## **DEUTZ AG**

EXECUTIVE ORDER U-R-013-0255 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 engines and emission control systems 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<br>YEAR                                                                                                                            | ENGINE FAMILY | E FAMILY DISPLACEMENT (liters) FUEL TYPE |                               | USEFUL LIFE (hours)                |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------------------------------|-------------------------------|------------------------------------|--|--|--|
| 2008                                                                                                                                     | 8DZXL07.1055  | 7.145                                    | Diesel                        | 8000                               |  |  |  |
| SPECIAL FEATURES & EMISSION CONTROL SYSTEMS                                                                                              |               |                                          | TYPICAL EQUIPMENT APPLICATION |                                    |  |  |  |
| Direct Diesel Injection, Turbocharger, Charge Air Cooler,<br>Electronic Control Module, Smoke Puff Limiter, Exhaust<br>Gas Recirculation |               |                                          | Loader, Other Industrial Equ  | Loader, Other 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          | EMISSION<br>STANDARD<br>CATEGORY | EXHAUST (g/kw-hr) |     |     |          | OPACITY (%) |      |       |     |      |
|----------------|----------------------------------|-------------------|-----|-----|----------|-------------|------|-------|-----|------|
| POWER<br>CLASS |                                  |                   | HC  | NOx | NMHC+NOx | co          | PM   | ACCEL | LUG | PEAK |
| 130 ≤ kW < 225 | Tier 3                           | STD               | N/A | N/A | 4.0      | 3.5         | 0.20 | 20    | 15  | 50   |
|                |                                  | CERT              |     |     | 3.8      | 0.6         | 0.14 | 4     | 8   | 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 \_\_\_\_\_\_ day of December 2007.

Annette Hebert, Chief

Mobile Source Operations Division

Raphael Swarout

## **Engine Model Summary Form**

0-8-013-0355

Manufacturer: DEUTZ AG

Engine category: Nonroad CI

EPA Engine Family: 8DZXL07.1055

Mfr Family Name: TAD750VE TIER3

Process Code: New Submission

Atlachment

|   |                                                                                                                                     | 353                         |                        | <b>-</b> >             |  |
|---|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------|------------------------|--|
|   | 9.Emission Control<br>Device Per SAE J1930                                                                                          | DDI, TC, CAC, ECM, SPL EGA  | DDI, TC, CAC, ECM, SPL | DDI, TC, CAC, ECM, SPL |  |
|   | 8.Fuel Rate:<br>(lbs/hr)@peak<br>torque                                                                                             | 82,4                        | 82,4                   | 74,9                   |  |
| - | 7.Fuel Rate:<br>mm/stroke@pea<br>k torque                                                                                           | 165                         | 165                    | 150                    |  |
|   | 6.Torque @ RPM<br>(SEA Gross)                                                                                                       | 774,4@1500                  | 774,4@1500             | 702,1@1500             |  |
|   | 4.Fuel Rate: 5.Fuel Rate: 3.BHP@RPM mm/stroke @ peak HP (lbs/hr) @ peak HP 6.Torque @ RPM (SAE Gross) (for diesel only) (SEA Gross) | 242,7                       | 268,2                  | . 227,9                |  |
|   | 4.Fuel Rate:<br>nm/stroke @ peak HF<br>(for diesel only)                                                                            | 123                         | 135                    | 116                    |  |
|   | 3.BHP@RPM n<br>(SAE Gross)                                                                                                          | 242,7@2300                  | 268,2@2300             | 227,9@2300             |  |
|   | 2.Engine Model                                                                                                                      | C3UI181 TAD750VE 242,7@2300 | TAD750VE みめ 268,2@2300 | TAD750VE 水 227,9@2300  |  |
|   | 1.Engine Code 2.Engine Model                                                                                                        | C3UI181                     | C3UI200                | C3UI170                |  |
|   |                                                                                                                                     |                             |                        |                        |  |