## IVECO N.V.

EXECUTIVE ORDER U-R-015-0165 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 engine and emission control system 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)		
2009	9VEXL10.3MLR	10.3	Diesel			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Engine Control Module			Generator and Other Industrial Equipment			

The engine models and codes are attached.

The following are the exhaust certification standards (STD) 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		EXHAUST (g/kw-hr)				OPACITY (%)			
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
225 < kW < 450	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT			3.9	1.3	0.14	9	4 .	12

**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 January 2009.

Annette Hebert, Chief

Mobile Source Operations Division

## Engine Model Summary Template

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8.Fuel Rate: 9.Emission Control (bs/hr)@peak torqueDewice Per SAE J1930	DDI, TC, CAC,ECM	DDI, TC, CAC,ECM	DDI, TC, CAC,ECM	DDI, TC, CAC,ECM
8.Fuel Rate: (lbs/hr)@peak torqu	N/A	N/A	A/A	A/N
	294	272	250	220
6.Torque @ RPM. (SEA Gross)	1439 @ 1420	1328 @ 1420	1218 @ 1420	1070 @ 1400
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	N/A	N/A	N/A	A/N
4.Fuel Rate: 5.Fuel Rate: 7.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP 6.Torque @ RPM mm/stroke@peak (for diesel only) (SEA Gross) torque	230	209	201	176
3.BHP@RPM (SAE Gross)	409 @ 2100	375 @ 2100	349 @ 1900	315 @ 2100
3.BHP@RPM Engine Code 2.Engine Model (SAE Gross)	F3AE9681A*E 409 @ 2100	F3AE9681B*E 375 @ 2100	F3AE9681C*E	F3AE9681D*E 315 @ 2100
1.Engine Code	F3AE9681	F3AE9681	F3AE9681	F3AE9681
Engine Family	9VEXL10.3MLR	9VEXL10,3MLR	9VEXL10,3MLR	9VEXL10.3MLR