

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-383  
Relating to Exemptions Under Section 27156  
of the Vehicle Code

CERTIFIED TECHNOLOGIES CORPORATION  
PURECYCLE OIL FILTER

Pursuant to the authority vested in the Air Resources Board (ARB) by Section 27156 of the Vehicle 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-45-9;

IT IS ORDERED AND RESOLVED: That the installation of PureCycle oil filter, manufactured by Certified Technologies Corporation of 1624 Harmon Place, Suite 209, Minneapolis, Minnesota 55403-1999, has been found not to reduce the effectiveness of the applicable vehicle pollution control system, and therefore, the PureCycle oil filter is exempt from the prohibitions of Section 27156 of the California Vehicle Code for installation on 1997 and older model-year heavy-duty diesel-powered vehicles.

This Executive Order is valid provided that installation instructions for the device not recommend tuning the vehicle to specifications different from those submitted by the vehicle manufacturer.

Changes made to the design or operating conditions of the device, as exempt by the ARB, which adversely affect the performance of a vehicle's pollution control system shall invalidate this Executive Order.

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

This Executive Order does not constitute any opinion as to the effect the use of the device may have on any warranty either expressed or implied by the vehicle manufacturer.

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 CERTIFIED TECHNOLOGIES CORPORATION'S PURECYCLE OIL FILTER.

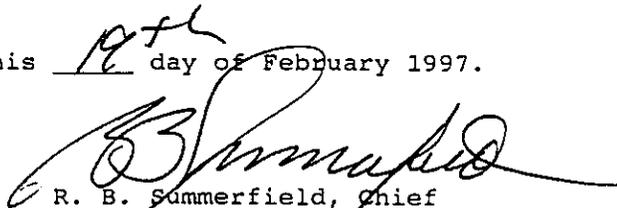
No claim of any kind, such as "Approved by the Air Resources Board," may be made with respect to the action taken herein in any advertising or other oral or written communication.

Violation of any of the above conditions shall be grounds for revocation of this Executive Order. The Executive Order may be revoked only after a ten-day written notice of intention to revoke the Executive Order, in which period the holder of the Executive 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 Executive Order may not be revoked until a determination after the hearing that grounds for revocation exist.

CERTIFIED TECHNOLOGIES CORPORATION  
PURECYCLE OIL FILTER

EXECUTIVE ORDER D-383  
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Executed at El Monte, California, this 19<sup>th</sup> day of February 1997.



R. B. Summerfield, Chief  
Mobile Source Operations Division

State of California  
AIR RESOURCES BOARD

EVALUATION OF CERTIFIED TECHNOLOGIES CORPORATION'S  
PURECYCLE OIL FILTER  
FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE  
SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13 OF THE  
CALIFORNIA CODE OF REGULATIONS

February 1997

State of California  
AIR RESOURCES BOARD

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by

Mobile Source Operations Division

State of California  
Air Resources Board  
9528 Telstar Avenue  
El Monte, CA 91731-2990

(This report has been reviewed by the staff of the California Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Air Resources Board nor does the mention of trade names or commercial products constitute endorsement or recommendation for use.)

SUMMARY

Certified Technologies Corporation (CERTECH) of 1624 Harmon Place, Suite 209, Minneapolis, Minnesota 55403-1999 has applied for an exemption from the prohibitions of Section 27156 of the California Vehicle Code for their PureCycle oil filter. The filtering device is designed for installation on heavy-duty diesel-powered vehicles.

Based on an engineering evaluation of the PureCycle oil filter, the staff believes that the filtering device will not have any adverse effect on the exhaust or evaporative emissions of the vehicles for which the exemption is requested.

Staff recommends that CERTECH be granted an exemption for their PureCycle oil filter for installation on 1997 and older model-year heavy-duty diesel-powered vehicles and that Executive Order No. D-383 be issued.

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AIR RESOURCES BOARD

EVALUATION OF CERTIFIED TECHNOLOGIES CORPORATION'S  
PURECYCLE OIL FILTER FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE  
CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13 OF  
THE CALIFORNIA CODE OF REGULATIONS

I. INTRODUCTION

Certified Technologies Corporation (CERTECH) of 1624 Harmon Place, Suite 209, Minneapolis, Minnesota 55403-1999 has applied for an exemption from the prohibitions of Section 27156 of the California Vehicle Code for their PureCycle oil filter for use on heavy-duty diesel-powered vehicles. CERTECH has submitted all the required information including installation instructions and specifications of the filtering device for our evaluation.

II. CONCLUSION

Based on an engineering evaluation of the filtering device, the staff has determined that the PureCycle oil filter will not adversely affect the exhaust or evaporative emissions from heavy-duty diesel-powered vehicles and therefore, meets the criteria set forth in Section 27156 of the California Vehicle Code and Title 13 of the California Code of Regulations.

III. RECOMMENDATION

Staff recommends that CERTECH be granted an exemption, permitting advertisement, sale, and installation of their PureCycle oil filter on 1997 older model-year heavy-duty diesel-powered vehicles and that Executive Order No. D-383 be issued.

IV. DEVICE DESCRIPTION AND OPERATION

The PureCycle filtering device is cylindrical in shape and consists of two clarification elements; the filtering vessel and the

distilling chamber. The device measures 15.5 inches in height and 7 inches in outer diameter. Under engine oil pressure, the oil is filtered through the replaceable filter cartridge from the bottom of the vessel at a rate of 4-5 gallons per hour. The filtering material is made of King-strand cotton fiber. The filtered oil then enters the distilling chamber where liquid impurities are removed through vaporization. The distilling chamber is heated to temperatures in the range of 212 to 220 degrees Fahrenheit through a 12-volt electrical connection to the battery. The purified oil is then returned by gravity to the oil pan, and the water and other distilling vapors vent through the vapor control valve and into the air cleaner.

The device is secured on the frame or on the firewall using the mounting bracket. The "pre-screen" hose connects the bottom of the filtering vessel to the oil source (oil gallery). A 3/4 inch hose connects the oil return outlet to the crankcase inspection plug or the fitting on the oil pan. The oil return outlet must be 3 inches above the point where the hose connects to the inspection plug. A 1/4 inch vent hose is installed from the vent chamber to an opening in the air cleaner allowing recirculation of the vapors. The device is a continuous filtering system which requires a minimum of 3-4 quarts of additional engine oil for operation. CERTECH recommends that the filter cartridge be changed at normally scheduled maintenance intervals or every 12,000 miles or 300 hours.

V. DEVICE EVALUATION AND DISCUSSION

CERTECH claims that PureCycle oil filter removes particulate matter and liquid impurities from the engine oil allowing cleaner running engine for an extended period of time. The filtering device has no direct contact with the fuel system or the combustion process; therefore, the staff concludes that the installation of the filtering device will not have any adverse effect on exhaust emissions. Potential hydrocarbon emissions vented from the distilling chamber are recirculated to the air cleaner preventing increased evaporative emissions.

No emissions tests were conducted by the Air Resources Board. CERTECH has submitted all the required information and has fulfilled the requirements for an exemption.