California Environmental Protection Agency		EXECUTIVE ORDER A-436-0001
	ENCORE TEC LLC	New On-Road Heavy-Duty Engines
OB Air Resources Board		Page 1 of 2 Pages

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-14-012;

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	DIAGNOSTIC 5	
2017	HEL3E06.076P	6.0	CNG	PROCEDURE Otto	CLASS [*] HDO	ECM, TWC, SFI, 2HO2S	EMD+	
	ENGINE'S IDLE		ADDI	TIONAL IDLE EN	ISSIONS CO	NTROL ⁴		
	N/A	I/A N/A						
ENGINE (L)		ENGINE MODE	LS / CODES_(ra	ted power, in	hp)		
6.0				2 Valve / 1 (32	20)		i,	
=not appl L≍liter; hp	icable; GVWR=gross vehicle v =horsepower; kw=kilowatt; hi	weight rating; 13 CC r=hour;	R xyz=Title 13, California Code o	f Regulations, Seci	ion xyz; 40 CF	R 86.abc=Title 40, Code of Federal Regulation	ons, Section 86.abc;	

CNG/LNG=compressed/liquefied natural gas; LPG=liquefied petroleum gas; E85=85% ethanol fuel; MF=multi fuel a.k.a. BE=bi fuel; DF=dual fuel; FF=ffexible fuel; 2

L/M/H HDD=light/medium/heavy heavy-duty diesel; UB=urban bus; HDO=heavy duty Otto;

Linkin RDD=light/misulum/neavy neavy-outy diesel; UB=UrDan bus; hDD2=heavy duty Otto;
ECS=emission control system; TWC/OC=three-way/oxidizing catalyst; NAC=NO x disorption catalyst; SCR-U / SCR-N=selective catalytic reduction – urea / – ammonia; WU (prefix) =warm-up catalyst; DPF=diesel particulate filter; PTOX=periodic trap oxidizer; HO2S/O2S=heated/oxygen sensor; HAFS/AFS=heated/air-fuel-ratio sensor (a.k.a., universal or linear oxygen sensor); WR-HO2S=wide range oxygen sensor; TBI=throttle body fuel injection; CAC=charge air cooler; EGR / EGR-0=exhaust gas redirculation / cooled EGR; PAIR/AIR=pulsed/secondary air injection; SPL=smoke puff limiter; ECM/PCM=engine/powertrain control module; EM=engine modification; 2 (prefix)=paralia(; (2) (suffix)=in series; ESS=engine shutdown system (per 13 CCR 1956.8(a)(6)(A)(1); 30g=30 g/hr NOX (per 13 CCR 1956.8(a)(6)(C); APS =internal combustion auxiliary power system; ALT=alternative method (per 13 CCR 1956.8(a)(6)(D); Exempti=exempted per 13 CCR 1956.8(a)(6)(D) for CNG/LNG fuel system; N/A=not applicable (e.g., Otto engines and vehicles); ENDEVENDENT (SUSTEMENT); SUSTEMENT); SUSTEMENT, SUSTEMENT

(2012-08-20)

EMD=engine manufacturer diagnostic system; OBD(F) / (P) / (\$)=full / partial / partial with fine / on-board diagnostic;

Following are: 1) the FTP exhaust emission standards, or family emission limit(s) as applicable, under 13 CCR 1956.8; 2) the SET 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, SET 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	NM	НС	N	Ox	NMHC	+NOx	С	0	PI	VI	HC	НО
g/bhp-hr	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET
STD	0.14	*	0.20	* .	*	*	14.4	*	0.01	*	0.01	*
CERT	0.07	*	0.04	*	*	*	0.5	*	0.000	*	0.000	*
NTE	y	k		*		ł		*	*	:	*	£

g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; SET= supplemental emissions testing; NTE=Not-to-Exceed emission limit; STD=standard or emission test cap; =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: The manufacturer has demonstrated compliance with the Greenhouse Gas Emission Standards as specified in Title 13 CCR 1956.8 and the incorporated "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy Duty Otto Cycle Engines and Vehicles" (HDOE Test Procedures) adopted Dec. 27, 2000, as last amended Oct. 21, 2014 using the 2014 model year National Heavy-Duty Engine and Vehicle Greenhouse Gas Program as specified in Section 1036.108 of the HDOE Test Procedures. The manufacturer has submitted the required information and therefore has met the criteria necessary to receive a California Executive Order based on the Environmental Protection Agency's Certificate of Conformity for the above listed engine family.

	EPA CERTIFICAT	E OF CONFORMITY	PRIMARY INTENDED SERVICE CLASS			
	HEL3E0	5.076P-003	Vocational			
In .	(CO ₂		NO		
g/bhp-hr	FTP	SET	CH₄	N ₂ O		
STD	*	*	*	*		
CL	*	*	*	*		
FEL	*	*	*	*		
CERT	*	*	*	*		
4 a/bhp-br=orams	per brake borsepower-bour: ETP:	Federal Test Procedure: SET=Supplemental emis	ssions testing: STD = standard or emis	ssion test cap: EEI =family emission limit:		

VOCATIONAL=vocational engine; FCL=family certification level; CERT=certification level; CO2=carbon dioxide; CH4=methane; N2O=nitrous oxide; TRACTOR=tractor engine

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BE IT FURTHER RESOLVED: The manufacturer has demonstrated compliance with the Greenhouse Gas Emission Standards as specified in Title 13 CCR 1956.8 and the incorporated "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy Duty Otto Cycle Engines and Vehicles" (HDOE Test Procedures) adopted Dec. 27, 2000, as last amended Oct. 21, 2014 using the Interim Provisions as specified in Section 1036.150(d) of the HDOE Test Procedures.

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 2035 et seq. (emission control warranty) and 13 CCR 1971.1 (on-board diagnostic).

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 May 2017.

Annette Hebert, Chief Emissions Compliance, Automotive Regulations and Science Division