California Environmental Protection Agency

OB Air Resources Board

IMPCO TECHNOLOGIES, INC. Executive Order: A-328-0077-1

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	UP II	NFORMAT	ION					
MODE	_	EST G	ROUP	VEH	IICLE CLASS(ES)			FUEL CATEGORY			FUEL TYPE		
2016 GZ9XD06.0DCA					DEDICATED SINGLE FUEL VEHICLE				COMPRESSED NATURAL GAS				
	USEFUI	LIFE	(miles)	T v	EHICLE EMISS	ONC	ATEGOR	Y	IN	TERIM / INT	ERMEDIA	TE IN-USE STD	
EXH/ORVR EVAP					FTP			SFTP		FTP	SFTP		
120000 *				Li	EV2 SULEV	SULEV *			*		*		
SPE	CIAL F	ATUR		AUST EMIS	SION CONTRO	-		OBD ST	TATL	JS	ENGINE	DISPLACEMENT (L)	
1 2TWC, TWC, 2HO2S(2), SFI							FULL		ALL MODELS				
*	-			*	7.0		PART	PARTIAL *			6.0		
*			Por 1864 - 15 of 1	*				ARTIAL WITH *					
			EV	APORATIVE	& REFUELING	(EVA	P/ORVR)	FAMILY	INF	ORMATION			
EVA	R FAN	MILY	IVE STD CATE	STDCATECODY			/AP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES			
GZ9XR0000DCA L					LEV 2	EV 2			*			*	
					EMISSION CF	REDIT	INFORM	ATION					
	A	LLOW	ANCE FO	R TEST GR	OUP		NMOG CR			NMOG CRE		OPTIONAL EXH.	
BASE	ELINE P	ZEV	AT	PZEV	TZEV	NC	ON-PZEV	ZERO-E	VAP	DO	R	TRUCKS	
	*			*	*	N			N		И		
				NM	OG AND FLEET	AVE	RAGE IN	FORMAT	TION				
NMOG RAF	NAMO CAN MAL		G/NMHC			/W-8	V-8500 GVW) M		NMOG+NOX FLEET ST MDV (8501-10000 GVW (g/mi)		NMOG+NOX FLEET STD MDV (10001-14000 GVWR) (g/mi)		
*	*	* 1.15 0.12 *				*				* .	*		

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 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],

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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).

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

This Executive Order hereby supersedes Executive Order A-328-0077 dated October 19, 2015.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this

5 day of May 2016

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

IMPCO TECHNOLOGIES, INC.

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							A	TTAC	НМ	ENT						
	EXH	US.	TAND	EVA	POF	RATIVE	EMIS	SSION	STAN	IDARI	DS ANI	CERT	IFIC	ATION	LEVEL	S
		EXH	AUST E	MISSI	ON S	STANDA	RDS A	ND CER	TIFICA	TION	LEVELS	(FTP, HW	FET,	50°F, 20	°F)	
	FUI	FUEL TYPE		onoxid djustma RVR [4	le; No ent fa g HC	Ox: oxid actor; 2D /gallon o	es of nit DHS/3DI dispense	trogen; He HS [g HC ed]: on-bo	CHO: /test]: oard re	formald 2/3 day fueling	lehyde; F s diurnal vapor re	bon; NMH M: particu +hot-soak covery; g: ure; SFTF	ilate i ; RL gram	matter; R. [g HC/mi] ı; mg: mil	AF: reacti : running ligram; mi	vity loss;
				NMOG (g/mi)			CO (g/mi)			NOx (g/mi)		HCH (mg/r				PM /mi)
	440			CERT		STD	CERT	STE	0	CERT	STD	CER	T	STD	CERT	STD
FTP@5	P@50K *			*		*	*	*		*	*	*		*	*	*
FTP@U	JL CN	G-CA	RB (.014	5 (0.100	1.07	3.2	2	0.013	0.1	0.0		8	*	0.06
50°F @	4K	*		*		*	*	*		* '	*	*		*		
dent of the co	A Simple of the second				FII	EL TYP	F				NOx (g/mi)			CO (g/mi	j)
						TOLL TIPE			CE	RT	STD	STD		Г	STD	
HWFE	T @ 50K					*					*	*				et en kanten er gerineren. Vertigen for
HWFE	T@UL				CN	IG-CARI	3			0.	054	0.2				
20°F @ 50K				*								*		*		
			S	TP E	XHAU	JST EM	ISSION	STANDA	ARDS	AND C	ERTIFIC	ATION LE	VEL	S		
Man Avrono				US06							SC03			co	MPOSITE	
	FUEL 1	YPE			HC+N g/mi)		CO (g/mi)	PI (mg		NMHC+NOx (g/mi)		CO (g/mi)	1	OG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)
@ 4K	@ 4K *		CERT	₹T *		*		A Alexander	*		*					
					*		*		400	-	*	*	77.74.74.64		4.4.5	en en en
		* S			*		*	*			*	*	*		*	*
@ UL	*				*		*	*			*	*		*	*	*
		10/1	BIN	LUICI	- FV	ADODA	TIVE E	MISSION	CTAN	IDABB	CAND	ERTIFIC	ATIO			
		VVI	10LE VI	HICL	EEV			EHICLE					ATIO	NLEVEL	.5	
EVAPORATIVE FAMILY		VE FUEL 1					g/test) @ UL			2DHS (g/test)				RL (g/mi) @ UL		UL
						RT S	STD	FEL	EL CE		RT STD		L CEF		T	STD
GZ9XR0000DCA		A	*	* *			*	*	*	*		*		* *		
(ORVR / F	UEL	ONLY /	CANIS	TER	BLEED	EVAP	ORATIVE	EMIS	SION	STANDA	RDS AND	CEF	RTIFICAT	ION LEV	ELS
									FU	JEL ON	NLY EVA	P & CANI	STE	RBLEED		
	ORATIVI MILY	ORVR		R (g/gallon) @ UL		FUEL TYPE		(9	3DHS RIG TEST (g/test) @ UL		2DHS RIG (g/test) @		UL '	TEST (g/t	EED CANISTER ST (g/test) @ 4K	
		FU	JEL TYP	E CI	ERT	STD			-	RT	STD	CERT	1	STD	CERT	STD
	*		*		*	*		*	1 .	*	*	*		*	*	*

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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; 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; 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	OBD	PZEV TYPE
IMPCO	CHEV C35 SILVERADO 2WD	MDV4	6.0	A6	GZ9XR0000DCA	1	F	*
IMPCO	CHEVROLET C25 SILVERADO 2WD	MDV4	6.0	A6	GZ9XR0000DCA	1	F	* .
IMPCO	CHEVROLET G2500 EXPRESS CARGO 2WD	MDV4	6.0	. A6	GZ9XR0000DCA	1	F	*
IMPCO	CHEVROLET G3500 EXPRESS CARGO 2WD	MDV4	6.0	A6	GZ9XR0000DCA	1	F	*
IMPCO	CHEVROLET K25 SILVERADO 4WD	MDV4	6.0	A6	GZ9XR0000DCA	1	F	*
IMPCO	CHEVROLET K35 SILVERADO 4WD	MDV4	6.0	A6	GZ9XR0000DCA	1	F	*
IMPCO	GMC C25 SIERRA 2WD	MDV4	6.0	A6	GZ9XR0000DCA	1	F	*
IMPCO	GMC C35 SIERRA 2WD	MDV4	6.0	A6	GZ9XR0000DCA	1	F	*
IMPCO	GMC G2500 SAVANA CARGO 2WD	MDV4	6.0	A6	GZ9XR0000DCA	1	F	*
IMPCO	GMC G3500 SAVANA CARGO 2WD	MDV4	6.0	A6 .	GZ9XR0000DCA	1	F	*
IMPCO	GMC K25 SIERRA 4WD	MDV4	6.0	A6	GZ9XR0000DCA	1	F	*
IMPCO	GMC K35 SIERRA 4WD	MDV4	6.0	A6	GZ9XR0000DCA	1	F	*