California Environmental Protection Agency AIR RESOURCES BOARD	IVECO N.V.	EXECUTIVE ORDER U-R-015-0030 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-45-9;

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)
2002	2VEXL05.9DAR	5.9	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection	Tractor, Generator

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
37 ≤ KW < 130	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT	--	6.6	--	--	--	6	7	8

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 22nd day of January 2002.

R. B. Summerfield, Chief
Mobile Source Operations Division

ATTACHMENT

LARGE ENGINE MODEL SUMMARY

12/12/01

U-R-015-0030

Manufacturer: IVECO N. V.

Process Code: New Submission

EPA Engine Family: 2VEXL05.9DAR

Manufacturer Family Name: NA

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
8035.05R.537/571	8035.05R	59@2300	58,2	22,4	155@1400	64,5	15,0	DDI
8035.05B.527/531	8035.05B	50@2300	49	18,9	144,6@1400	59,5	13,8	
8035.06.506/512	8035.06	52.5@2500	51	21,0	135,7@1500	55,4	13,9	
8035.05.506/550	8035.05	58@2500	55	22,6	151,3@1500	61,8	15,5	
8045.05C.530/531	8045.05C	66@2300	48,75	24,86	192,5@1400	59,5	18,48	
8045.06R.512/520	8045.06R	65@2500	44,3	24,6	172,4@1500	53,7	18,0	
8045.06.506/521	8045.06	70,5@2500	48,7	27,0	181,8@1500	55,3	18,5	
8045.05B.539/578	8045.05B	76@2300	54,5	28,4	207,1@1400	63,8	19,8	
8045.05.506/551	8045.05	79@2500	55	30,5	206@1500	62,5	20,9	
8045.05R.512/521	8045.05R	77@2500	52,4	29,0	192@1500	59,5	19,8	
8065.05.520/560	8065.05	108,5@2500	50,5	42	281@1500	56,8	28,5	
8065.05E.500	8065.05E	101@2500	46,2	38,3	255@1500	49,8	25,5	
8035.05.562	—	46@1800	58	17,1	—	—	—	
8045.05.562	—	61@1800	57	22,4	—	—	—	
8065.05.562	—	92@1800	57	33,6	—	—	—	