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]
2014	ECEXH0408BAP	6.7	Diesel	Diesel	MHDD	DDI, TC, CAC, ECM, EGR, OC, PTOX, SCR-U	OBD($)

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

ENGINE (L)	ENGINE MODELS / CODES (rated power, in hp)
6.7	See Attachment for engine models and ratings
*	*

* =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;

[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**(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 heavy-duty 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.).[4]

in g/bhp-hr	NMHC		NOx		NMHC+NOx		CO		PM		HCHO	
	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET
STD	0.14	0.14	0.20	0.20	*	*	15.5	15.5	0.01	0.01	*	*
FEL	*	*	*	*	*	*	*	*	*	*	*	*
CERT	0.04	0.01	0.18	0.13	*	*	0.6	0.8	0.000	0.001	*	*
NTE	0.21		0.30		*		19.4		0.02		*	

[4] **g/bhp-hr**=grams per brake horsepower-hour; **FTP**=Federal Test Procedure; **SET**=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" (HDDE Test Procedures) adopted Dec. 12, 2002, as last amended Apr. 18, 2013, 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), 13 CCR 1971.1 (on-board diagnostic, full or partial compliance) and 13 CCR 2035 et seq. (emission control warranty).

BE IT FURTHER RESOLVED: That the manufacturer has elected to include engine models in this engine family which are identified for "emergency vehicle use only". These "emergency vehicle use only" engines are exempt from requirements imposed pursuant to California law and the regulations adopted pursuant thereto for motor vehicle pollution control devices per California Vehicle Code Section 27156.2. The manufacturer must clearly label these engines for "emergency vehicle use only" on the engines' emission control label.

BE IT FURTHER RESOLVED: The listed engine models are conditionally certified in accordance with 13 CCR Section 1971.1(k) (deficiency and fines provisions for certification of malfunction and diagnostic system) because the heavy-duty on-board diagnostic (HD OBD) system of the listed engine models has been determined to have eight deficiencies. The listed engine models are approved subject to the manufacturer paying a fine of $325 per engine for the third through eighth deficiencies in the listed engine family that is produced and delivered for sale in California. On a quarterly basis, the manufacturer shall submit to the Air Resources Board reports of the number of engines produced and delivered for sale in California and pay the full fine owed for that quarter pursuant to this conditional certification. Payment shall be made payable to the State Treasurer for deposit in the Air Pollution Control Fund no later than thirty (30) days after the end of each calendar quarter during the 2014 model-year production period. Failure to pay the quarterly fine, in full, in the time provided, may be cause for the Executive Officer to rescind this conditional certification, effective from the start of the quarter in question, in which case all engines covered under this conditional certification for that quarter and all future quarters would be deemed uncertified and subject to a civil penalty of up to $5000 per engine pursuant to HSC Section 43154.

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 6th day of January 2014.

Erik White, Chief
Mobile Source Operations Division

Attachment: Page 1 of 2

EO#: A-021-0604.

12-31-2017

Engine Model Summary Template

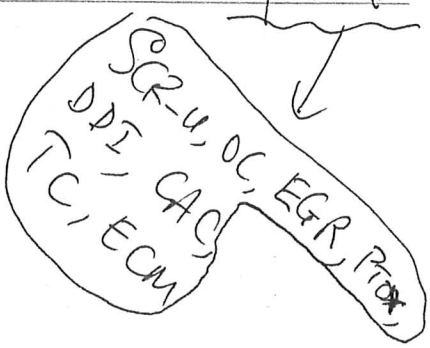
Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
ECEXH0408BAP	3612;FR93354	ISB6.7 360	360@2600	154	135	800@1800	152	92	SCRC, PTOX, PC
ECEXH0408BAP	3612;FR93352	ISB6.7 340	340@2600	148	130	700@1600	140	75	SCRC, PTOX, PC
ECEXH0408BAP	3612;FR93351	ISB6.7 325	315@2600	140	123	750@1800	146	89	SCRC, PTOX, PC
ECEXH0408BAP	3612;FR93349	ISB6.7 300	300@2600	139	122	660@1600	131	71	SCRC, PTOX, PC
ECEXH0408BAP	3613;FR93350	ISB6.7 300	300@2600	139	122	660@1600	131	71	SCRC, PTOX, PC
ECEXH0408BAP	3612;FR93347	ISB6.7 280	270@2600	127	112	660@1600	131	71	SCRC, PTOX, PC
ECEXH0408BAP	3613;FR93348	ISB6.7 280	270@2600	127	112	660@1600	131	71	SCRC, PTOX, PC
ECEXH0408BAP	3610;FR93345	ISB6.7 260	250@2600	118	103	660@1600	133	72	SCRC, PTOX, PC
ECEXH0408BAP	3611;FR93346	ISB6.7 260	250@2600	118	103	660@1600	133	72	SCRC, PTOX, PC
ECEXH0408BAP	3610;FR93343	ISB6.7 250	245@2600	116	102	660@1600	133	72	SCRC, PTOX, PC
ECEXH0408BAP	3611;FR93344	ISB6.7 250	245@2600	116	102	660@1600	133	72	SCRC, PTOX, PC
ECEXH0408BAP	3610;FR93341	ISB6.7 240	235@2600	112	98	560@1600	119	64	SCRC, PTOX, PC
ECEXH0408BAP	3611;FR93342	ISB6.7 240	235@2600	112	98	560@1600	119	64	SCRC, PTOX, PC
ECEXH0408BAP	3610;FR93339	ISB6.7 220	215@2600	103	90	520@1600	111	60	SCRC, PTOX, PC
ECEXH0408BAP	3611;FR93340	ISB6.7 220	215@2600	103	90	520@1600	111	60	SCRC, PTOX, PC
ECEXH0408BAP	3610;FR93337	ISB6.7 200	195@2600	95	83	520@1600	111	60	SCRC, PTOX, PC
ECEXH0408BAP	3611;FR93338	ISB6.7 200	195@2600	95	83	520@1600	111	60	SCRC, PTOX, PC
ECEXH0408BAP	3612;FR93354	PX-7 360	360@2600	154	135	800@1800	152	92	SCRC, PTOX, PC
ECEXH0408BAP	3612;FR93352	PX-7 340	340@2600	148	130	700@1600	140	75	SCRC, PTOX, PC
ECEXH0408BAP	3612;FR93351	PX-7 325	315@2600	140	123	750@1800	146	89	SCRC, PTOX, PC
ECEXH0408BAP	3612;FR93349	PX-7 300	300@2600	139	122	660@1600	131	71	SCRC, PTOX, PC
ECEXH0408BAP	3613;FR93350	PX-7 300	300@2600	139	122	660@1600	131	71	SCRC, PTOX, PC
ECEXH0408BAP	3612;FR93347	PX-7 280	270@2600	127	112	660@1600	131	71	SCRC, PTOX, PC
ECEXH0408BAP	3613;FR93348	PX-7 280	270@2600	127	112	660@1600	131	71	SCRC, PTOX, PC
ECEXH0408BAP	3610;FR93345	PX-7 260	250@2600	118	103	660@1600	133	72	SCRC, PTOX, PC
ECEXH0408BAP	3611;FR93346	PX-7 260	250@2600	118	103	660@1600	133	72	SCRC, PTOX, PC
ECEXH0408BAP	3610;FR93343	PX-7 250	245@2600	116	102	660@1600	133	72	SCRC, PTOX, PC
ECEXH0408BAP	3611;FR93344	PX-7 250	245@2600	116	102	660@1600	133	72	SCRC, PTOX, PC

SCR-4, OC, EGR, PTox
DDI, C+C,
TC, ECM

Attachment: Page 2 of 2

EO#: A-021-0604

12-31-2013

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
ECEXH0408BAP	3610;FR93341	PX-7 240	235@2600	112	98	560@1600	119	64	SCRC, PTOX, PC
ECEXH0408BAP	3611;FR93342	PX-7 240	235@2600	112	98	560@1600	119	64	SCRC, PTOX, PC
ECEXH0408BAP	3610;FR93339	PX-7 220	215@2600	103	90	520@1600	111	60	SCRC, PTOX, PC
ECEXH0408BAP	3611;FR93340	PX-7 220	215@2600	103	90	520@1600	111	60	SCRC, PTOX, PC
ECEXH0408BAP	3610;FR93337	PX-7 200	195@2600	95	83	520@1600	111	60	SCRC, PTOX, PC
ECEXH0408BAP	3611;FR93338	PX-7 200	195@2600	95	83	520@1600	111	60	SCRC, PTOX, PC
ECEXH0408BAP									
ECEXH0408BAP	Emergency	Vehicle	Ratings	Below					
ECEXH0408BAP	3613;FR93355	ISB6.7 360 EV	360@2600	154	135	800@1800	152	92	SCRC, PTOX, PC
ECEXH0408BAP	3613;FR93353	ISB6.7 340 EV	340@2600	148	130	700@1600	140	75	SCRC, PTOX, PC
ECEXH0408BAP	3612;FR93351	ISB6.7 325 EV	315@2600	140	123	750@1800	146	89	SCRC, PTOX, PC
ECEXH0408BAP	3612;FR93349	ISB6.7 300 EV	300@2600	139	122	660@1600	131	71	SCRC, PTOX, PC
ECEXH0408BAP	3612;FR93347	ISB6.7 280 EV	270@2600	127	112	660@1600	131	71	SCRC, PTOX, PC
ECEXH0408BAP	3610;FR93345	ISB6.7 260 EV	250@2600	118	103	660@1600	133	72	SCRC, PTOX, PC
ECEXH0408BAP	3613;FR93355	PX-7 360 EV	360@2600	154	135	800@1800	152	92	SCRC, PTOX, PC
ECEXH0408BAP	3613;FR93353	PX-7 340 EV	340@2600	148	130	700@1600	140	75	SCRC, PTOX, PC
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