

**STATEMENT FROM DONALDSON COMPANY, INC.  
ON THE AIR RESOURCES BOARD'S  
PROPOSED REVISIONS TO THE 2008  
LOWER-EMISSION SCHOOL BUS PROGRAM  
GUIDELINES AND FUNDING ALLOCATIONS**

March 26, 2008

Donaldson Company, Inc. is pleased to provide testimony in support of ARB's proposed revisions to the 2008 Lower-Emission School Bus Program Guidelines and Funding Allocations..

Donaldson is headquartered in Minneapolis, Minnesota, and is a leading worldwide provider of filtration systems and replacement parts. The company serves customers in the industrial and engine markets with a product mix which includes air and liquid filters and exhaust and emission control markets.

Donaldson is also a member of the Manufacturers of Emission Control Association (MECA) and has been actively working with EPA and California ARB staff to develop and provide diesel retrofit control technology in support of ARB's Diesel Risk Reduction Plan (DRRP) and EPA's Voluntary Diesel Retrofit Program (VDRP). Donaldson presently has Verified retrofit technologies and is a leading supplier for both ARB's DRRP program and for EPA's VDRP.

While supporting overall the proposed revisions of the 2008 Lower-Emission School Bus Program Guidelines, Donaldson has concerns that California is not taking advantage of the significant PM emission reduction benefits on school buses which are available by using retrofit crankcase PM controls as Verified Diesel Emission Control Systems (VDECS).

Specifically Donaldson has present EPA and CARB Verifications for the combined use of various reduction level Tailpipe PM control technologies combined with a closed crankcase ventilation system (CCVS). Donaldson has brand named our CCVS technology as Spiracle. Specific reference and background to this Spiracle CCVS technology may be accessed from our corporate web site at [www.donaldson.com/emissions](http://www.donaldson.com/emissions).

Donaldson believes that Tailpipe PM control and Crankcase (CCVS) PM control can and should be used together to reduce overall TOTAL ENGINE PM, and in the case of school buses to also significantly reduce PM inside school buses.

While there has been past allowance in ARB's Verification process of this type of Total PM reduction, which includes Tailpipe and Crankcase PM control, the existing and newly proposed amended Verification Procedure does not specifically address or recognize the emission reduction benefits of Crankcase PM control. Donaldson is concerned that

without appropriate Verification process guidelines, future Verifications and retrofit of Crankcase PM controls on in-use diesel engines will be very limited in California.

Given this uncertainty, Donaldson requests that ARB develop guidelines for verifying retrofit Crankcase PM controls as VDECS, either alone or in combination with other Tailpipe PM FDECS devices. This would help ensure a recognized process for effectively reducing Total PM emissions and allowing effective future utilization in California. In addition, Donaldson requests that ARB develop specific guidelines concerning the use of retrofit Crankcase PM controls as part of the proposed revisions to the 2008 Lower-Emission School Bus Program Guidelines and Funding Allocations.

Specific benefits for controlling Crankcase PM on in-use diesels are well summarized in MECA's written testimony of January 24, 2008, concerning verifying retrofit crankcase PM controls as VDECS. The most significant of these benefits include reduction of sizable Crankcase PM emissions, .01 to .04 g/bhp-hr, as compared to Level 3 controlled Tailpipe PM levels of .01 g/bhp-hr and associated Crankcase PM reduction and overall PM emission improvement for School Bus in-cabin air.

In summary, retrofit crankcase controls exist today that can capture more than 95% of the PM emitted from the crankcase. The U.S. EPA in the 2007 on-road regulations and 2011 non-road rules considers crankcase PM a significant contributor to total vehicle PM emissions and requires that they be measured and accounted for in meeting new vehicle emission limits. The allowed use of 2007 MY engines in California school buses certified to the 0.01 PM standard must also account for or include crankcase emissions. Donaldson requests that ARB develop appropriate guidelines concerning the use of retrofit crankcase PM controls on school buses along with tailpipe VDECS retrofitted on pre-2007 MY engines.

In closing we comment the Air Resources Board and staff members for continuing efforts with healthy air quality, and in implementing the Diesel Risk Reduction Plan. Donaldson intends to provide continued commitment and support of ARB's objectives and looks for continued cooperative effort with ARB staff and other stakeholders.

Thank you.

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