(page 1 of 2)

## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER U-R-15-15

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., 1999 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:

Dozer and other construction and

industrial equipment.

Fuel Type: Diesel

Engine Family	Liters (Cubic Inches)	Exhaust Emission Control Systems and Special Features	
XVEXL09.5DAR	9.5 (580)	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-hr)			Smoke	<pre>_ Smoke Opacity ( % )</pre>		
<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 Emission (g/bhp-hr)				Smoke Opacity ( % )			
THC	<u>co</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>	
0.5	0.4	4.0	0.1	7	6	14	

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 1/2

R. B Summerffield, Chief

/ Mobile Source Operations Division

day) of February 1999.

## LARGE ENGINE MODEL SUMMARY

Manufacturer: IVECO N.V. Process Code: New Submission EPA Engine Family: XVEXL09.5DAR Manufacturer Family Name: NA 4. Fuel Rate: 5.Fuel Rate: 7.Fuel Rate: 3.BHP@RPM mm/stroke @ peak HP (lbs/hr) @ peak HP 6.Torque @ RPM 8. Fuel Rate: 1. Engine Code 2.Engine Model 9.Emission Control mm/stroke@peak (SAE Gross) (for diesel only) (SEA Gross) (for diesels only) (lbs/hr)@peak torque Device Per SAE J1930 torque 8465.41.9875 8465.41 326@ 2100 172 121,5 936@ 1600 183 98 TC, CAC, SPL 8465.41.985 8465.41 296@ 2100 155 108 832@ 1800 164 97 TC, CAC, SPL TC, CAC, SPL 8465.41.016 8465.41 253@ 2100 129,5 98,5 803@ 1800 154.5 61