California Environmental Protection Agency AIR RESOURCES BOARD AB VOLVO PENTA

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-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines 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		DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)		
2002	2VPXL07.3ACB	7.3	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
D	irect Diesel Injection, Tu	urbocharger	Generator Set			

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			EXHAUST (g/kw-hr)				OPACITY (%)		
	CATEGORY		нс	Nox	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
225 <u>≤</u> kW <450	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	N/A	N/A	N/A
		CERT	-	-	5.8	0.7	0.13	-	-	-

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

14 TH _____ day of August 2002.

len Lyons, Chief Mobile Source Operations Division

Engine Model S nmary Form

8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930 100 M 100 M 1010 - XX DDF, TC E0# 4- 4-014 - 0055 -4 A thankment 100@841 105@923 7.Fuel Rate: mm/stroke@peak 181@923 165@841 torque 6.Torque @ RPM 841@1800 923@1800 (SEA Gross) 5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only) 100@288 110@316 4. Fuel Rate: mm/stroke @ peak HP (for diesel only) 165@288 181@316 3.BHP@RPM 2.Engine Model (() (SAE Gross) 215 288@1800 236 316@1800 **New Submission AB Volvo Penta** EPA Engine Family: 2VPXL07.3ACB TAD741GE TAD741GE X1.0 Nonroad CI TAD741GE Mfr Family Name: 1.Engine Code Engine category: Process Code: Manufacturer: - \sim ¥ 10