## Sisu Diesel Inc.

EXECUTIVE ORDER U-R-050-0006 New Off-Road Compression-Ignition Engines

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)	
2005	5SIDL08.4H5A	8.4	Diesel	8000	
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Engine Control Module and Smoke Puff Limiter		Tractor			

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			- I	EXHAUST (g/kw-ł	nr)		Oi	PACITY (%	o)
POWER CLASS	STANDARD CATEGORY		HC	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
130 < KW < 225	Tier 2	STD	N/A	N/A	6.6	3.5	0.20	20	15	50
		CERT			6.2	1.0	0.14	15	3	35

**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 March 2005.

Allen Lyons, Chief

Mobile Source Operations Division

## Engine Model Summary Form

9000-050-y-n

Sisu Diesel Inc. Manufacturer:

Engine category: Nonroad Cl
EPA Engine Family. 5SIDL08.4H5A
Mfr Family Name: 84 ETA-4V
Process Code: New Submission

Control E J1930	* JdS	·	> 	
9 Emission Control e Device Per SAE J193	91.5 DOT, ALECM SPU	), ECM	FCM	:
8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	91.5	86.0	82.5	
7.Fuel Rate: mm/stroke@peak torque	183	172	165	
6.Torque @ RPM (SEA Gross)	969@1500	942@1500	884@1500	
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	115.1	107.1	98.3	
4 Fuel Rate: mm/stroke @ peak HP (for diesel only)	157	146	134	1 :
3.BHP@RPM (SAE Gross)	295@2200		000000000000000000000000000000000000000	0077 🕭 007
1 Engine Code 2.Engine Model	04 254 ETA-4V	000@000 //V VIII #20 #00 #70 F00	84,335 C.1.M-44.1 232.8	84.415 84.350 E 1 A-4 v
. Engine Code			84.414	84.415