OB Air Resources Board

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	GROUP INFORM	ATION				
MODEL YEAR	TEST GRO	UP VEHIC	LE CLASS(ES)	FUE	L CATEGORY	FU	FUEL TYPE		
2017	HGMXT02.5	200	LDT2		TED SINGLE FUEI VEHICLE	-	GASOLINE		
	USEFUL LIF	E (miles)	VEHICLE E	MISSION CATE	GORY	INTERI	M / INTERME	DIATE IN-USE STD	
EXH/	ORVR	EVAP	FTP		SFTP	FTF	>	SFTP	
120,000 150,000 USEPA TIER3 BI COUNTED AS A LEV2 ULEV					P STANDARD	*			
SPECIAL	FEATURES &	EXHAUST EMISSION	CONTROL SYSTEMS		OBD STATUS		ENGIN	IE DISPLACEMENT (L)	
1		TWC(2), HO2S(2), DI	=1	FULL	ALL MOD	DELS			
*		*		PARTIAL *				2.5	
*		*		PARTIAL WITH FINES					
	and the second second	<u>e na serie de la construction de la construction de la cons</u> truction de la construction de la const	VAPORATIVE & REFUEL	ING (EVAP/ORV	R) FAMILY INFORM	ATION	and a start and a starter	n na shekara na shekara na shekara na shekara shekara shekara	
EV	AP / ORVR FA	MILY EVA	APORATIVE STD CATEGO	DRY EVAP E	MISSION STD VEH	ICLE CLASS	SPE	ECIAL FEATURES	
1	HGMXR01263	7A	LEV3 OPTION 2		LDT2		HCT		
1	HGMXR01383	5A	LEV3 OPTION 2		LDT2			HCT	
	*		*		*		*		
nerie wielen en en			EMISSIO	N CREDIT INFO	RMATION	angana nga (ngalan) i sagana , janj ^a	a anna ann ann ann ann ann ann	a san an in the second s	
		LOWANCE FOR TEST	the second se	NMOG CREDIT FOR		NMOG CREDIT FOR DOR		OPTIONAL EXH. STD FOR	
BASELINE PZEV AT PZEV TZE			TZEV *	NON-P	N	N		WORK TRUCKS	
ter al general	- 10 - 20 - 20 - 20 - 20 - 20 - 20 - 20	t an ann an thair an thair	NMOG AND FL	EET AVERAGE	INFORMATION	No construction of the second			
MOG RAF	CH4 RAF	FTP NMOG/NMHC RATIO	HCHO/NMHC RATIO	NMO	DG+NOX FLEET DT (0-3750 LVW) (g	/mi)	NMOG+NOX FLEET STD LDT (3751 LVW- 8500 GVWR) + MDPV (g/mi)		
		1.04	The second line was to be added and the second second to be added as a second sec	and the second se			0.101		

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.

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 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).

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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

15 day of July 2016.

Annette Hebert, Chief Emissions Compliance, Automotive Regulations and Science Division

OB Air Resources Board

GENERAL MOTORS LLC

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New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles Page 3 of 4

ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

(For bi-, dual- or flexible-fueled vehicles, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

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

	FUEL TYPE	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 diumal+hot-soak; RL [g HC/mi]=running loss; ORVR [g HC/gallon dispensed]=on-board refueling vapor recovery; g=gram; mg=milligram; ml=mile; K=1000 miles; F=degre Fahrenheit; FTP=federal test procedure; SFTP=supplemental FTP										
W - Lake Talk to Tak	and the second se	NMOG+N	Ox (g/mi)	CO (g/mi)	HCHO (mg/mi)	PM (g/mi)	HWY NMOG	+NOx (g/mi)	
FTP @ 50K		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	
FTP @ 50K	*	*	*	*	*	*	*	*	*	*	*	
FTP @ UL	GASOLINE-TIER2 UNLEADED	0.027	0.110	0.9	2.1	*	4	*	0.010	0.006	0.110	
20°F @ 50K	GASOLINE-COLD CO LOW OCTANE	*	*	2.3	12.5	*	*	*	*	*	*	
50°F @ 4K	*	*	*	*	*	*	*	*	*	*	*	

				SITT L	UIA001	Limbolon	STAND	ANDO AN	OLIVIA	IOATION	LLVLLO					
To and the		US06						SC03				COMPOSITE				
	FUEL TYPE		C+NOx mi)	CO (g/mi)	PM (n	ng/mi)	NMHC (g/		CO (g/mi)	NMC	G+NOx (g/mi)	CO (9	g/mi)
	·	CERT	STD	CERT	STD	CERT	STD .	CERT	STD	CERT	STD	CERT	STD	BIN	CERT	STD
@ 4K	GASOLINE-TIER2 UNLEADED	0.03	0.25	7.1	10.5	*	*	0.01	0.27	1.1	3.5	*	*	*	*	*
@ UL	GASOLINE-TIER2 UNLEADED	*	*	*	*	*	*	*	*	*	*	0.022	0.103	0.110	*	*

WHOLE VEHICLE EVAPORATIVE/ORVR EMISSION STANDARDS AND CERTIFICATION LEVELS

EVADODATIVE		WHOLE VEHICLE EVAPORATIVE TESTING							G LOSS	ON-BOARD REFUELING		
FAMILY	FUEL TYPE		S DIURNAL K (g/test) @			S DIURNAL K (g/test) @		(g/mi)	@ UL	VAPOR R	ecovery on) @ UL	
HGMXR012637A		CERT	STD	FEL	CERT	STD	FEL	CERT	STD	CERT	STD	
HGMXR012637A	EPA TIER3 E10	0.198	0.400	*	0.173	0.400	*	0.00	0.05	0.03	0.20	
HGMXR013835A	EPA TIER3 E10	0.257	0.400	*	0.340	0.400	*	0.00	0.05	0.02	0.20	
*	*	*	*	*	*	*	*	*	*	*	*	
*	*	*	*	*	*	*	*	*	*	*	*	
*	*	*	*	*	*	*	*	*	*	*	*	

FUEL ONLY & CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			FUEL ONLY EVAP					
EVAPORATIVE FAMILY	FUEL TYPE	3-DAYS DIURN/ (g/test		2-DAYS DIURNA (g/test)		CANISTER BLEED (g/test)		
		CERT	STD	CERT	STD	CERT	STD	
HGMXR012637A	EPA TIER3 E10	*	*	*	*	0.006	0.020	
HGMXR013835A	EPA TIER3 E10	*	*	*	*	0.006	0.020	
*	*	*	*	*	*	*	*	

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GENERAL MOTORS LLC

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New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles Page 4 of 4

* =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=medium-duty 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 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; F/PI\$=full/partial/martial 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-CARB: 85% ethanol+15% Cire2 unleaded gasoline; A=automatic transmission; M=manual transmission; SA=semiautomatic transmission; CT=other transmission; CV=continuously variable transmission; AM=automated manual transmission; AMS=automated manual-selectable transmission; OT=other transmission

2017 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH	OBD	PZEV TYPE
BUICK	ENVISION AWD	LDT2	2.5	A6	HGMXR012637A	1	F	. *
BUICK	ENVISION FWD	LDT2	2.5	A6	HGMXR012637A	1	F	*
CHEVROLET	COLORADO 2WD	. LDT2	2.5	A6,M6	HGMXR013835A	1	F	*
CHEVROLET	COLORADO 4WD	LDT2	2.5	A6	HGMXR013835A	1	F	*
GMC	CANYON 2WD	LDT2	2.5	A6,M6	HGMXR013835A	1	F	- m +-
GMC	CANYON 4WD	LDT2	2.5	A6	HGMXR013835A	1	F	*