### **HYUNDAI MOTOR COMPANY**

**EXECUTIVE ORDER A-254-0161** 

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

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Div. 26, Part 5, Chap. 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 & 39516 and Executive Order G-02-003;

#### IT IS ORDERED AND RESOLVED:

That 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.

MODEL YEAR	TEST GROUP	VEHICLE TYPE	EXHAUST EMISSION STANDARD CATEGORY	USEFU (mil		IN- COMP (*=N/A or A/E=ex	MEDIATE -USE -LIANCE -full In-use; -h. / evap	FUEL TYPE			
2008	8HYXV02.0HPC	Passenger Car	"LEV II" Super Ultra Low Emission Vehicle (LEV II	EXH / ORVR	EVAP	EXH	EVAP	Gasoline			
		~	SULEV)	150K	150K	•	*				
No.	ECS & SF	PECIAL FEATURES		EVAPORATIVE FAMILY (EVAF)				DISPLACEMENT (L)			
1	WU-TWC,TWC	, HO2S(2), SFI, OBD(F)	8HYXR0	8HYXR0148PPH							
*				•							
*		*		•				2			
*		•		•							

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:**

That the exhaust and the 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 Fleet Average" (PC or LDT) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

#### **BE IT FURTHER RESOLVED:**

That 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], 1968.1 [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 Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model PC, LDT and MDV).

#### BE IT FURTHER RESOLVED:

That the listed vehicle models are granted a partial zero-emission-vehicle (PZEV) allowance of 0.2 pursuant to 13 CCR Section 1962 (c)(2).

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 day of September 2007.

Annette Hebert, Chief

Mobile Source Operations Division

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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.)

NMOG FLEET NMOG @ R AVERAGE [g/mi] CH4 RAF			NMOG or	HCHO=fo	hane; NMOG= rmaldehyde; F	PM=particu	ulate matter	RAF=reac	tivity adjust	ment facto	r; 2/3 D (g/tes	st]=2/3 day	diumal+	_		
CERT			NMHC	NMHC STD [g/mi]	noi-soak mi=mile; l	RL  g/mi]=run K=1000 miles;	ining ibss; ; F≍degree	okvik įgyga es Fahrenhe	mon disper it; SFTP=s	iseaj≍on-bo upplementa	lard refuel I federal ti	ling vapor rec est procedure	overy; <b>g</b> =gr	am; mg≂mili	gram	
0.037 0.040		CERT [g/mi]	CERT [g/ml]			[g/mi]	NOx [g/mi]			CHO [mg/mi]		PM [g/mi]		Hwy NOx [g/mi]		
					CERT	STD	CER	T	CE	RT S	TD	CERT	STD	CERT	STD	
	@ 50K	*	*		*	•	*	*		' ]	•	*	*	•	•	
	@ UL	0.004	•	0.010	0.1	1.0	0.00	0.02	· T	•	4.	•	0.01	0.01	0.03	
	ฏ 50°F & 4K	*	•	*	*	•	•	•	•	•	•	•	*	*	*	
CO [g/mi] @ 20°F & 50K				NMHC+NOx [g/mi] (composite)		i] CO [g/ml] (composite)			NMHC+NOx [g/mi] [US06]		CO [g/ml] [US06]		NMHC+NOx [g/mi] [SC03]		CO [g/mi] [SC03]	
		1		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	
CERT	1.7	SFTP @ 4000 miles		•	*	•	•	0.01	0.14	1.0	8.0	0.00	0.20	0.1	2.7	
STD	10.0	SFTP	@ * miles	•	*	*	•	•	*		•	*	•	*	•	
						rnal + Hot Soak /test) @ UL		Running Loss (grams/mile) @ UL		On-Board Refueling Vapor Recovery (grams/gailon) @ UL						
		CERT	S	TD	CERT	T	STD	CER	т	STD		CERT		STD		
8HYXR0148PPH		PH	0.17	0.35		0.18	0.35		0.01	0.01		5 0,03		0.20		
	*		*		•	*		•	+	+			*		*	
					.	•	<del>-  </del>	•				-		<del></del>		

<sup>\* =</sup> not applicable; UL=useful life; PC=passenger car; LDT=light-duty truck; MDV=medium-duty vehicle; ECS= Emission Control System; STD= Standard; CERT= Certification; LVW=loaded vehicle weight; ALVW=adjusted LVW; LEV=low emission vehicle; TLEV=transitional LEV; ULEV=ultra LEV; SULEV=super ULEV; TWC=3-way catalyst; ADSTWC=adsorbing TWC; WU=warm-up catalyst; OC=oxidizing catalyst; O2S=oxygen sensor; HO2S=heated O2S; AFS/HAFS=air- fuel ratio sensor / heated AFS; EGR=exhaust gas recirculation; AIR=secondary air injection; PAIR=pulsed AIR; MFI= multiport fuel injection; SFI=sequential MFI; TBI=throttle body injection; TC/SC= turbo/super charger, CAC=charge air cooler; OBD (F)/(P)=full/partial on-board diagnostic; DOR=direct ozone reducing; prefix 2=parallel; (2) suffix=series; CNG/LNG= compressed/liquefied natural gas; LPG=liquefied petroleum gas; E85="85%" Ethanol Fuel

## 2008 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	EVAPORATIVE FAMILY	ECS NO.	ENGINE SIZE (L)	INTERMEDIATE IN-USE COMPLIANCE ("=N/A or full in-use; A/E=exh. / evap. intermediate in-use)		PHASE-IN STD.	OBD II
					EXH	EVAP		
HYUNDAI	ELANTRA	8HYXR0148PPH	1	2	*	*	SFTP	Full