IVECO N.V.

EXECUTIVE ORDER U-R-015-0042

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)		
2003	3VEXL07.8CRS	7.8	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Direct Dies	el Injection, Turbocharge Electronic Control N	er, Charge Air Cooler, lodule	Harvester, Combine			
	Electronic Control N			mbine		

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	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)				OPACITY (%)			
CLASS			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
225 <u><</u> KW < 450	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	20	15	50
		CERT	1		6.2	0.8	0.12	16	2	33

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 otner model-year are not covered by this Executive Order.

Executed at El Monte, California on this ______ day of May 2003.

Allen Lyons, Chief

Mobile Source Operations Division

LARGE ENGINE MODEL SUMMARY

328103 U-R-015-0042

Manufacturer: IVECO N. V.

Process Code: New Submission

DDI, TC, CAC, €€H DDI, TC, CAC, UDDI, TC, CAC, V 8.Fuel Rate: 9.Emission Control (lbs/fhr)@peak torque Device Per SAE J1930 **₹** ₹ ₹ mm/stroke@peak torque 7.Fuel Rate: 202 202 202 202 6.Torque @ RPM (SEA Gross) 1050@1500 1050@1500 1050@1500 Manufacturer Family Name: 5.Fuel Rate: (tbs/hr) @ peak HP (for diesels only) **₹** ₹ ₹ 4.Fuel Rate: mm/stroke @ peak HP (for diesel only) 177 177 177 3.BHP@RPM (SAE Gross) 355@2100 355@2100 355@2100 3VEXL07.8CRS 2. Engine Model F2BE0684 F2BE0684 F2BE0684 EPA Engine Family: F2BE0684A*B002 F2BE0684A*B003 F2BE0684A*B001 1.Engine Code