

 AIR RESOURCES BOARD	Sisu Diesel Inc.	EXECUTIVE ORDER U-R-050-0003
		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	5SIDL07.4G4B	7.4	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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75 ≤ KW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
		CERT	--	--	5.6	0.9	0.15	8	3	26

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 22ND day of March 2005.



Allen Lyons, Chief
 Mobile Source Operations Division

Engine Model Summary Form

U-R-050-0003

Manufacturer: **Sisu Diesel Inc.**
 Engine category: **Nonroad CI**
 EPA Engine Family: **5SIDL07.4G4B**
 Mfr Family Name: **74 ETA**
 Process Code: **New Submission**

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 Control Device Per SAE J1930
74.307	74.237 ETA	168@2200	87	63.8	769@1500	141	70.5	PDI, T, ECM, AS, SPL, ECM
44.305	44.264 EWA	133@2200	102	49.9	415@1500	116	38.7	ECM
66.313	620.98	169@2100	87	60.9	558@1400	102	51.0	ECM
66.314	620.97	154@2100	81	56.7	508@1400	93	43.4	ECM
66.315	620.96	145@2100	76	53.2	469@1400	86	40.1	ECM
66.316	620.95	135@2100	71	49.7	438@1400	81	37.8	ECM
44.306	44.276 EWA	145@2200	112	54.8	446@1400	124	38.6	ECM
44.307	44.277 EWA	128@2200	99	48.4	392@1400	108	33.6	ECM
44.309	44.279 EWA	113@1800	102	40.8	446@1200	126	33.6	ECM
66.320	66.296 ETA	156@2100	81	56.7	500@1400	91	42.5	ECM
66.317	66.293 ETA	143@1800	84	50.4	504@1100	98	35.9	ECM
44.308	44.278 EWA	117@2200	91	44.5	385@1400	107	33.3	ECM
66.328	66.327 ETA	157@2100	78	54.6	481@1400	87.5	40.8	ECM
44.402	44.309 DTA	109@2200	86	42.0	354@1400	99	30.8	SPL
44.413	44.325 DTA	141@2200	102	49.9	423@1400	127	39.5	SPL
66.334	66.367 ETA	147@2200	75	55.0	488@1500	90	45.0	ECM
66.336	66.368 ETA	161@2200	79	57.9	500@1500	89	44.5	ECM