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 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 FAMILY	ENGINE SIZES (L)	FUEL TYPE [1]	STANDARDS & TEST PROCEDURE	INTENDED SERVICE CLASS [2]	ECS & SPECIAL FEATURES [3]	DIAGNOSTIC [6]
2011	BVPTH10.8S01	10.8	Diesel	Diesel	HHDD	DDI, TC, CAC, ECM, EGR, OC, PTOX, SCR-U, OC, SPL	EMD+

PRIMARY ENGINE'S IDLE EMISSIONS CONTROL [5]	ADDITIONAL IDLE EMISSIONS CONTROL [5]
30g	N/A

ENGINE (L)	ENGINE MODELS / CODES (rated power, in hp)
* 10.8	See attachment for engine models and ratings (clean idle engines are labeled as 50-State compliant engines)

* =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; **hr**=hour;

[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;

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

[3] **ECS**=emission control system; **TWC/OC**=three-way/oxidizing catalyst; **NAC**=NOx adsorption 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); **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-C**=exhaust 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; SCR = Selective Catalytic Reduction system

[5] **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); **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);

[6] **EMD**=engine manufacturer diagnostic system (13 CCR 1971); **OBD**=on-board diagnostic system (13 CCR 1971.1);

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, 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.).[4]

in g/bhp-hr	NMHC		NOx		NMHC+NOx		CO		PM		HCHO	
	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO
STD	0.14	0.14	0.20	0.20	*	*	15.5	15.5	*	*	*	*
FEL	*	*	*	*	*	*	*	*	0.00	0.00	*	*
CERT	0.02	0.01	0.13	0.09	*	*	*	*	0.001	0.002	*	*
NTE	0.21		0.30		*		19.4		0.02		*	

[4] **g/bhp-hr**=grams per brake horsepower-hour; **FTP**=Federal Test Procedure; **EURO**=Euro III European Steady-State Cycle, including **RMCSET**=ramp mode cycle supplemental emissions testing; **NTE**=Not-to-Exceed; **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: Except in vehicle applications exempted per 13 CCR 1956.8(a)(6)(B), engines in this engine family certified under 13 CCR 1956.8(a)(6)(C) [30 g/hr NOx] and section 35.B.4 of the incorporated "California Exhaust Emissions Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles" adopted Dec. 12, 2002, as last amended Sep. 1, 2006, shall be provided with an approved "Certified Clean Idle" label that shall be affixed to the vehicle into which the engine is installed.

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) and 13 CCR 2035 et seq. (emission control warranty).

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.

This Executive Order hereby supersedes Executive Order A-242-0060, dated December 23, 2010.

Executed at El Monte, California on this 18 day of March 2011.

Annette Hebert, Chief
Mobile Source Operations Division

SUPERSEDED

Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
BVPTH10.8S01	N / A	MP7-325E	325 @ 1850	188.1	116.2	1282.0 @ 1200	241.3	96.7	EM,EC,TC,CAC,DI,EGR,DPF,SCR
BVPTH10.8S01	N / A	MP7-355E	355 @ 1800	212.4	127.6	1393.2 @ 1200	262.9	105.3	EM,EC,TC,CAC,DI,EGR,DPF,SCR
BVPTH10.8S01	N / A	MP7-405E	405 @ 1800	247.6	148.8	1492.6 @ 1200	282.5	113.2	EM,EC,TC,CAC,DI,EGR,DPF,SCR
BVPTH10.8S01	N / A	MP7-345A	345 @ 1500	236.2	118.3	1249.1 @ 1000	230.8	77.1	EM,EC,TC,CAC,DI,EGR,DPF,SCR
BVPTH10.8S01	N / A	MP7-345C	345 @ 1500	236.2	118.3	1391.9 @ 1200	261.7	104.9	EM,EC,TC,CAC,DI,EGR,DPF,SCR
BVPTH10.8S01	N / A	MP7-365C	365 @ 1450	259.7	125.7	1491.0 @ 1200	280.8	112.5	EM,EC,TC,CAC,DI,EGR,DPF,SCR
BVPTH10.8S01	N / A	MP7-395C	395 @ 1500	274.7	137.6	1596.6 @ 1200	304.0	121.8	EM,EC,TC,CAC,DI,EGR,DPF,SCR
BVPTH10.8S01	N / A	MP7-325M	325 @ 1900	186.1	118.1	1215.3 @1200	228.5	91.6	EM,EC,TC,CAC,DI,EGR,DPF,SCR
BVPTH10.8S01	N / A	MP7-365M	365 @ 1900	211.7	134.3	1360.5 @ 1200	257.3	103.1	EM,EC,TC,CAC,DI,EGR,DPF,SCR
BVPTH10.8S01	N / A	MP7-405M	405 @ 1900	239.8	152.2	1512.6 @1200	286.2	114.7	EM,EC,TC,CAC,DI,EGR,DPF,SCR
BVPTH10.8S01	N / A	D11H-325	325 @ 1700	201.4	114.3	1235.6 @ 1050	234.7	82.3	EM,EC,TC,CAC,DI,EGR,DPF,SCR
BVPTH10.8S01	N / A	D11H-355	355 @ 1700	221.3	125.6	1228.5 @ 1050	235.2	82.5	EM,EC,TC,CAC,DI,EGR,DPF,SCR
BVPTH10.8S01	N / A	D11H-365	365 @ 1700	225.9	128.2	1379.4 @ 1100	260.9	95.8	EM,EC,TC,CAC,DI,EGR,DPF,SCR
BVPTH10.8S01	N / A	D11H-385	385 @ 1700	240.8	136.7	1508.0 @ 1200	284.3	113.9	EM,EC,TC,CAC,DI,EGR,DPF,SCR
BVPTH10.8S01	N / A	D11H-405	405 @ 1800	248.9	149.6	1493.6 @ 1200	284.1	113.8	EM,EC,TC,CAC,DI,EGR,DPF,SCR

DDI, TC, CAC, ECM, EGR,
OC, PTOX, ~~SCR~~ SCR-U, OC, SPL

ATTACHMENT

A-242-0060-1

SUPERSEDED