California Environmental Protection Agency Air Resources Board	FPT INDUSTRIAL S.p.A.	EXECUTIVE ORDER U-R-015-0252 New Off-Road Compression-Ignition Engines

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)
2013	DFPXL03.4ADD	3.4	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Exhaust Gas Recirculation, Diesel Oxidation Catalyst, and Periodic Trap Oxidizer	Loader, Tractor, Dozer, and Other Industrial Equipment

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), 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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
56 ≤ kW < 130	Interim Tier 4 /ALT NOx	STD	0.19	3.4	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.01	2.9	--	0.1	0.02	--	--	--

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 9 day of October 2012.

Annette Hebert, Chief
Mobile Source Operations Division

Engine Model Summary Template

U-R-015-0252 Attachment pg 1/2 11/8/2012

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
DFPXL03.4ADD	F5HFL413B*A	F5HFL413B*A	110 @ 2200	84.7	N/A	339 @ 1400	102.3	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL413C*A	F5DFL413C*A	87 @ 2300	66.0	N/A	300 @ 1500	90.5	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL413B*A	F5DFL413B*A	96 @ 2300	73.1	N/A	327 @ 1500	98.7	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL413A*A	F5DFL413A*A	103 @ 2300	78.1	N/A	337 @ 1500	101.6	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL413D*A	F5HFL413D*A	84 @ 2200	65.1	N/A	305 @ 1500	82.4	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL413C*A	F5HFL413C*A	96 @ 2200	74.1	N/A	334 @ 1400	100.7	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL413G*A	F5HFL413G*A	82 @ 2000	66.9	N/A	265 @ 1400	79.3	N/A	DDI, ECM, TC, CAC, EGR, OC PTOX
DFPXL03.4ADD	F5HFL413F*A	F5HFL413F*A	90 @ 2000	73.8	N/A	295 @ 1400	88.1	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL414D*A	F5HFL414D*A	111 @ 2200	85.8	N/A	332 @ 1400	100.1	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL414C*A	F5HFL414C*A	100 @ 2200	77.2	N/A	309 @ 1400	93.4	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL414A*A	F5HFL414A*A	94 @ 2200	72.0	N/A	291 @ 1400	87.0	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL414F*A	F5HFL414F*A	88 @ 2200	67.9	N/A	273 @ 1400	81.5	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL414B*A	F5HFL414B*A	84 @ 2200	64.8	N/A	261 @ 1400	78.0	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL414G*A	F5HFL414G*A	115 @ 2500	82.7	N/A	309 @ 1600	93.8	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL414E*A	F5HFL414E*A	100 @ 2500	72.1	N/A	287 @ 1600	86.7	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL414H*A	F5HFL414H*A	89 @ 2500	64.3	N/A	253 @ 1600	76.1	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL413E*A	F5HFL413E*A	90 @ 2500	65.7	N/A	282 @ 1400	84.7	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL413A*A	F5HFL413A*A	114 @ 2500	81.7	N/A	339 @ 1400	102.3	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL413D*A	F5DFL413D*A	76 @ 2300	58.9	N/A	259 @ 1500	77.7	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL413H*A	F5DFL413H*A	112 @ 2300	85.5	N/A	337 @ 1500	101,6	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL413J*A	F5DFL413J*A	105 @ 2300	80.0	N/A	327 @ 1500	98,7	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL413K*A	F5DFL413K*A	97 @ 2300	74.0	N/A	300 @1500	90,5	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL413L*A	F5DFL413L*A	84 @ 2300	64.5	N/A	259 @ 1500	77,7	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL414D*A	F5DFL414D*A	111 @ 2200	85.8	N/A	332 @1400	100.1	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL414C*A	F5DFL414C*A	100 @ 2200	77.2	N/A	309 @1400	93.4	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL414A*A	F5DFL414A*A	94 @ 2200	72.0	N/A	291 @1400	87.0	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL414B*A	F5DFL414B*A	84 @ 2200	64.8	N/A	261 @1400	78.0	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL414F*A	F5DFL414F*A	88 @ 2200	67.9	N/A	273 @1400	81.5	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX

Engine Model Summary Template

U-12-015-0252 Attachment 13 2/2 11/8/2012

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
DFPXL03.4ADD	F5HFL413H*A	F5HFL413H*A	82 @ 2500	60.6	N/A	257 @1400	77.0	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL413J*A	F5HFL413J*A	96 @ 2000	79.0	N/A	305 @ 1400	91.0	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL414E*A	F5DFL414E*A	100 @ 2500	72.1	N/A	289 @ 1600	86.7	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL414G*A	F5DFL414G*A	115 @ 2500	82.7	N/A	311 @ 1600	93.8	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL414H*A	F5DFL414H*A	88 @ 2500	64.3	N/A	255 @ 1600	76.1	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL413S*A	F5HFL413S*A	82 @ 2300	61	N/A	247 @ 1500	73	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL413T*A	F5HFL413T*A	90 @ 2300	66	N/A	271 @ 1500	80	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL413M*A	F5HFL413M*A	96 @ 2300	71	N/A	301 @ 1600	89	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL413N*A	F5HFL413N*A	95 @ 2300	70	N/A	271 @ 1500	80	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL413P*A	F5HFL413P*A	100 @ 2300	74	N/A	297 @ 1500	87	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5HFL413R*A	F5HFL413R*A	103 @ 2300	78	N/A	299 @ 1700	89	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL413S*A	F5DFL413S*A	82 @ 2300	61	N/A	247 @ 1500	73	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL413T*A	F5DFL413T*A	90 @ 2300	66	N/A	271 @1500	80	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL413M*A	F5DFL413M*A	96 @ 2300	71	N/A	301 @ 1600	89	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL413N*A	F5DFL413N*A	95 @ 2300	70	N/A	271 @1500	80	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL413P*A	F5DFL413P*A	100 @ 2300	74	N/A	297 @ 1500	87	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX
DFPXL03.4ADD	F5DFL413R*A	F5DFL413R*A	103 @ 2300	78	N/A	299 @ 1700	89	N/A	DDI, ECM, TC, CAC, EGR,OC PTOX