(page 1 of 2)

## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER U-R-15-9

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., 1998 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:

Typical Equipment Usage:

Wheeled Loader, Crawler Loader, and

Dozers

<u>Fuel Type</u>: Diesel

Engine Family	Liters (Cubic Inches)	Exhaust Emission Control <u>Systems and Special Features</u>
WVEXL07.7DAR	7.7 (469)	Turbocharger Smoke Puff Limiter

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 matters (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-hr)				Smoke C	Dpacity ( %	<u>;   )                                 </u>
THC	<u>co</u>	NOx	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<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	Emissio	n (g/bh	<u>o-hr)</u>	Smoke (	Opacity	( % )
Engine Family	<u>THC</u>	<u>co</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	Lug	<u>Peak</u>
WVEXL07.7DAR	0.6	0.8	6.7	0.2	4	4	6

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 6 day of March 1998.

R. B. Summerfield, Chief

Mobile Source Operations Division

## 1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY OFF-ROAD DIESEL ENGINES

Page 1 of 1

Manufacturer:	IVEC	<u> N.V.</u>	]	Engine Family:	WVEXL07.7	'DAR_
Displacement:	7.7/469	Liters/	Cubic Inches	Eng. Co	nfig: I-6	
All Codes in Er	ng Fam: CA	49S	50S <u>X</u>	_ Cert Test Pro	ocedures: ARE	EPA_X_
Valves/Ports per Cylinder: 2 valves/cyl. Strokes per Combustion Cycle: 4-stroke						
Maximum Rate	d Power:	193 HP	(144	KW)	@2150	RPM
Ignition: Comp	oression	Compr	ession with Glo	w Plug X	Spark	
Fuel Type(s):	Dedicated X	Flex-Fuel	_ Dual-Fuel_	Diesel X	M100	M85
	CNG	LNG	LPGC	Other (specify)		<del></del>
Diesel Cert Fue	el: 40 CFR 86.	1313-94 <u>X</u>	(	Other (specify)		
Primary Service						
Exhaust ECS (6	e.g., MFI, TC, C	CAC):		SPL, TC		
			(use abbrev	iations per SAE	: 11930 JUN93	)
Engine Model (Eng Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm³ / stroke (lbs/hr)	Fuel Pump & Injector Part no.	(Governor) ECM/PCM Part no.	EGR Valve Part no.	PTOX/ Catalytic Converter Part no.
8365.26.584	193@2150	99 (70.0)				
8365.26.540	182@2000	99 (65.4)				
8365.26.541	173@2000	94 (62.1)				
Date Issued:	December 9	1007				
	,	<i>4731</i>				

Revisions: