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 engine 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)						
2003	3PKXL04.4RE1	4.4	Diesel							
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION							
	Direct Diesel Injec	ction	Tractor and Industrial	l Equipment						

The engine models and codes are attached.

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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	EMISSION STANDARD				EXHAUST (g/kw-ł	OPACITY (%)				
CLASS	CATEGORY		нс	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
37 <u><</u> KW<75	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT		6.6				2	5	5

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 _____24^{III} day of December 2002.

Raphael Soonswitz

Ju Allen Lyons, Chief Mobile Source Operations Division

ATTACHMENT 1 OF 1 Engine Model Summary Form

tanufacturer: Perkins Engines Company Ltd ingine category: Nonroad Cl

u-R-022-0046

Afr Family Name: 1104C-44 AND CATERPILLAR 3054 Process Code: New Submission

PA Engine Family: 3PKXL04.4RE1

:	C				19 1	<u>t</u>		t (an									2. 1			
8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	iga 👘	DDI	jąą, 🖓	DDI			這是中國國家的意思			医疗学校 医外宫室										
8.Fuel Rate: (İbs/hr)@peak torque	21.7	21.7	21:12	21.7	21.7		计委员生工作中的												一方的"古地"等于的主	
7.Fuel Rate: mm/stroke@peak torque	A. 70.7	70.7		70.7	70.7		A CONTRACTOR							とう などをとう 変化						
6.Torque @ RPM (SEA Gross)	217 lbf ft @	217 lbf ft @	222.7 lbf.ft.@	222.7 lbf ft @	222.7 Ibf ft @		家主要的故事来的			、「「「「「「「「」」」、「「」」、「」、「」、「」、「」、「」、「」、「」、「			· .					内理構造を必要的		
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	31,0144	32.5		• 32.0	. (1. 32,5 h															
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	64.2	62.0			62.0					的研究的研究的研究									「「「「「「「「」」」」	
3.BHP@RPM (SAE Gross)	80,5 @ 2200	83.1 @ 2400	<u>82.5 @ 2200</u>	84.5 @ 2200	85.8 @ 2200													のため、「「「「」」	がいたが、現代を知	
2.Engine Model	2161/2200		÷., ÷.,	2160/2300	1															
1.Engine Code				<u></u>		4													HTTER AND	