INTERNATIONAL TRUCK AND ENGINE CORPORATION

EXECUTIVE ORDER A-004-0318 New On-Road Heavy-Duty Engines

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.

2008 ENGINE (L) 7.6	8NVXH0466AGB GD	7.6 7.6 7230 / GDT230	Diesel ENGINE MODEL (230) CDT225 / CDT225	& TEST PROCEDURE Diesel	CLASS ² MHDD	DDI, TC, CAC, ECM, EGR, OC, PTOX	CONTROL ESS
7.6			ENGINE MODEL			PTOX	ESS
7.6	GD'	T230 / GDT230		S / CODES (rate			
*	GD'	T230 / GDT230	(230) CDT225 / CDT225		d power, in h	p)	<u> </u>
			(230), GD12237 GD1223	(225), GDT22	5 / GDT225	(225), GDT210 / GDT210 (210)	
*				*			
				*			
*				*			
CNG/LNG= L/MH HDD L/MH HDD properties properties properties properties properties portrol module properties pr	=compressed/liquefied natur D=light/medium/heavy heavy sion control system; TWC/C FF=diesel particulate filter; ody fuel injection; SFPMFi=s CAC=charge air cooler; E E; EM=engine modification; te shutdown system (per 13	al gas; LPG=liquefid /-duty diesel; UB=ur DC=three-way/oxidzi PTOX=perlodic trap sequential/multi port to GR / EGR-C=exhaus 2 (prefix)=parallel; CCR 1958.8(a)(6)(A	ed petroleum gas; E85=85% ethal ban bus; HDO=heavy duly Otto; ng catalyst; NAC=NOx adsorptior oxidizer; HO2S/O2S=heated/oxyg tuel injection; DGH=direct gasoline it gas recirculation / cooled EGR; (2) (suffts)=in series;	nol fuel; MF=multi f n catalyst; SCR-U / pen sensor; HAFS/, injection; GCARB- PAIR/AIR=pulsed/s R 1956.8(a)(6)(C):	uel a.k.a. BF=b SCR-N=selectiv AFS=heated/air- gaseous carbu secondary air inj	Mabc=Title 40, Code of Federal Regulations, S i fuel; DF=dual fuel; FF=flexible fuel; ecatalytic reduction – urea / – ammonia; WU (fuel-ratio sensor (a.k.a., universal or linear oxygetetor; ID/IDD=indirect/direct diesel injection; T isocion; SPL=smoke puff limiter; ECM/PCM=en; e method (per 13 CCR 1956.8(a)(6)(D); Exemp	prefix) =warm- en sensor); C/SC=turbo/ gine/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 heavy-duty 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 ponventional 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		CO		PM		нсно	
	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO
STD	0.14	0.14	*	*	*	+	15.5	15.5	0.01	0.01		+
FEL	*	*	1.10	1.10	1,1	1.1	*	*	*	*	*	•
CERT	0.1	0.01	1.00	0.86	1.1	0.9	0.7	0.02	0.001	0.004	*	+
NTE	0.21		1.65		1.6		19.4		0.02		*	

@/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/hydroca/bon; NOx=oxides of nitrogen; CO=carbon monoxide; PM=particulate matter; HCHO=formaldehyde;

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: The listed engine models have been certified to the split engine family standards under 13 CCR 1956.8(b) [diesel engines] or 13 CCR 1956.8(d) [Otto engines] and the incorporated 40 CFR 86.007-15(m)(9).

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) 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 January 2008.

Annette Hebert, Chief

Mobile Source Operations Division