## **BAYTECH CORPORATION**

EXECUTIVE ORDER A-330-0186 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.

MODEL	ENGINE FAMILY	ENGINE SIZES (L)	FUEL TYPE 1	STANDARDS & TEST	INTENDED SERVICE	ECS & SPECIAL FEATURES 3	DIAGNOSTIC <sup>6</sup>
YEAR	CHOILE I VINIE		· · · · · · · · · · · · · · · · · · ·	PROCEDURE	CLASS T	2TWC, SFI, 2HO2S(2)	N/A
2008	8BYTH06.0613	6.0	CNG	Otto	HDO	21110, 311, 211023(2)	19/74
	ENGINE'S IDLE	***	AC	DITIONAL IDLE EN	IISSIONS CON	TROL <sup>5</sup>	
	N/A			N	/A		
ENGINE (L	.)		ENGINE MO	DELS / CODES (ra	ted power, in i	ıp)	
6.0		A ####					
L=liter; hp= 1 CNG/LN 2 L/M/H H 3 ECS=en up catalyst;	chorsepower; kw=kilowatt; IG=compressed/liquefied na IDD=light/medium/heavy hea nission control system; TWC DPF=cliesel particulate filter beds footbloom of STIME	hr=hour; hural gas; LPG=liquefid avy-duty diesel; UB=ur C/OC=three-way/oxidiz r; PTOX=periodic trap L=equentia/(multi pout	ed petroleum gas; E85=85% tran bus; HDO=heavy duty C ing catalyst; NAC=NOx adso oxidizer; HO25/025=heated trial injection; DGI=direct gas	ethanol fuel; MF=mul Otto; rption catalyst; SCR-I Woxygen sensor; HAP	ti fuel a.k.a. BF= J / SCR-N=selec S/AFS=heated/a	t 86.abc=Title 40, Code of Federal Regulation bit fuel; DF=dual fuel; FF=flexible fuel; flive catalytic reduction – urea / ammonia; iir-fuel-ratio sensor (a.k.a., universal or lineaburetor; ID/IDDI=indirect/direct diesel inject.	WU (prefix) ⇒warm- ir oxygen sensor); on; TC/SC=turbo/
super charg	jer; CAC=charge air cooler; iule: EM=engine modificatio	EGR / EGR-C=exhau: n: 2 (prefix)=parallel:	st gas recirculation / cooled E (2) (suffix)≕n series;	GR; PAIR/AIR=pulse	d/secondary air i	njection; SPL=smoke pur limiter; ECMPC	m-engine/powerdali
(per 13 CCF	R 1956.8(a)(6)(D);	exempted per 13 CCR	! 1956.8(a)(6)(B) or for CNG/I	_NG fuel systems; N//	a=not applicable	Il combustion auxiliary power system; ALT= (e.g., Otto engines and vehicles);	-Bucilians inchion
° FMD=e	noine manufacturer diagnos	tic system (13 CCR 19	71); OBD=on-board diagnos	tic system (13 CCR 19	971.1);		

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		со		PM		нсно	
	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO
STD	0.14	*	0.20	*	*	*	14.4	*	0.01	*	0.01	*
FEL	*	*	*	*	*	*	*	*	*	*	ż	*
CERT	0.04	+	0.16	•	*	*	2.9	*	0.001	•	0.001	*
NTE	*		*		*		*		*		*	

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.: 2007-02-25)

**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**: 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 April 2008.

Annette Hebert, Chief

**Mobile Source Operations Division**