OB Air Resources Board

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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	GROUP INF	ORMATION						
YEAR	TEST GRO	UP VEHIC	LE CLASS(ES)		FUEL CATEGORY		FUEL TYPE				
2015	FHYXV02.4	2JP	PC	DEC	DICATED SINGLE FUE	EL	GASOLINE				
	USEFUL LIP	E (miles)	VEHICLE	EMISSION C	ATEGORY	11		EDIATE IN-USE STD			
EXH/ORVR EVA		EVAP	FTP		SFTP		FTP	SFTP			
150,000 150,000		150,000	LEV3 SULEV30	0 LE	EV3 COMPOSITE		*	NMOG+NOx			
SPECIAL	FEATURES &	EXHAUST EMISSION	CONTROL SYSTEMS		OBD STATUS		ENGI	NE DISPLACEMENT (L)			
1	WU-TW	C, TWC, WR-HO2S, H	IO2S; DFI	FULL	ALL MC	DELS	- Carlo				
		*	4* • •	PARTI	AL *			2.4			
*		*		PARTIAL		a la constante de la constante					
		E	VAPORATIVE & REFUE	LING (EVAP	ORVR) FAMILY INFOR	MATION					
	EVAP / OF	RVR FAMILY	EVAPO	RATIVE STE	DCATEGORY	E	EVAP EMISSION STD VEHICLE CLASS				
	FHYXR	0140AHV	4	LEV3 OPT	ION 1		F	°C			
		*		*			*				
		*		*			•				
in it in but it -	an an a the setting a	11.22 . 4	EMISSIC	ON CREDIT I	INFORMATION						
	۵	LI OWANCE FOR TEST	•		NMOG CREDIT FOR	1		OPTIONAL EXH. STD FOR			
ALLOWANCE FOR TEST G BASELINE PZEV AT PZEV			TZEV	N	NON-PZEV ZERO-EVAP		CREDIT FOR DOR	WORK TRUCKS			
ALL MODELS *			*		N	N		N Fer Notem			
-			NMOG AND F	LEET AVER	AGE INFORMATION			F21-30(20)			
NMOG RAF	CH4 RAF	FTP NMOG/NMHC RATIO	HCHO/NMHC RATIO	STD	NMOG+NOX FLEET PC+LDT (0-3750 LVW)	(g/mi)	mi) NMOG+NOX FLEET STD LDT (375 8500 GVWR) + MDPV (g/mi)				
*	*	1.10	*		0.100		0.119				

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 or NMOG+NOX, as applicable, 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 test group listed in this Executive Order is certified conditionally on the manufacturer providing data to demonstrate compliance with California's greenhouse gas fleet average emission standard (CA GHG Standard) specified in Title 13, California Code of Regulations, (13 CCR) Section 1961.1 and the incorporated California 2001 through 2014 Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2009 through 2016 Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,

California Environmental Protection Agency

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amended December 6, 2012 (CA Test Procedures). The manufacturer has elected, under 13 CCR Section 1961.1(a)(1)(A)(ii) and under Section E.2.5.1(ii) of the CA Test Procedures, to demonstrate compliance with the CA GHG Standard by demonstrating compliance with the National greenhouse gas program (National GHG Program). Therefore, the test group listed in this Executive Order is certified conditionally further on the manufacturer complying with the requirements specified in said provisions in 13 CCR, and Sections E.2.5.1(ii) and H.4.5(b) and H.4.5(c) of the CA Test Procedures (among other things, concerning data and information submission, timing, and format as specified by the Executive Officer). Failure to comply with the certification requirements to demonstrate compliance with CA GHG Standard by demonstrating compliance with the National GHG Program under said provisions in 13 CCR and CA Test Procedures may be cause for the Executive Officer to revoke the Executive Order. Vehicles in the revoked Executive Order shall be deemed uncertified and subject to penalties authorized under California law. Notwithstanding the requirement herein, a mawnufacturer that becomes, after MY2009, a large-volume manufacturer, as defined in 13 CCR Section 1900, is not required to comply with the CA GHG Standard until the beginning of the fourth model-year from becoming a large-volume manufacturer. Additionally, notwithstanding the requirement herein, a small-volume manufacturer, or intermediate volume-manufacturer, as defined in 13 CCR Section 1900, is not required to comply with CA GHG Standard during model-years (MY) 2012 through 2015.

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 14 day of May 2014.

an Annette Hebert Chief

Emissions Compliance, Automotive Regulations and Science Division

California Environmental Protection Agency

**OB** Air Resources Board

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# 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.)

			E	XHAUST	EMIS	SION	STAN	DARDS AN	ND CEI	RTIFICA	TION	LEVEL	S (FTP, H	WFET, 50	°F, 20	PF)				
		FUE	ТҮРЕ	HCHO=f HC/mi]=r	ormalde	hyde; F oss; O	PM=part RVR [g	iculate matte	er; RAF	=reactivity	y adju ard rei	stment (ac	tor, 2DHS/3	DHS (g HC	/test]=2/3	e; NOx=oxide days diurnal ram; ml=mile	+hol-soak; R	L (g	grees	
POLETITE				G+NO				) (g/mi				(mg/mi)		PM (g	g/mi)	HWY N	AOG+NC	x (g/ml)		
				CER	T	STD		CERT		STD	CERT		STD	C	ERT	STD		CERT		
FTP @ 50K			•					*		*	*		*		*	+	•			
FTP	FTP @ UL GASOLINE-LEV3 E10		0.01	0.014 0.03		30	0.3		1.0	1.0 •		4		*	0.01	0.00	0.005			
20°F (	@ 50K	GASOLINE-COLD CO						1.3		10.0		*			*		*	*		
50°F	@4K			0.01	18 0.060		. 0.3		1.0		*	8		¥-	*			•		
					SFTP	EXH	AUSTE	EMISSION	STAN	DARDS	AND	CERTI	ICATION	LEVELS						
.			T		US06	UC (	LA92)					S	03		1	С	OMPOSIT	E		
	FUEL T		PE NMOG+				0 (g/mi)		PM (mg/mi)		NMOG+NOx (g/mi)		CO (g/mi)		NMOG+NOx (		g/mi) CC		(g/mi)	
			CERT	STD	CER	т	STD	CERT	STD	CE	RT	STD	CERT	STD	CER	T STD	BIN	CERT	STD	
@ UL		LINE-LEV3 E10	*	+	*			*	*				•	*	0.01	4 0.140	0.030	1.0 4.2		
			W	OLE VE	HICLE	EVA	PORAT	TIVE/ORV	REMI	SSION S	TAN	DARDS	AND CER	TIFICATI	ON LEV	ELS				
				1		V	NHOLE	EVEHICL	EEVA	PORATI	VE T	ESTING		PII	NNING	2201	ON-BOAR			
EVAPORATIVE FAMILY		IVE	FUEL TYP			3-DAYS DIURNAL + HOT SOAK (g/test) @ UL			T		SOAK (g/test)				g/ml) @		VAPOR RECOVERY (g/gallon) @ UL			
					CER		the second se		L	CERT	1	STD	FEL	CER	T	STD	CERT		STD	
FHYXR0140AHV		AHV	GASOLINE-LEV3 E10		0.25	0.258 0.350		) .		0.287		0.350		0.0	2	0.05	0.01		0.20	
				NLY &	CANIS	TER B	LEED	EVAPOR	ATIVE	EMISSI	ON S	TANDA	RDS AND	CERTIFIC	CATION	LEVELS				
		1			T			FUEL ON	ILY EV	APORA	TIVE	TESTIN	G		T					
EVAPORATIVE FAMILY			FUEL TYPE		3-DAYS DIURNAL + HOT S									TSOAK	SOAK CANISTER BLEED (g/test)				)	
					(			(g/test) @ UL			(g/tes		st) @ UL		CERT			STD		
		AHV G				0.04	-	0.0			0.04			0.0				*		
*			*				*			*		*		*		*				
5750 8501 STD= ULE TWC SCR DPF= air-fu EGR DFI/I ozon LPG trans	#LVW; -10000; -standa /=ultra /OC=3- C/SCR- diesel el ratio C=EGF F1=dire e reduc =liquefii missior	LDT3=LD #GVWR; N rd; FEL=fa LEV; SULI N or SCR particulate sensor; N cooler; Al ct/indirect f ing; HCT= ed petroleu n; SA=sem	unds; UL=u r 6001-8500 IDV5=MDV imily emissi EV=super U ing catalyst; c-NH3=sele filter (active 0XS=NOx s R/AIRE=se uel injection hydrocarbor m gas; E85 i-automatic r transmissi	HGVWF 10001- on limit; LEV; ZE ADSTV ctive ca b; GPF= sensor; condary condary condary condary condary sensor; trap; B ="85%" transmis	R,3751 4000# GVWF VC=add talytic PMS=F air inje car inje cAN=t	-5750 GVW egroso-emi sorbin reduct er for PM se ection o/supe bleed	#ALVW R; MD ss vehi ssion v g TW( tion-ur spark- nsor; F (belt d er char carbor %*gas	N; LDT4= PV=medi icle weigh /ehicle; P2 C; HAC=H ea/ammou- ignited er RDQS=red riven)/(ele rger; CAC of canister; oline) fuel	LDT 6 um-du t rating ZEV=p IC ads nia; NI ngine; ductan ectric d =charg prefix : E10=	001-850 ity passe g; LVW= bartial Zi orbing of H3OC=a H02S/C it quality driven); I ge air co 2=para ="10%" e	00#G enge load EV; A cataly ammo 22S= y sens PAIR coler; illel; (	VWR,57 r vehicle ed vehicle ed vehicle vst; WU= onia oxic heated/c sor; NH3 =pulsed F/P/\$=f 2) suffix	751-8500# ECS=en le weight; advance warm-up dation cata bxygen se S=ammo AIR; SFI ull/partial/ =series; C "asoline	ALVW; I nission cc ; ALVW= ed techno catalyst; CTC nsor; WF nia senso /MFI=sec /MFI=sec /partial wi cNG/LNC	MDV=m ontrol sy adjusted logy PZ NAC=N DX/PTO C-HO2S or; EGR uential/ th fines =comp	edium-duty stem; CEF d LVW; LE EV; TZEV; IOx adsorp X= continu or AFS=w =exhaust g multiport fu on-board c ressed/iqu titc transmi	vehicle; M T=certific: V=low emi =transition tion cataly ous/period ide range/ as recircu rel injectio ilagnostic; efied natu ssion: M=	ADV4=N ation; ssion ve al ZEV; st; SCR dic trap o linear/he lation; n; DOR= ral gas; manual	MDV ehicle; -U or oxidizer; eated direct	
				2	015	NOD	DEL	EAR:	VE	HICLE	M	ODEL	S INFO	RMAT	ION					
	MAKE MODEL						/EH ASS		GINE	TRANS TYPE		ORATIV MILY	E EXH ECS	OBD		PZEV TYPE				
1	HYUNDAI SONATA						PC	2	.4	L6	FHYXE	FHYXR0140AHV 1		FULL		PZEV				
	HYUNDAI SONATA SPORT					1	PC	2	.4	L6	FHYXF	FHYXR0140AHV 1			-	PZEV				
HYUNDAI SONATA LIMITED					1	PC	2	.4	L6	FHYXE	0140A	-IV 1	FULL	-	<b>ÝZEV</b>					