California Environmental Protection Agency	EXECUTIVE ORDER A-378-0005
AIR RESOURCES BOARD	New On-Road Heavy-Duty Motor Vehicles

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.

10 · · · · · · · · · · · · · · · · · · ·		7		-	ENGIN	E DESCRIPTION						
MANUFACTURE	E	EXECUTIVE		ENGINE FAMILY	ENGINE SIZES	FUEL TYPE 1		TANDARDS & TEST	INTENDED SERVICE	ECS & SPECIAL FEATURES		
MANUFACIURE		ORDER	YEAR	ENGINE FAMILT	(L)	Fiex Fuel: Ethanol (E8	5) / PF	ROCEDURE	CLASS 2	EUS & SPECIAL FEATURES		
FORD MOTOR COMPANY A-010-1664		-010-1664	2012	Gas		Gasoline (Tier 2 Unleaded)			HDO	TWC, 2H02S, SFI, HAFS		
Gasoline, LPG o C	r Alcoho Inly	l Vehicles				VEHICLE D	ESCRIP	TION				
EVAPORATIVE		FUEL TANK			Hybrid VEHICLE MAKE & MODELS		ENGIN	E	ENGINE MODELS / CODES			
FAMILY	UL (K)	(gallons)	YEAR	Engine Family	, ven	VEHICLE MARE & MODELS		(rated power, in		d power, in hp)		
CFMXF0265NAT	150	55, 40	2012	CAZD105.400	1 Azur	e Dynamics Balance Hybrid E-450	5.4		E-450 / BE414Y05 (255)			
*	*	*	*		*				*			

=not applicable; GVWR=gross vehicle weight rating; 13 CCR xyz=Title 13, California Code of Regulations, Section xyz; 40 CFR 86.abc=Title 40, Code of Federal Regulations, Section 86.abc; L=liter; 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;

CNG/LNG=compressed/liquefied natural gas; LPG=liquefied petroleum gas; E85=85% ethanoi fuel; MF=multi fuel a.k.a. E L/M/H HDD=light/medium/heavy heavy-duty diesel; UB=urban bus; HDO=heavy duty Otto;

3 EdStemission control system; TWC/OC=hree-way/oxidizing catalyst; WU (prefix) =wam-up catalyst; DPF=diesel particulate filter; HO2S/O2S=heated/oxygen sensor; HAFS/AFS=heated/air-fuel-ratio sensor (a.k.a., universal or linear oxygen sensor); TBI=throttle body fuel injection; SF/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=exhaust gas recirculation; 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

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 heavyduty 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. (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		со		PM		нсно	
	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO
STD	0.14 [0.14]	•	0.20 [0.20]	•	•	•	14.4 [14.4]	•	0.01 [0.01]	÷	0.01 [0.01]	•
FEL	•		*	•	•	•	•	•	•	•	•	*
CERT	0.05 [0.05]	•	0.11 [0.10]	·	•	•	2.2 [4.3]	•	•	*	0.002 [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												

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 certification levels listed above are determined in accordance with the "California Interim Certification Procedures for 2004 and Subsequent Model Hybrid-Electric Vehicles, in the Urban Bus and Heavy-Duty Vehicle Classes, adopted October 24, 2002".

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)(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 November 2011.

Annette Hebert, Chief Mobile Source Operations Division