## IVECO N.V.

EXECUTIVE ORDER U-R-015-0074 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)		
2005	5VEXL12.9CRS	12.9	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Direct Dies	el Injection, Turbocharg Electronic Control M	er, Charge Air Cooler, Module	Harvester, Combine			

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	СО	PM	ACCEL	LUG	PEAK
225 ≤ kW < 450	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	20	15	50
		CERT			6.1	0.6	0.11	9	1	13

**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 May 2005.

Allen Lyons, Chief

Mobile Source Operations Division

## AMACHMENT PS 1041 LARGE ENGINE MODEL SUMMARY

4-R-015-0074

3/22/05

Manufacturer: IVECO N. V.

Process Code: New Submission

DDI, TC, CAC, ECM DDI, TC, CAC, ( DDI, TC, CAC, DDI, TC, CAC, 8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930 DDI, TC, CAC, DDI, TC, CAC, DDI, TC, CAC, 8.Fuel Rate: mm/stroke@peak torque 7.Fuel Rate: 275 315 275  $\frac{5}{2}$ 305 6.Torque @ RPM (SEA Gross) 1637@1340 1622@1200 1468@1100 1637@1340 1458@1340 1458@1340 Manufacturer Family Name: 5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only) 4.Fuel Rate: mm/stroke @ peak HP (for diesel only) 273. 241 213 241 213 257 247 3.BHP@RPM (SAE Gross) 466@1900 474@2100 422@2100 490@1900 474@2100 422@2100 436@1800 **5VEXL12.9CRS** 2. Engine Model F3BE0684 F3BE0684 F3BE0684 F3BE0684 =3BE0687 -3BE0687 =3BE0687 EPA Engine Family: -3BE0684E\*B002 =3BE0684A\*B003 3BE0684A\*B001 =3BE0687A\*B301 =3BE0687B\*B301 =3BE0687C\*B301 3BE0684E\*B001 1. Engine Code