California Environmental Protection Agency AIR RESOURCES BOARD HINO MOTORS, LTD. EXECUTIVE ORDER New On-Road Heavy-I	A-031-0070 Duty Engines
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Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: The engine and emission control systems produced by the manufacturer are certified as described below for use in on-road motor vehicles with a manufacturer's GVWR over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAN	IILY ENGINE SIZES (L)		FUEL TYPE	STANDARDS & TEST		ECS & SPECIAL FEATURES		
2011	BHMXH07.7	JVB	7.684	Diesel	PROCEDURE Diesel	CLASS ~ HHDD	ECM, EGR, PTOX, OC, TC,CAC, DDI, SCR-U	OBD (P)	
	Y ENGINE'S IDLE			ADDI'	TIONAL IDLE EM		NTROL <sup>5</sup>		
	30g N/A								
ENGINE	(L)			ENGINE MODE	LS / CODES (rat	ted power, in	hp)		
7.7				J08E	-VB / J08E-VE	3 (260)			
L=liter; hp CNG/L L/M/H 1 ECS=e up catalyst TBI=throtti super char control mo ESS=e (per 13 CC	Ehorsepower, kw=k NG=compressed/liqu HDD=light/medium/hr mission control syste ; DPF=diesel partic. e body fuel injection; ger, CAC=charge ai dule; EM=engine mc ngine shutdown syste R 1956.8(a)(6)(D); E	ilowatt; hi efied natu aavy heav m; TWC/i late filter; SFI/MFI= r cooler; E odification; em (per 13 Exempt=e	r=hour; ral gas; LPG=liquefi y-duty diesel; UB=u OC=three-way/oxidiz PTOX=periodic trap sequential/multi port EGR / EGR-C=oxhau 2 (prefix)=parallel; 3 CCR 1956.8(a)(6)(/ xempted per 13 CCF	ed petroleum gas; E85=85% etha rban bus; HDO=heavy duty Otto; ing catalyst; NAC=NOx adsorptic oxidizer; HO2S/O2S=heated/oxy, fuel injection; DGI=direct gasolin st gas recirculation / cooled EGR; (2) (suffix)=in series; x)(1); 30g=30 g/hr NOx (per 13 C	anol fuel; MF=mult on catalyst; SCR-U gen sensor; HAFS e injection; GCAR PAIR/AIR=pulsec CR 1956.8(a)(6)(C fuel systems; N/A	i fuel a.k.a. BF / SCR-N=select 3/AFS=heated/3 B=gaseous car //secondary air =not applicable	R 86,abc=Title 40, Code of Federal Regulations =bi fuel; DF=dual fuel; FF=flexible fuel; ctive catalytic reduction – urea / – ammonia; W air-fuel-ratio sensor (a.k.a., universal or linear or buretor, ID/IDI=infirect/direct diesel injection injection; SPL=smoke puff limiter; ECM/PCM= al combustion auxiliary power system; ALT=alt e (e.g., Otto engines and vehicles); hostic;	U (prefix) ≕warm- xygen sensor); TC/SC=turbo/ engine/powertrain	

Following are: 1) the FTP exhaust emission standards, or family emission limit(s) as applicable, under 13 CCR 1956.8; 2) the EURO and NTE limits under the applicable California exhaust emission standards and test procedures for heavyduty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, for this engine family. "Diesel" CO, EURO and NTE certification compliance may have been demonstrated by the manufacturer as provided under the applicable Test Procedures in lieu of testing. (For flexible- and dual-fueled engines, the CERT values in brackets [] are those when tested on conventional test fuel. For multi-fueled engines, the STD and CERT values for default operation permitted in 13 CCR 1956.8 are in parentheses.).

in g/bhp-hr	NMHC		NOx		NMHC+NOx		со		PM		нсно	
	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO
STD .	0.14	0.14	0.20	0.20	· *	*	15.5	15.5	0.01	0.01	*	*
EL	*	*			*	÷	*	*	*	*	*	*
CERT	0.04	0.005	0.19	0.13	+7	*	0.1	0.1	0.008	0.007	*	*
NTE	0.21		0.30		*		19.4		0.02			

g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; EURO=Euro III European Steady-State Cycle, including RMCSET=ram mode cycle supplemental emissions
testing; NTE=Not-to-Exceed; STD=standard or emission test cap; FEL=family emission limit; CERT=certification level; NMHC/HC=non-methane/hydrocarbon; NOx=oxides of nitrogen;
CO=carbon monoxide; PM=particulate matter; HCHO=formaldehyde; (Rev.: 2007-02-26)

**BE IT FURTHER RESOLVED:** Certification to the FEL(s) listed above, as applicable, is subject to the following terms, limitations and conditions. The FEL(s) is the emission level declared by the manufacturer and serves in lieu of an emission standard for certification purposes in any averaging, banking, or trading (ABT) programs. It will be used for determining compliance of any engine in this family and compliance with such ABT programs.

**BE IT FURTHER RESOLVED:** Except in vehicle applications exempted per 13 CCR 1956.8(a)(6)(B), engines in this engine family certified under 13 CCR 1956.8(a)(6)(C) [30 g/hr NOx] and section 35.B.4 of the incorporated "California Exhaust Emissions Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles" adopted Dec. 12, 2002, as last amended Sep. 1, 2006, shall be provided with an approved "Certified Clean Idle" label that shall be affixed to the vehicle into which the engine is installed.

**BE IT FURTHER RESOLVED:** The listed engine models are conditionally certified pending submission of additional test data to verify compliance with useful-life emission standards. The manufacturer has until April 30, 2011 to provide test data to confirm or correct the certification emissions levels on this conditional certification. Failure to resolve concerns by the specified date, shall be cause for the Executive Officer to rescind this conditional certification, in which case all engines covered under this conditional certification would be deemed uncertified and subject to civil penalties pursuant to Health and Safety Code Section 43154.

**BE IT FURTHER RESOLVED:** For the listed engine models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 1971.1 (on-board diagnostic, full or partial compliance), and 13 CCR 2035 et seq. (emission control warranty).



## Engines certified under this Executive Order must 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 day of March 2011. Annette Hebert, Chief Mobile Source Operations Division