

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) | | | | | |
|---------------|---|--------------------------------|-------------------------------|------------------------|--|--|--|--|--|
| 2006 | 6CEXL0661AAF | 10.8 | Diesel | 8000 | | | | | |
| | FEATURES & EMISSION (| | TYPICAL EQUIPMENT APPLICATION | | | | | | |
| Direct Dies | sel Injection, Turbocharge Engine Control Mo | er, Charge Air Cooler, dule | Crane, Loader and Compressor | | | | | | |

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, 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 | | | E | EXHAUST (g/kw-l | | OPACITY (%) | | | |
|----------------|----------------------|------|-----|-----|-----------------|-----|-------------|-------|-----|------|
| POWER CLASS | STANDARD CATEGORY | | нс | NOx | NMHC+NOx | co | PM | ACCEL | LUG | PEAK |
| 130 ≤ kW < 450 | Tier 3 | STD | N/A | N/A | 4.0 | 3.5 | 0.20 | 20 | 15 | 50 |
| | | FEL | N/A | N/A | N/A | N/A | 0.18 | N/A | N/A | N/A |
| | | CERT | | | 3.8 | 0.9 | 0.10 | 16 | 1 | 33 |

BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

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

Allen Lyons, Chief

Mobile Source Operations Division

day of October 2005.

Engine Model Summary Form ATTACHHENT Pg (56)

U-R-002-0308

Manufacturer: Cummins Inc.

Engine category: Nonroad CI

EPA Engine Family: 6CEXL0661AAF

Mfr Family Name: F353

Process Code: New Submission

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|--|------------------|---------------|----------------|--------------|--------------|--|--------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 9.Emission Control Device Per SAE J1930 | DDI ECM, TC, CAC | DDI,ECM,TC,C | DDI ECM, TC, C | DDI,ECM,TC,C | DDI ECN,TC,C | DDI,ECM,TC,C | DDIFECM,TC,C | DDI.ECM,TC,C | DDI ECM, TC,C | DDI.ECM,TC,C | DDI.ECM,TC,C | DDI,ECM,TC,C | DDI.ECM,TC,C | DDI.ECM,TC,C | DDI,ECM,TC,C | DDI.ECM,TC,C |
| 8.Fuel Rate: (lbs/hr)@peak torque | 139.9 | 124.5 | 139.9 | 139.9 | 139.9 | 139.9 | 740.4 | 140.4 | 124.5 | 125.4 | | 118.7 | 125.4 | 108.0 | 122.0 | 136.6 |
| 7.Fuel Rate: mm/stroke@peak torque | 296 | 264 | 296 | 296 | . 296 | 296 | 270 | 277 | 263 | 266 | 235 | 251 | 266 | 229 | 263 | 276 |
| 6.Torque @ RPM (SEA Gross) | 1400@1400 | 1260@1400 | .400@1400 | 1400@1400 | 1400@1400 | 1400@1400 | 1310@1400 | 1350@1400 | 1260@1400 | 1235@1400 | 1090@1400 | 1162@1400 | 1235@1400 | 1050@1400 | 1235@1400 | 1350@1400 |
| 5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only) | 7'97. | 129.9 | | 147.5 | 147.5 | 139.9 | 138.5 | 142.7 | 1807 | 130.3 | | 119.6 | 130.3 | 117.0 | 185,5 | 134.6 |
| 4.Fuel Rate: mm/stroke @ peak HP (for diesel only) | 241 | 214 | 208 | 208 | 208 | 198 | | 202 | 215 | 184 | | 177 | 184 | 165 | 161 | 200 |
| 3.BHP@RPM (SAE Gross) | 400@1800 | 360@1800 | 400@2100 | 400@2100 | 400(@2/100 | 375@2100 | 350@2400 | 360@2100 | 340@1800 | 335@2100 | 290(0)24100 | 300@2000 | 335@2100 | 300@2100 | 330@2100 | 350@2000 |
| 2.Engine Model | @SMT/-G | QSM11-C | OSM11.C | QSM11-C | OSM11-6 | QSM11-C | OSMITTED | QSM11-C | OSMITAC: | QSM11-C | QSM11-C | QSM11-C | OSM11-C | QSM11-C | OSM/1.C | QSM11-C |
| 1.Engine Code | 8495 FR20002 | 8495:FR20026 | 84711FR200001 | 8471:FR20003 | 8471:FF20004 | 8471:FR02999 | 8543 FF20017 | 8543:FR20018 | 8546 FR20023 | 8608:FR20042 | 8608;FR20043 | 8608:FR20096 | 8545:FR20021 | 8545:FR20022 | 8545:FR20088 | 8544:FR20019 |