**State of California**
**AIR RESOURCES BOARD**

**EXECUTIVE ORDER DE-06-003-04**

Pursuant to the authority vested in the California Air Resources Board (ARB) by Health and Safety Code, Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by Health and Safety Code section 39515 and 39616 and Executive Order G-02-003;

This action relates to Verification under sections 2700 through 2710 of Title 13 of the California Code of Regulations

Clariant Corporation
EnviCat®-DPF

ARB staff has reviewed the request by Clariant Corporation for transfer of the EnviCat®-DPF diesel particulate filter (DPF) verification per California Code of Regulations (CCR), Title 13, sections 2702 (j). They have complied with all required provisions of the regulation.

Based on an evaluation of the data provided, and pursuant to the terms and conditions specified below, the Executive Officer of the ARB hereby finds that the EnviCat®-DPF reduces emissions of diesel particulate matter (PM) consistent with a Level 3 device (greater than or equal to 85 percent reductions) (Title 13, California Code of Regulations (CCR), section 2702 (f) and (g) and section 2708) and complies with the CARB January 1, 2009, nitrogen dioxide ($NO_2$) limit (CCR, Title 13, section 2702 (f) and section 2706 (a)). Accordingly, the Executive Officer determines that the system merits verification for stationary prime and emergency standby generators and pumps, subject to the terms and conditions specified below, classifies the EnviCat-DPF® as a Level 3 Plus system, for use with stationary prime and emergency standby generators and prime and emergency standby pumps using engine families listed in Attachment 1.

This verification is subject to the following terms and conditions:

- The engine must be used in a stationary application associated with prime or emergency standby generators or pumps.
- The engines are model years 1996 or newer having the engine family names listed in Attachment 1 and certified to Tier 1, 2, or 3 PM emissions level.
- The engine must be in its original certified configuration.
- The engine must not employ exhaust gas recirculation.
- The engine must not have a pre-existing oxidation catalyst.
- The engine must not have a pre-existing diesel particulate filter.
- The engine must be four-stroke.
- The engine can be turbocharged or naturally-aspirated.
- The engine must be certified in California.
- The engine must be a certified off-road engine meeting 0.2 grams per brake horsepower hour (g/bhp-hr) diesel (PM) or less based on certification or in-use emissions testing (as tested on an appropriate steady-state certification cycle outlined in the ARB off-road regulations - similar to ISO 8178 D2).

- Clariant Corporation must review actual operating conditions (duty cycle, baseline emissions, exhaust temperature profiles, and engine backpressure) prior to retrofitting an engine with the EnviCat®-DPF to ensure compatibility.
- The engine should be well maintained and not consume lubricating oil at a rate greater than that specified by the engine manufacturer.
- The product must not be operated with fuel additives, as defined in section 2701 of Title 13, of the CCR, unless explicitly verified for use with fuel additive(s).
- The product must not be used with any other systems or engine modifications without ARB and manufacturer approval.
- The other terms and conditions specified below.

Table 1: Conditions for the EnviCat®-DPF

| Parameter | Value |
|---|---|
| Application | Stationary Prime and Emergency Standby Power Generation and Stationary Prime and Emergency Standby Pumping |
| Engine Type | Diesel, with or without turbocharger, without Exhaust-Gas Recirculation (EGR), mechanically or electronically controlled, certified off-road engines meeting 0.2 g/bhp-hr diesel PM or less based on certification or in-use emissions testing. |
| Minimum Exhaust Temperature for Filter Regeneration | The engine must operate at the load level required to achieve 400 degrees Celsius (°C) for a minimum of 30 minutes. Operation at lower temperatures is allowed, but only for a limited duration, as specified below. |
| Maximum Consecutive Minutes Operating Below Passive Regeneration Temperature | 300 Minutes |
| Number of Cold Start and 30 Minute Idle Sessions before Regeneration Required | 10 |
| Number of Hours of Operation Before Cleaning of Filter Required | 2,000 when using diesel with <15 ppm sulfur. |
| Fuel | California diesel fuel with less than or equal to 15 ppm sulfur or a biodiesel blend provided that the biodiesel portion of the blend complies with ASTM D6751, the diesel portion of the blend complies with Title 13 (CCR), sections 2281 and 2282 and the blend contains no more than 20 percent biodiesel by volume. |
| PM Verification Level | Level 3 Plus Verification: At least 85% reduction of PM and meets January 2009 $NO_2$ limit. |

The EnviCat®-DPF consists of a catalyzed passive diesel particulate filter and a Dwyer 3000, Series AN 14, backpressure monitor.

This Executive Order is valid provided that installation instructions for the EnviCat®-DPF do not recommend tuning the engine to specifications different from those of the engine manufacturer.

Changes made to the design or operating conditions of the EnviCat®-DPF, as exempted by ARB, which adversely affect the performance of the engine's pollution control system, shall invalidate this Executive Order.

Changes to the EnviCat®-DPF are not permitted without ARB approval. ARB must be notified in writing of any changes to any part of the EnviCat®-DPF. Any changes to the device must be evaluated and approved by ARB. Failure to do so shall invalidate this Executive Order.

Marketing of the EnviCat®-DPF using identification other than that shown in this Executive Order or for an application other than that listed in this Executive Order shall be prohibited unless prior approval is obtained from ARB.

This Executive Order shall not apply to any EnviCat®-DPF advertised, offered for sale, sold with, or installed on a new engine.

As specified in the Diesel Emission Control Strategy Verification Procedure (Title 13 CCR section 2706(g)), the ARB assigns each Diesel Emission Control Strategy a family name. The designated family name for the verification as outlined above is:

**CA/CLR/2006/PM3+/N00/ST/DPF01**

The designated family name CA/CLR/2006/PM3+/N00/ST/DPF01 replaces and is equal to the previous name CA/SUD/2006/PM3+/N00/ST/DPF01 from this time forward. If a Süd-Chemie produced EnviCat®-DPF loses the label with the previous designated family name, a new Clariant Corporation EnviCat®-DPF label must be used to replace it and the word "replacement" must be included on the label.

Additionally, as stated in the Diesel Emission Control Strategy Verification Procedure, Clariant Corporation is responsible for honoring their warranty (California Code of Regulations (CCR), Title 13, section 2707),conducting in-use compliance testing (section 2709), and complying with the system labeling requirements in accordance with section 2706(g).

In addition, ARB reserves the right in the future to review this Executive Order and verification provided herein to assure that the verified add-on or modified part continues to meet the standards and procedures of CCR, Title 13, section 2222, et seq and CCR, Title 13, sections 2700 through 2710.

Systems verified under this Executive Order shall conform to all applicable California emissions regulations. This Executive Order does not release Clariant Corporation from complying with all other applicable regulations.

Violation of any of the above conditions shall be grounds for revocation of this Executive Order.

Executive Order DE-06-003-003 is hereby superseded and is of no further force and effect.

Executed at Sacramento, California, this 8th day of August 2013.

Richard W. Corey
Executive Officer
by

Cynthia Marvin, Chief
Stationary Source Division

Attachment