⊘ 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-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 YEAR	ENGINE F	AMILY	ENGINE	FUEL TYPE 1	STANDARDS & TEST	INTENDED SERVICE	ECS & SPECIAL FEATURES 3	DIAGNOSTIC 5 EMD+
TEAR	article versus.	1.50	SIZES (L)	and the second second second	PROCEDURE	CLASS	TWC, SFI, 2WR-H02S, H02S	
2016	GRIIE06.8BWC		6.8	CNG	Otto	HDO	1000, 3F1, 200K-HO23, HO23	EMD+
	' ENGINE'S IDI NS CONTROL			ADDI	TIONAL IDLE EN	IISSIONS COI	NTROL 4	
	N/A			i an an an an a	N.	/A		t _{at}
ENGINE (L)		+	ENGINE MODE	LS/CODES (ra	ted power, In	hp)	
6.8		** * + 1	В	lue Bird Vision Bus / GG	(C10AR5; GG	XC10ARA (269 for all codes)	· .
L=liter; hp:	=horsepower, k	v=kilowatt; h	r=hour;				R 86.abc=Title 40, Code of Federal Regulation =bi fuel; DF=dual fuel; FF=flexible fuel;	ns, Section 86.abc;

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

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 auxilliary power system; ALT=alternative method (per 13 CCR 1956.8(a)(6)(D); Exempt=exempted per 13 CCR 1956.8(a)(6)(B) or for CNG/LNG fuel systems; N/A=not applicable (e.g., Otto engines and vehicles);

EMD=engine manufacturer diagnostic system (13 CCR 1971); OBD(F) /-(P) / (\$)=full / partial / partial with a 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 heavyduty 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	NMHC		NOx		NMHC+NOx		co		PM		нсно	
g/bhp-hr	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET
STD	0.14	*	0.10	*	*	*	14.4	*	0.01	*	0.01	*
CERT	0.02	*	0.04	*	*	*	7.1	*	0.000	*	0.000	*
NTE	y	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; 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: That the listed engine family is certified to the Optional Low NOx Emission Standards as specified in 13 CCR 1956.8(c)(1)(B) and section 10.B.1 of the incorporated "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles" adopted December 27, 2000 and last amended September 2, 2015.

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.

ECS=emission control system; TWC/OC=three-way/oxldizing catalyst; NAC=NOx adsorption catalyst; SCR-U / SCR-N=selective catalytic reduction - urea / - ammonia; WU (prefix) = warmup catalyst; DPF=dlesel 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; SFI/MFI=sequential/multi port fuel injection; DGI=direct gasoline injection; GCARB=gaseous carburetor; IDI/DDI=indirect/direct diesel injection; TC/SC=turbo/ super charger; CAC=charge air cooler; EGR / EGR—cashaust gas recirculation / cooled EGR; PAIR/AIR=pulsed/secondary air injection; SPL=smoke puff limiter; ECM/PCM=engine/powertrain control module; EM=engine modification; 2 (prefix)=parallel; (2) (suffix)=in series;

	EPA CERTIFICAT	E OF CONFORMITY	PRIMARY INTENDED SERVICE CLASS Vocational				
	GRIIE06.	8BWC-002					
In	(O ₂					
g/bhp-hr	FTP	SET	CH,	N₂O			
STD	627	*	0,10	0.10			
FCL	596	*	*	*			
FEL	614	*	0.30	0.10			
CERT	545	*	0,22	0.02			

BE IT FURTHER RESOLVED: Certification to the FEL(s) / FCL(s) listed above, as applicable, is subject to the following terms, limitations and conditions. The FEL(s) / FCL(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), 13 CCR 2035 et seq. (emission control warranty) and 13 CCR 1971 (engine manufacturer 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

Annette Hebert, Offici

Emissions Compliance, Automotive Regulations and Science Division