

 <b>AIR RESOURCES BOARD</b>	<b>IVECO N.V.</b>	<b>EXECUTIVE ORDER U-R-015-0169</b> 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	9VEXL12.9TCD	12.9	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Engine Control Module.			Tractor, 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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	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	--	--	3.7	0.7	0.07	6	2	9

**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 20 day of January 2009.



Annette Hebert, Chief  
Mobile Source Operations Division

U-12-015-0169  
 Attachment  
 7/8/2009

### Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	4.Fuel Rate:		5.Fuel Rate:		7.Fuel Rate:		8.Fuel Rate: (lbs/hr)/@peak torque	9.Emission Control Device Per SAE J1930
			3.BHP@RPM (SAE Gross)	mm/stroke @ peak HP (for diesel only)	mm/stroke @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	mm/stroke@peak torque			
9VEXL12.9TCD	F3CE0684	F3CE0684D*E	590 @ 2100	300	N/A	1822 @ 1400	367	N/A	DDI,TC,CAC,ECM	
9VEXL12.9TCD	F3CE0684	F3CE0684C*E	536 @ 2100	276	N/A	1807 @ 1500	348	N/A	DDI,TC,CAC,ECM	
9VEXL12.9TCD	F3CE0684	F3CE0684A*E	530 @ 2100	275	N/A	1807 @ 1500	352	N/A	DDI,TC,CAC,ECM	
9VEXL12.9TCD	F3CE0684	F3CE0684B*E	489 @ 2000	260	N/A	1801 @ 1400	360	N/A	DDI,TC,CAC,ECM	
9VEXL12.9TCD	F3CE0684	F3CE0684E*E	536 @ 2100	269	N/A	1822 @ 1500	352	N/A	DDI,TC,CAC,ECM	
9VEXL12.9TCD	F3CE0684	F3CE0684F*E	536 @ 2100	276	N/A	1822 @ 1500	352	N/A	DDI,TC,CAC,ECM	