

**State of California
AIR RESOURCES BOARD**

EXECUTIVE ORDER DE-04-003

Pursuant to the authority vested in the 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;

Relating to Verification under sections 2700 through 2710 of Title 13 of the California Code of Regulations

Lubrizol Engine Control Systems
AZ Purifier™ and AZ Purimuffler™

The ARB has reviewed Lubrizol Engine Control System's request for verification of the AZ Purifier™ and AZ Purimuffler™. Based on an evaluation of the data provided, and pursuant to the terms and conditions specified below, the Executive Officer of ARB hereby finds that the AZ Purifier™ and AZ Purimuffler™ reduce emissions of diesel particulate matter (PM) consistent with a Level 1 device (greater than or equal to 25 percent reductions) (Title 13 California Code of Regulations ("CCR") sections 2702 (f) and (g) and section 2708). Accordingly, the Executive Officer determines that the system merits verification and, subject to the terms and conditions specified below, classifies the AZ Purifier™ and AZ Purimuffler™ as a Level 1 system, for the off-road applications: port, railway yards, and other intermodal/freight handling operations.

The aforementioned verification is subject to the following terms and conditions:

- Off-road diesel engines (model year 1996 to 2002) manufactured by Cummins, Inc., Navistar (International Truck and Engine Corporation), Case Corporation, and Komatsu Ltd. listed in Attachment 1.
- The engine is a four-stroke.
- The engine can be turbocharged or naturally aspirated.
- The engine can be mechanically or electronically injected
- The engine should be well maintained and not consume lubricating oil at a rate greater than that specified by the engine manufacturer.
- Lube oil, or other oil, should not be mixed with the fuel.
- The engine must be operated on fuel that has a sulfur content of no more than 15 parts per million by weight.
- The other terms and conditions specified below.

IT IS ALSO ORDERED AND RESOLVED: That installation of the AZ Purifier™ and AZ Purimuffler™, manufactured by Lubrizol Engine Control Systems of 165 Pony Drive, Newmarket, Ontario, Canada L3Y 7V1, has been found not to reduce the effectiveness of the applicable vehicle pollution control system, and therefore, the AZ Purifier™ and AZ Purimuffler™ is exempt from the prohibitions in section 27156 of the Vehicle Code for installation on off-road engines listed in Attachment 1.

This exemption is only valid provided the engines meet the aforementioned conditions.

The AZ Purifier™ and AZ Purimuffler™ consists of a passive diesel oxidation catalyst(s). The major components of the AZ Purifier™ and AZ Purimuffler™ are identified in Attachment 2.

This Executive Order is valid provided that installation instructions for the AZ Purifier™ and AZ Purimuffler™ do not recommend tuning the off-road equipment to specifications different from those of the off-road equipment manufacturer.

Changes made to the design or operating conditions of the AZ Purifier™ and AZ Purimuffler™, as verified by ARB, which adversely affect the performance of the off-road equipment's pollution control system, shall invalidate this Executive Order.

No changes are permitted to the device. ARB must be notified in writing of any changes to any part of the AZ Purifier™ and AZ Purimuffler™. Any changes to the device must be evaluated and approved by ARB. Failure to do so shall invalidate this Executive Order.

Marketing of the AZ Purifier™ and AZ Purimuffler™ 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 AZ Purifier™ and AZ Purimuffler™ advertised, offered for sale, sold with, or installed on an off-road equipment prior to or concurrent with transfer to an ultimate purchaser.

As specified in the Diesel Emission Control Strategy Verification Procedure (Title 13 CCR section 2706 (i)), ARB assigns each Diesel Emission Control Strategy a family name. The designated family name for the verification as outlined above is: CA/LUB/2004/PM1/N00/OF/DOC01.

Additionally, as stated in the Diesel Emission Control Strategy Verification Procedure, Lubrizol Engine Control Systems is responsible for honoring their warranty (section 2707) and conducting in-use compliance testing (section 2709).

In addition to the foregoing, ARB reserves the right in the future to review this Executive Order and the exemption and verification provided herein to assure that the exempted

and verified add-on or modified part continues to meet the standards and procedures of California Code of Regulations, Title 13, section 2222, et seq and California Code of Regulations, Title 13, sections 2700 through 2710.

Off-road equipment certified under this Executive Order shall conform to all applicable California emissions regulations.

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

Executed at El Monte, California this 10 day of May 2004.

/s/

Robert H. Cross, Chief
Mobile Source Control Division

Attachment 1: ARB Approved Engine Families for the AZ Purifier™ and AZ Purimuffler™

Attachment 2: Part Numbers and Model Numbers of the AZ Purifier™ and AZ Purimuffler™