

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-249-1  
Relating to Exemptions Under Section 27156  
Of the Vehicle Code

Donaldson Company, Inc.  
Donaldson DCM Diesel Oxidation Catalyst Muffler

Pursuant to the authority vested in the Air Resources Board by Section 27156 of the Vehicle Code; and

Pursuant to the authority vested in the undersigned by Section 39515 and Section 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED; That the installation of the Donaldson DCM Diesel Oxidation Catalyst Muffler, manufactured and marketed by the Donaldson Company, P.O. Box 1299, Minneapolis, MN 55440, has been found not to reduce the effectiveness of the applicable vehicle pollution control system and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for installation on 1991 through 2002 model-year four-stroke, turbocharged heavy-duty diesel engines certified to standards of 0.25 g/bhp-hr particulate matter (PM) or less, with horsepower rating between 150 and 600 HP.

The Donaldson DCM Diesel Oxidation Catalyst Muffler is an integrated catalyst and muffler intended to directly replace the existing muffler on a heavy-duty diesel vehicle. It comes in two formulations: the Series 6000 intended for use with California's standard diesel (500 ppm maximum sulfur content) or ultra low sulfur diesel fuel (15 ppm maximum sulfur content), and the Series 6100 for use with ultra low sulfur diesel fuel only.

This Executive Order is valid provided that the installation instructions for the Donaldson DCM Diesel Oxidation Catalyst Muffler will not recommend tuning the vehicle to specifications different from those of the vehicle manufacturer.

This Executive Order shall not apply to any Donaldson Company Donaldson DCM Diesel Oxidation Catalyst Muffler advertised, offered for sale, sold with, or installed on a motor vehicle prior to or concurrent with the transfer to an ultimate purchaser.

Changes made to the design or operating conditions of the Donaldson DCM Diesel Oxidation Catalyst Muffler, as exempt by the Air Resources Board, which adversely affect the performance of the vehicle's pollution control system shall invalidate this Executive Order.

Marketing of the Donaldson DCM Diesel Oxidation Catalyst Muffler using any identification other than that shown in this Executive Order or marketing of the Donaldson DCM Diesel Oxidation

Catalyst Muffler for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board. Exemption of the system shall not be construed as exemption to sell, offer for sale, or advertise any component of the kit as an individual device.

This Executive Order does not constitute any opinion as to the effect that the use of the Donaldson DCM Diesel Oxidation Catalyst Muffler may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on test results submitted by Donaldson Company which demonstrated that the Donaldson DCM Diesel Oxidation Catalyst Muffler has no adverse impact on exhaust emissions when tested using the transient federal test procedure for on-road heavy-duty engines. Results from testing a 1991 model year Detroit Diesel Series 60 engine and a 2000 model year Caterpillar 3126 engine are summarized below:

**Ultra Low Sulfur Diesel Fuel (<15ppm)**

	TEST	NOx	CO	HC	PM
2000 Caterpillar 3126	Baseline	3.22	1.49	0.69	0.11
	DCM 6100	3.15	0.25	0.08	0.09
1991 DDC Series 60	Baseline	4.81	2.22	0.07	0.16
	DCM 6100	4.75	1.02	0.02	0.14
1991 DDC Series 60	Baseline	4.77	2.11	0.05	0.16
	DCM 6000	4.76	1.56	0.01	0.14

**Standard Diesel Fuel (<500ppm)**

	TEST	NOx	CO	HC	PM
2000 Caterpillar 3126	Baseline	2.85	1.49	0.61	0.12
	DCM 6000	2.82	0.96	0.16	0.11
1991 DDC Series 60	Baseline	4.82	2.23	0.05	0.18
	DCM 6000	4.78	1.72	0.01	0.15

In addition to the foregoing, the ARB reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222, et seq.

**THIS EXECUTIVE ORDER DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF DONALDSON COMPANY'S DONALDSON DCM DIESEL OXIDATION CATALYST MUFFLER.**

No claim of any kind, such as "Approved by the Air Resources Board", may be made with respect to the action taken herein in any advertising of other oral or written communication.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after a ten-day written notice of intention to revoke the order, in which period the holder of the order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within ten days of receipt of the request and the order may not be revoked until a determination is made, after the hearing, that grounds for revocation exist.

Executed at El Monte, California, this 2<sup>nd</sup> day of October 2002.



Allen Lyons, Chief  
Mobile Source Operations Division