

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;

FORD MOTOR COMPANY

IT IS ORDERED AND RESOLVED: The following diesel or incomplete medium-duty vehicles (MDV) with a manufacturer's GVWR from 8501 to 14000 pounds are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

					EN	IGINE DESCRI	PTION				
MODEL YEAR	ENGINE FAMILY BFMXE05.4AFF		Υ	ENGINE	EMISSION	FUEL TYP	JEL TYPE STANDARDS & TEST PROCEDUR		SIZES (L)	ECS & SPECIAL FEATURES	OBD COMPLIANCE
			F MAN	UFACTURER	STD CATEGORY 2						
	EXECUT	IVE ORD	ER FORD M	OTOR COMPA		Gasoline		E	5.4 TWC, SFI, 2HO2S,	OBD(P)	
2011	A-0	10-1612			ULEV			Otto	0.1	2HAFS	000(17
Gasoline, LPG or Alcohol Vehicles Only VEHICLE DESCRIPTION											
EVA	PORATI	/E	FUEL TANK CAPACITY	WEHICLE	VEHICLE MAKE	MODELS	ENGI	NE	ENGINE MO	DELS / CODES	OBD
FAM	ILY	UL (K)	(gallons)	YEAR	VEITICLE MAKE	(L)			(rated power, in hp)		COMPLIANCE
BFMXF0	265NAS	150	55	2011	E350		5.4	E3:	50 Incomplet	te / BE414G05 (255)	OBD(P)
BFMXF0	265NAS	150	40	2011	E350		5.4	E3	50 Incomple	te / BE414F05 (255)	OBD(P)

*=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; hp=horsepower; kw=kilowatt; (2004may26)

1 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; SULEV / ULEV / LEV=super ultra / ultra / low emission vehicle;

3 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-fuel-ratio sensor (a.k.a., universal or linear oxygen sensor); TBI=throttle body fuel injection; SFI/MFI=sequential/multi port fuel injection; DGS=direct gasoline injection; GCARB=gaseous carburetor; IDI/DDI=indirect/direct diesel injection; TC/SC=turbo/super charger, CAC=charge as particulation; PAI/RAIR=pulsed/secondary air injection; SPL=smoke putf limiter; OBD(F) / (P) / (\$)=full / partial / partial with a fine / on-board diagnostic; 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 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. (For dual- and flexible-fuel, the CERT values in brackets [] are those when tested on conventional test fuel.)

	NMHC		NOx		NMHC+NOx		co		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	*	*	*	*	*	*	*	*	*	*	*	*
CERT	0.08	*	0.14	*	*	*	4.4	*	*	*	0.001	*
NTE		*		*		*		*		*		*

⁴ g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; EURO=Euro III European Steady-State Cycle; 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: 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 optional emission standards and test procedures in 13 CCR 1956.8 applicable to diesel or incomplete MDV with a 8501-14000 pound GVWR and shall be subject to 13 CCR 2139(c) (in-use testing of engines certified for use in diesel or incomplete MDV with a 8501-14000 pound GVWR).

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 1968.2 (on-board diagnostic, full or partial compliance), 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.)

Vehicles certified under this Executive Order shall 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 2010.

a FOR AUNTETTE HEBRET

Annette Mebert, Chief

Mobile Source Operations Division

A-010-1613 E.O.#___MDEV

2011 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET **HEAVY DUTY ENGINE**

	Manufacturer:	Ford Motor Comp	<u>bany</u>	Engine Family: BFMXE	05.4AFF_				
	Displacement: 5.4 Liter 330 Cubic Inches								
	All Eng Codes in Eng Family: CA 49S 50S_X_								
	Fuel Type(s):	Dedicated X	_ Flex Fuel Dua	al-Fuel Bi-Fuel Gaso	oline <u>X</u> CNG				
		LNG_ LPG	M85 M100	Other (specify)					
	Maximum Rate	d Power: 255_HF	P@_4500_RPM_F-	Series Incomplete Engine	e Configuration <u>V8</u>				
	Exhaust Contro	ol System and Spe		, 2HO2S, SFI, 2HAFS abbreviations per SAE J1	930 SEP91)				
	Engine Model	Transmission	Ign. System or PCM	Fuel System Injtr	Catalyst				
	(Engine Code)		OI FOW	ngu					
			Part No. -12A650-	Part No. -9F593-	Part No. -5E212-				
Initial	Certification								
E350	(40 gal) ¹								
	BE414F05	Auto	BC2A – ACC	9C2E A5A	9C24 – JF 9C24 – JE 9C24 – KE				
E350	(55 gal) ¹								
	BE414G05	n	BC2A - ADC	H	11				

Prifamel ky: Batak 7-6/10 Seviewed by. P.A.717/10

Test Group: BFMXE05.4AFF Issued: May 11, 2010

¹ EVAP family BFMXF0265NAS

Comments:

Revised:

Large Engine Evaporative Emission Form

Ma	inufacturer:	Ford Motor Cor	npany		
1.	Model Year: 20	011_	2.	Date: 5/11/2010	
3.	Process Code: No New Submission, Con	ew Submission rection, Running Change)	4.	Test Data Set Nur	nber:1_
5.		d Evaporative Family FMXF0265NAS	name: 6.	Fuel: E10 (Gasoline, LPG, Metho	anol, CNG, Other)
7.		Certification Standard Cycle, 86.091-11(b) Diesel,			l, 86.098-11 Cycle)
		jory: <u>8501 < GVWF</u> #K < GVWR < 26k, GVWR :			
8.	Evaporative R	<u>esults</u>			
		Test #1	Test #2	Test #3	Calif. LEV-II
Pro	ocedure	Federal	Federal		Standards
Da	te of Test	2/12/2008	1/31/2008		4 - w

Note: Vehicle 184W401, 5.4L E450 Cutaway 55 gal, was used for the 3-Day, 2-Day and Running Loss testing.

0.70

0.00

1.00

1.25

0.05

N/A

9. Evaporative Family/Engine Comparison Information

0.52

Evaporative Family Code	Engine Manufacturer	Engine Family	Evap Control System
BFMXF0265NAS	Ford Motor Co.	BFMXE05.4AFF	Canister

Test Group: BFMXE05.4AFF Issued: May 11, 2010

3-Day diurnal g/test

2-Day diurnal g/test

Running Loss g/test

Spit Back g/test

Revised: