California Environmental Protection Agency	WORKHORSE CUSTOM CHASSIS, LLC	EXECUTIVE ORDER A-340-0029 New On-Road Heavy-Duty Motor Vehicles
AIR RESOURCES BOARD		

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 following on-road motor vehicles with a manufacturer's GVWR over 14000 pounds are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

							ENGINE D	DESCRIPTION						
GENERAL MOTORS CORPORATION A-00				DEL AR	ENGIN	E FAMILY	ENGINE SIZES (L)	FUEL TYPE <sup>1</sup>	- 81	DARDS EST EDURE	INTENDED SERVICE CLASS <sup>2</sup>	ECS & SPECIAL FEATURES		
								Gasoline	Otto		HDO	0 2TWC, 2HO2S, SFI		
		-006-1331				H08.1503	8.1		DESCRIPTION		1.2			
Gasoline, LPG or	Alcoho									ENGINE	FN	GINE MODELS / CODES		
EVAPORATIVE		FUEL T		VEHICLE MODEL			VEHICLE MAKE & MODELS			(L)		(rated power, in hp)		
FAMILY	UL (K)			YEA	AR	Observice B 20				8.1	L18 / 30 (330)			
WHCE0407000	150	40, 60,	75	200	06	W	Workhorse Custom Chassis P 30 * *			*	*			
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		-+		t							e of Federal Regulations, Section 86.abc;			

L=iiter, K=1000 miles; hp=horsepower; kw=kilowatt;
CNG/LNG=compressed/liquefied natural gas; LPG=liquefied petroleum gas; E85=85% ethanol fuel; MF=multi fuel a.k.a. BF=bi fuel; DF=dual fuel; FF=flexible fuel;
L/W/H HDD=light/medium/heavy heavy-duty diesel; UB=urban bus; HDO=heavy duty Otto;
L/W/H HDD=light/medium/heavy heavy-duty diesel; UB=urban bus; HDO=heavy duty Otto;
ECS=emission control system; TWC/OC=three-way/oxidizing catalyst; WU (prefix) =warm-up catalyst; DPF=diesel particulate filter; HO2S/O2S=heated/oxygen sensor; HAFS/AFS=heated/air-faels sensor (a.k.a., universal or linear oxygen sensor); TBI=throttle body fuel injection; SFL/MFI=sequential/multi port fuel injection; DGI=direct gasoline injection; GCARB=gaseous carburetor;
JD/DDI=indirect/direct diesel injection; TC/SC=turbo/super charger; CAC=charge air cooler; EGR=exhaust gas recirculation; PAIR/AIR=pulsed/secondary air injection; SPL=smoke puff limiter;
L/W/H CM=engine/powertrain control module; EM=engine modification; 2 (prefix)=parallel; (2) (suff(x)=in series;

Following are: 1) the FTP exhaust emission standards or family emission limit(s) as applicable under 13 CCR 1956.1 rollowing are: 1) the FTP exhaust emission standards or family emission limit(s) as applicable under 15 CCR 1950.1 (urban bus) or 13 CCR 1956.8 (other than urban bus); 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, in g/bhp-hr, 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. 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 1956.1 or 13 CCR 1956.8 are in parentheses.)

ngines, in	00.2								F	M	н	сно
·	NMHC		NOx		NMHC+NOx		<u> </u>			EURO	FTP	EURO
	FTP		FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO		+
	FIP	EUKO		*	*	*	37.1	T *	*	· ·		
STD	*	*		<u></u>		+	*	*	*		*	
EL	•	•	*	*	1.0	<u> </u>		+ +	+	+	*	*
ERT	*	*	*	•	0.6	<u> </u>	3.4	<u> </u>		*		*
NTE		*		*				Ob-to Cuplet N	TE-Not-to-Exc	eed emission limi	t; STD=standard	or emission test

g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; EURO=Euro III European Steady-State Cycle; NTE group-in-grams per brane horseporter-indur, in the education of the education, Education in European oready orace organ, in E-inded or European and or Enhance in the education of the education the education

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 Option 1 federal NMHC+NOx emission standard(s) listed above pursuant to 13 CCR 1956.1 or 13 CCR 1956.8.

BE IT FURTHER RESOLVED: For the listed vehicle models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 1976(b)(1)(B)-(C) or 13 CCR 1976(b)(1)(F) {evaporative emission standards}, 13 CCR 2035 et seq. (emission control warranty), and 13 CCR 2235 [fill pipes and openings of motor vehicle fuel tanks]. (The braces { } are for gasoline, LPG or alcohol fueled vehicles only. The brackets [] are for gasoline or alcohol fueled vehicles only.)

Vehicles 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 2005.

Allen Jons, Chief Mobile Source Operations Division