

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)
2007	7CPXL12.5ESK	12.5	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler and Engine Control Module			Loader, Tractor 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
225 ≤ KW < 450	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT	--	--	3.6	2.2	0.10	8	3	15

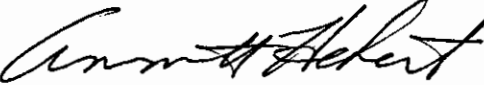
BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

This Executive Order hereby supersedes Executive Order U-R-001-0306 dated October 11, 2006.

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 5 day of February 2007.


 Annette Hebert, Chief
 Mobile Source Operations Division

Engine Model Summary Form

ATTACHMENT 1 OF 1

U-R-001-0306-1

Manufacturer: **CATERPILLAR INC.**
 Engine category: **Nonroad Over 50 Hp**
 EPA Engine Family: **7CPXL12.5ESK**
 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.								
1	Cert Engine		301	182.1	1625@1400	323	152.0	EM,DI,TC,ECM,CAC
2	C13	520@1800	301	182.0	1634@1400	314	148.0	EM,DI,TC,ECM,CAC
3	C13	520@1800	266	188.0	1634@1400	314	148.0	EM,DI,TC,ECM,CAC
4	C13	520@2100	235	166.0	1565@1575	308	163.0	EM,DI,TC,ECM,CAC
5	C13	463@2100	218	154.1	1510@1400	299	140.9	EM,DI,TC,ECM,CAC
6	C13	425@2100	218	154.1	1510@1400	299	140.9	EM,DI,TC,ECM,CAC
7	C13	425@2100	200	116.8	1207@1400	240	112.6	EM,DI,TC,ECM,CAC
8	C13	345@1800	215	127.3	1300@1400	253	121.6	EM,DI,TC,ECM,CAC
9	C13	371@1800	189	114.3	1059@1400	216	101.7	EM,DI,TC,ECM,CAC
10	C13	311@1800	226	160.0	1483@1400	290	137.0	EM,DI,TC,ECM,CAC
11	C13	440@2100	194	137.0	1297@1400	249	117.0	EM,DI,TC,ECM,CAC
12	C13	385@2100	212	150.0	1398@1400	272	128.0	EM,DI,TC,ECM,CAC
14	C13	415@2100	200	142	1336@1400	258	142.0	EM,DI,TC,ECM,CAC
15	C13	400@1200	193	136.6	1297@1400	253	119.2	EM,DI,TC,ECM,CAC
16	C13	385@2100	246	173.0	1545@1400	298	140.0	EM,DI,TC,ECM,CAC
17	C13	475@2100	243	172	1586@1400	317	150	EM,DI,TC,ECM,CAC
18	C13	463@2100	161	108	1148@1000	221	74	EM,DI,TC,ECM,CAC
19	C13	304@2000	164	110	1167@1000	221	75	EM,DI,TC,ECM,CAC
20	C13	310@2000	166	112	1187@1000	229	77	EM,DI,TC,ECM,CAC
21	C13	314@2000	168	113	1207@1000	230	77	EM,DI,TC,ECM,CAC
22	C13	319@2000	168	113	1226@1000	235	79	EM,DI,TC,ECM,CAC
23	C13	325@2000	174	114	1265@1000	238	80	EM,DI,TC,ECM,CAC
24	C13	330@2000	174	117	1265@1000	242	81	EM,DI,TC,ECM,CAC
25	C13	334@2000	175	118	1285@1000	245	82	EM,DI,TC,ECM,CAC

Engine Model Summary Form

Manufacturer: CATERPILLAR INC.
Engine category: Nonroad Over 50 Hp
EPA Engine Family: 7CPXL12.5ESK
Mfr Family Name:
Process Code: Running Change - 3

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
9								
29	C13	310@1800	182 173	110 105	1058@1400	222 213	105 100	EM, DI, TC, ECM,