California Environmental Protection Agency

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)			
2012	CCPXL12.5ESK	12.5	Diesel	8000			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Electroni	c Direct Injection, Turbo Cooler, Engine Contro	charger, Charge Air I Module	Excavator, Industrial Equipment				

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)				OPACITY (%)			
POWER CLASS			нс	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
130 <u>≤</u> kW <u>≤</u> 560	Tier 4 Interim ALT 20% NOX and PM	STD	0.19	2.0	N/A	3.5	0.02	20	15	50
		FEL	N/A	3.8		N/A	0.20	N/A	N/A	N/A
		CERT	0.11	3.6		2.7	0.16	15	4	25

BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this _

day of November 2011.

Annette Hebert, Chief Mobile Source Operations Division

Engine Model Summary Template

u-R-001-0440 1d2412011

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 torg	9.Emission Control ueDevice Per SAE J1930
CCPXL12.5ESK	Cert Test 1	C13	480@2000	250	168	1735@1400	339	160	ECM EM, DI, TC, DAC
CCPXL12.5ESK	1	C13	345@1800	196	119	1207@1400	233	110	EM,DI,TC,
CCPXL12.5ESK	2	C13	371@1800	213	129	1300@1400	253	119	EM,DI,TC,
CCPXL12.5ESK	3	C13	440@1800	249	151	1483@1400	292	138	EM,DI,TC,
CCPXL12.5ESK	4	C13	371@1800	209	127	1300@1400	246	116	EM,DI,TC,
CCPXL12.5ESK	5	C13	409@1800	223	135	1294@1400	259	122	🗸 EM,DI,TC, 🗸