

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	5CPXL07.2HSK	7.2	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler and Engine Control Module			Dozer and 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):

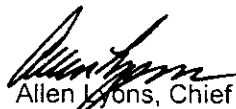
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75≤KW<130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
		CERT	--	--	5.8	1.6	0.20	5	1	8

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 7TH day of December 2004.


 Allen Lyons, Chief
 Mobile Source Operations Division

Engine Model Summary Form

U-R-001-0268

Manufacturer: **CATERPILLAR INC.**
 Engine category: **Nonroad Over 50 Hp**
 EPA Engine Family: **5CPXL07.2HSK**
 Mfr Family Name: **NA**
 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
Note: Peak HP and Peak Torque fuel rates are nominal values. Due to production engine avgs. these fuel rates may change.								
3	3126	125 @ 2000	74	49.9	504 @ 1200	104	41.8	EM, DI, TC, ECM,
4	3126	140 @ 2000	83	55.6	562 @ 1200	115	46.6	EM, DI, TC, ECM,
5	3126	135 @ 2000	79	52.9	543 @ 1200	113	45.5	EM, DI, TC, ECM,
6	3126	155 @ 2000	87	58.5	620 @ 1200	126	51.1	EM, DI, TC, ECM,
7	3126	172 @ 2200	89	65.7	677 @ 1400	133	62.3	EM, DI, TC, ECM,
8 Cert Eng	3126	173 @ 2200	90	66.3	677 @ 1400	133	62.3	EM, DI, TC, ECM,
9	3126	110 @ 2100	67	47.5	391 @ 1400	82	38.8	EM, DI, TC, ECM,
10	3126	115 @ 2100	68	48.4	408 @ 1400	85	40.2	EM, DI, TC, ECM,
11	3126	164 @ 2000	73	48.9	433 @ 1300	91	39.7	EM, DI, TC, ECM,
12	3126	158 @ 2000	92	61.8	561 @ 1300	113	49.6	EM, DI, TC, ECM,
13	3126	140 @ 2000	81	55.0	628 @ 1400	124	58.0	EM, DI, TC, ECM,
15	3126	172 @ 1800	107	64.6	656 @ 1400	130	61.2	EM, DI, TC, ECM,
18	3126	165 @ 1800	104	63.1	624 @ 1400	122	57.5	EM, DI, TC, ECM,
19	3126	155 @ 2200	84	62.0	629 @ 1400	124	58.0	EM, DI, TC, ECM,
20	3126	134 @ 2100	73	51.0	432 @ 1300	89	39.0	EM, DI, TC, ECM,
21	3126	172 @ 1800	107	64.6	656 @ 1400	130	61.2	EM, DI, TC, ECM,
22	3126	165 @ 1800	104	63.1	624 @ 1400	122	57.5	EM, DI, TC, ECM,

Engine Model Summary Form

Manufacturer: CATERPILLAR INC.
Engine category: Nonroad Over 50 Hp
EPA Engine Family: 5CPXL07.2HSK
Mfr Family Name: NA
Process Code: New Submission

1. Engine Code	2. Engine Model	3. BHP @ RPM (SAE Gross)	4. Fuel Rate: mm ³ /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 ³ /stroke @ peak torque	8. Fuel Rate: (lbs/hr) @ peak torque	9. Emission Control Device Per SAE J1930
	Note: Peak HP and Peak Torque	fuel rates are	nominal values.	Due to product-	ion engine avgs.	these fuel rates	may change.	
3	3126	125 @ 2000	74	49.9	504 @ 1200	104	41.8	EM, DI, TC, ECM,
4	3126	140 @ 2000	83	55.6	562 @ 1200	115	46.6	EM, DI, TC, ECM,
5	3126	135 @ 2000	79	52.9	543 @ 1200	113	45.5	EM, DI, TC, ECM,
6	3126	155 @ 2000	87	58.5	620 @ 1200	126	51.1	EM, DI, TC, ECM,
7	3126	172 @ 2200	89	65.7	677 @ 1400	133	62.3	EM, DI, TC, ECM,
8 Cert Eng	3126	173 @ 2200	90	66.3	677 @ 1400	133	62.3	EM, DI, TC, ECM,
9	3126	110 @ 2100	67	47.5	391 @ 1400	82	38.8	EM, DI, TC, ECM,
10	3126	115 @ 2100	68	48.4	408 @ 1400	85	40.2	EM, DI, TC, ECM,
11	3126	164 @ 2000	73	48.9	433 @ 1300	91	39.7	EM, DI, TC, ECM,
12	3126	158 @ 2000	92	61.8	561 @ 1300	113	49.6	EM, DI, TC, ECM,
13	3126	140 @ 2000	81	55.0	628 @ 1400	124	58.0	EM, DI, TC, ECM,
19	3126	155 @ 2200	84	62.0	629 @ 1400	124	58.0	EM, DI, TC, ECM,
20	3126	134 @ 2100	73	51.0	432 @ 1300	89	39.0	EM, DI, TC, ECM,
21	3126	172 @ 1800	107	64.6	656 @ 1400	130	61.2	EM, DI, TC, ECM,
22	3126	165 @ 1800	104	63.1	624 @ 1400	122	57.5	EM, DI, TC, ECM,

Engine Model Summary Form

Manufacturer: **CATERPILLAR INC.**
 Engine category: **Nonroad Over 50 Hp**
 EPA Engine Family: **5CPXL07.2HSK**
 Mfr Family Name:
 Process Code: **Running Change - 1**

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
19		171 @ 2000	89	60.0	630 @ 1400	124	58.0	
21		171 @ 2000	89	60.0	630 @ 1400	131	61.6	
23	3126	170 @ 2000	93	62.7	591 @ 1400			EM, DI, TC, ECM,