ UL	2D	HS (g/test) @	RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
JGMXR0095700	GASOLINE - CA PHASE 2	0.32	0.35	*	0.31	0.35	*	0.00	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		
JGMXR0095700	GASOLINE - TIER 2 UNLEADED		0.20	GASOLINE - CA PHASE 2	0.04	0.0	*	0.0	*	*		

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thingtonian in the contract the contract that are the contract that the contract is 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; HDV: heavy-duty 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 spark-ignited 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; FFH: fuel fired heater; 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: semiautomatic transmission; CV: continuously variable transmission; SCV: selectable continuously variable transmission; AM: automated manual transmission: AMS: automated manual-selectable transmission: OT: other transmission

2018 MODEL YEAR: VEHICLE MODELS INFORMATION **ENGINE EVAPORATIVE EXH** VEH CLASS TRANS TYPE MAKE MODEL OBD **PZEV TYPE** (L) **FAMILY ECS** CHEVROLET SONIC PC 1.8 M5,SA6 JGMXR0095700 1 P * JGMXR0095700 CHEVROLET SONIC 5 1.8 M5,SA6 1 PC Ρ *