## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER U-R-15-8

Relating to Certification of New Heavy-Duty Off-Road Equipment Engines

IVECO N.V.

Pursuant to the authority vested in the Air Resources Board by Sections 43000.5, 43013 and 43018 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 Iveco N.V. 1997 model-year engine, with rated power between 175 and 750 horsepower, and exhaust emission control systems are certified as described below for use in heavy-duty off-road equipment:

<u>Typical Equipment Usage</u>: Havester, Generator

<u>Fuel Type</u>: Diesel

Engine Family	Liters	(Cubic Inches)	Exhaust Emission Control Systems and Special Features
VVE14.R6DARA	14.R6DARA 13.8 (842		Turbocharger Smoke Puff Limiter Charge Air Cooler

Engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM) certification exhaust emission standards, in grams per brake horsepower-hour (g/bhp-hr), and the opacity of smoke emission standards, in percent (%), during acceleration (Accel), lugging (Lug), and peak (Peak) modes, for this engine family are (Title 13, California Code of Regulations, Section 2423):

Exhaust Emissions (g/bhp-hp)			<u>Smoke</u>	Smoke Opaciity (%)			
<u>THC</u>	<u>co</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	Lug	<u>Peak</u>	
1.0	8.5	6.9	0.4	20	15	50	

The THC, CO, NOx and PM exhaust emission certification values, in g/bhp-hr, and the opacity of smoke emission certification values, in percent (%), for this engine family are:

Exhaust Emissions (g/bhp-hr)					Smoke Opacity (%)		
<b>Engine Family</b>	<u>THC</u>	<u>co</u>	<u>N0x</u>	<u>PM</u>	<u>Accel</u>	Lug	<u>Peak</u>
VVE14.R6DARA	0.3	1.0	4.3	0.2	20	11	36

BE IT FURTHER RESOLVED: That the listed engine models comply with the "Exhaust Emission Standards and Test Procedures--Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed engine models also comply with the "Emission Control Labels--1996 and Later Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2425 et seq.).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this  $2^{2d}$  day of January 1997.

Mobile Source Openations

Raphael Susnowith

Mobile Source Operations Division

## 1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY OFF-ROAD DIESEL ENGINES

Manue	<b></b>					Page 1 of 1
		ON.V.		Engine Family:	<u>VVE14.R6I</u>	<u>DARA</u>
Displacement:	13.798	3/841.98 Liters	/Cubic Inches	Eng. Co	onfig: <u> </u>	-
All Codes in E	ing Fam: CA_	49S	50S <u>X</u>	Cert Test Pr	ocedures: AR	B EPA X
Valves/Ports p	er Cylinder: _	2 valves/cy	l Stroke	s per Combustio	n Cycle: 4-st	roke
Maximum Rat	ed Power:	<u>493</u> HP	( 368	_KW)	@ 1950	RPM
Ignition: Com	pression	Comp	ression with Gl	ow Plug <u>X</u>	Spark	_ KI IVI
Fuel Type(s):	Dedicated X	_ Flex-Fuel	Dual-Fuel	Diesel X	Opurk	M05
	CNG	LNG	LPG	Other (specify)	. 101100	_ 1/165
Diesel Cert Fu	el: 40 CFR 86	1313-94 Y				
				Other (specify) _ r, Generating Se		<del>-</del>
Exhaust ECS (	e.g MFLTC	CAC)·	orage marveste	r, Generating Se SPL, TC, CAC	<u> </u>	<del></del>
(	(o.g., 1111 1, 1 C,	CAC)	(use abbrev	viations per SAE	E J1930 JUN93	
			<u> </u>	· 1		
Engine Model (Eng Code)	Rated HP @ RPM	Fuel Rate @ Rated HP	Fuel Pump & Injector	ЕСМ/РСМ	EGR	PTOX/
,		mm³ / stroke	Part no.	Part no.	Valve Part no.	Catalytic Converter
0045.40.00		(lbs/hr)				Part no.
8215.42.985	350@1950	202 (129.5)	PE6P130A 720RS7197	RQV 425 975PA1292	N/A	N/A
		, ,	0402646669	) / 31 R12)2		
			KBEL 111		:	
0015 45 500 5			S75 516			
8215.42.5985	493@1950	288 (186)	PE6P130A 720RS7339	RQV 425 975	N/A	N/A
		( /	0402646649	7/3		
			/ KBEL 111			
0015 (0.500)			S75 555			
8215.42.5986	460@1800	282 (169.4)	PE6P130A 700RS7225-1	ACD 275D	N/A	N/A
			0파일616805			
			/ KBEL 111			
			№75-5 <b>5</b> 5			
		<u></u>	<u> </u>	<u> </u>		
Date Issued:						

Revisions: