California Environmental Protection Agency					
AIR	RESOURCES	BOARD			

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 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	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)		
2002	2DZXL07.1032 7.1, 4.8		Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		TYPICAL EQUIPMENT APPLICATION				
Direct Diesel Injection, Electronic Control Module, Smoke Puff Limiter, Turbocharger, Charger Air Cooler			Compressor, Generator Set,	Industrial Equipment		

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 EMISSION			EXHAUST (g/kw-hr)				OPACITY (%)			
POWER			нс	NOx	NMHC+NOx	со	РМ	ACCEL	LUG	PEAK
75< KM < 130	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
120 - KIN - 225	"Tier 1	STD	13	9.2	N/A	11.4	0.54	20	15	50
1305 KW < 223		CERT	0.6	5.5		0.6	0.09	8	2	24

**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

day of January 2002.

R. B. Summerfield, Chief Mobile Source Operations Division

•	•	۴.
	-	
	-	
"	-	
-	- 6	
	_	٠
	1	
	-	
- 1	n	
- 7	5	
	1	
. 1	_	
	-	•
- 1	-	-
- 4	'n	1
- 2	1	_
		•
		2
	-	
- 2		
- 1	_	
	-	
		2
	-	
		•
	-	
		£
<u>ا</u>	-	2
	-	1
	4	
	C	١.
	1	2
		۲.
	-	5
	-	۲
	-	

EOTTU-R-013-005/

EPA Engine Famly:	Engine category:	Manufacturer:
2DZXL07.1032	Nonroad Cl	Deul: AG

Mfr Family Name: VOLVO D7D, BF6M1013EC/ECP/FC-MVS

Process Code: New Submission

CE170 CE180 CE162	CE129	CE134	1.Engine Code
D7DGCE2 D7DGDE2 D7DLAC2	D7DGAE2	D7DEBE2	2.Engine Model
228/2200 1 80 241/2200 217/2100	205/2200	180/2000	3.BHP@RPM (KW) (SAE Gross)
114 120 114	88 104	100 118	4. Fuel ftette: rnrn/stroke @ t ∉ak HP (for diesel unly)
72.8 76.7 72.8	56.2 66.5	63.9 75.4	5.Fuel Rate: (lbs/hr) @ peak Hil- (for diesels only)
1050Nm/1400 1050Nm/1400 1020Nm/1400	801Nm/1400 950Nm/1400	750Nm/1400 940Nm/1400	6.Torque @ RPM (SEA fiross)
154 154	119	139	7.Fuel Rate mm/stroke@peak torque
72.2 70.8	65.6	02.1 02.2	8.Fusi Rate: (lbs/hr)@peak torque
CAC,SPL,TC CAC,SPL,TC	CAC,SPL,TC	CAC,SPL,TC	9.Emission Control Device Per SAE J1930

-291# DZX - NR6-02-29

<u>.</u>