## State of California AIR RESOURCES BOARD

# EXECUTIVE ORDER U-R-15-23 Relating to Certification of New Off-Road Compression-Ignition Engines

#### IVECO N. V.

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:

Model Year: 2001

Typical Equipment Usage: Tractor and Generator

Fuel Type: Diesel

	Engine		
Engine Family 1VEXL05.9DAR	Displacement (liters) 5.9	Useful Life <u>(hours)</u> 8000	Emission Control Systems and Special Features Direct Diesel Injection

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 exhaust emission certification standards and certification values for hydrocarbons (HC), oxides of nitrogen (NOx), or non-methane hydrocarbons plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) (units are expressed in grams per kilowatt-hour (g/kw-hr)), and the opacity-of-smoke certification standards and certification values in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family are as follows (Title 13, California Code of Regulations, Section 2423):

Engine Power	Emission Standard	Exhaust Emissions (g/kw-hr)					Smoke	Smoke Opacity (%)		
<u>Rating (kw)</u> 37 <u>≤</u> KW<130	<u>Category</u> Tier 1	Standard	<u>HC</u> N/A	<u>NOx</u> 9.2	NMHC+NOx N/A	<u>CO</u> N/A	<u>PM</u> N/A	Accel 20	<u>Lug</u> 15	Peak 50
		Certification		9.0				6	7	8

BE IT FURTHER RESOLVED: That the listed engine models also comply with "Emission Control Labels— 1996 and Later Off-Road Compression-Ignition 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, Sections 2425 and 2426).

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

Executed at El Monte, California this

day of March 2001.

R. B. Summerfield, Chief

Mobile Source Operations Division

12/11/00

### Attachm.

# LARGE ENGINE MODEL SUMMARY

Manufacturer: IVECO N. V.

Process Code: New Submission

EPA Engine Family: 1VEXL05.9DAR			45.10.	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 Co Device Per SAE
8035.05R.537/571	8035.05R	59@2300	58,2	22,4	155@1400		4	···
8035.05B.527/531	8035.05B	50@2300	49	18,9	144,6@1400	64,5	15,0	DOI
8035.06.506/512	8035.06	52.5@2500	51	21,0		59,5	13,8	}
8035.05.506/550	8035.05	58@2500	55	22,6	135,7@1500	55,4	13,9	
8045.05C.530/531	8045.05C	66@2300	48,75		151,3@1500	61,8	15,5	
8045.06R.512/520	8045.06R	65@2500	44,3	24,86	192,5@1400	59,5	18,48	İ
8045.06.506/521	8045.06	70,5@2500	•	24,6	172,4@1500	53,7	18,0	1
8045.05B.539/578	8045.05B	76@2300	48,7	27,0	181,8@1500	55,3	18,5	1
8045.05.506/551	8045.05	79@2500	54,5	28,4	207,1@1400	63,8	19,8	- 1
8045.05R.512/521	8045.05R		55	30,5	206@1500	62,5	20,9	- 1
8065.05.520/560		77@2500	52,4	29,0	192@1500	59,5	19,8	1
8065.05E.500	8065.05	108,5@2500	50,5	42	281@1500	56,8	28,5	1
	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	*			1
8065.05.562	<del></del>	92@1800	57	33,6	· ·	<del></del>	·	₩ .

EPA Cert No: VEX-NRCI-01-02