

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 FA	VILY	ENGINE SIZES (L)	FUEL TYPE STANDARDS INTENDED SERVICE PROCEDURE CLASS		ECS & SPECIAL FEATURES 3	DIAGNOSTIC 6				
2008	2008 8CPXH0763E1C		12.5	Diesel	Diesel	CLASS THHOD	DDI, TC(2), CAC, ECM, EGR-C, PTOX	EMD			
EMISSIO	PENGINE'S IDLE ONS CONTROL ONS ON 30g			ADI	DITIONAL IDLE EN		NTROL 5				
ENGINE (	<del></del>			ENGINE MOD	ELS / CODES (ra		hp)				
12.5	ESS: C13 / 1 (350), C13 / 2 (320), C13 / 3 (320)										
12.5	5 30g: C13 / 1-30g (350), C13 / 2-30g (320), C13 / 3-30g (320)										
					·			ECM, EGR-C, EMD  If Federal Regulations, Section 86.abc; F=flexible fuel;  urea / ammonia; WU (prefix) =warm-, universal or linear oxygen sensor); tirect diesel injection; TC/SC=turbo/ If limiter; ECM/PCM=engine/powertrain			
t =net eccli	CONTRACTOR										
CNG/LI L/M/H H ECS=er up catalyst; TBI=Ihrottle super charg control mod ESS=er (per 13 CCI	NG=compressed/ind HDD=light/medium/ mission control syst DPF=diesel partic e body fuel injection per; CAC=charge a lule; EM=engine m ugine shutdown syst R 1956.8(a)(6)(D);	uefied natu eavy heav em; TWC// ulate filter; SFVMFI= r cooler; E odification; em (per 13 Exempt=ex	rai gas: LPG=liquefie y-duty diesel: UB=urt OC=three-way/oxidizin PTOX=periodic trap is sequentia/multi port GGR / EGR-C=exhaus 2 (preffx)=parallel: (i cCR 1956.8(a)(6)(A) kempled per 13 CCR	d petroleum gas; E85=85% et van bus; HDO=heavy duty Otto ig catalyst; NAC=NOx adsorp pixidizer; HO25/O25-heated/o let injection; DGI=direct gasol t gas recirculation / cooled EGI 2) (suffix)=in series; (1): 30a=30 othr NOx (per 13.	hanol fuel; MF=mult o; tion catalyst; SCR-U xygen sensor; HAFs ine injection; GCAR R; PAIR/AIR=pulsed CCR 1956.8(a)(6)(C G fuel systems; N/A	i fuel a.k.a. BF: / SCR-N=select /AFS=heated/a B=gaseous card /secondary air i ); APS =interna =not applicable	R 86.abc=Title 40, Code of Federal Regulations =bi fuel; DF=dual fuel; FF=flexible fuel; titive catalytic reduction – urea / ammonia; W air-fuel-ratio sensor (a.k.a., universal or linear or buretor; IDI/DDI=indirect/direct diesel injection; injection; SPL=smoke puff limiter; ECM/PCM= al combustion auxiliary power system; ALT=alk (e.g., Otto engines and vehicles);	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 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 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		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	*	*	1.16	1.16	1.3	1.3	*	*	*	*	*	*
CERT	0.08	0.10	0.94	0.99	1.0	1.1	1.3	0.1	0.004	0.001	*	*
NTE	0.21		1.74		2.0		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;

**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" (HDDE Test Procedures) 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;

## CATERPILLAR, INC

EXECUTIVE ORDER A-013-0196
New On-Road Heavy-Duty Engines

**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 July 2008.

Annette Hebert, Chief

**Mobile Source Operations Division**