



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 17 2005

OFFICE OF
AIR AND RADIATION

Mr. William Passie
Caterpillar, Inc.
100 NE Adams Street
Peoria, IL 61629-7150

Dear Mr. Passie:

The U.S. Environmental Protection Agency (EPA) has reviewed your request for verification of the Caterpillar's Diesel Particulate Filter (DPF) use with Low Sulfur Diesel (LSD) fuel. Based on our evaluation of the verification application, the test data, and additional information provided, EPA hereby verifies that this technology reduces emissions of certain criteria pollutants by the percentages described in the table below.

This technology is approved for use on the following engines and/or vehicles provided all of the required operating criteria are met as described below:

All non-EGR equipped, 4-cycle, nonroad, turbocharged engines from 1996 through 2005 model years with powers in $130 \leq \text{Kilo Watts} < 225$ ($174.2 \leq \text{Horsepower} < 301.5$).

Technology	Baseline Fuel (sulfur content)	Fuel with Technology (sulfur content)	Particulate Matter (PM) %	Carbon Monoxide (CO) %	Hydrocarbons (HC) %	Oxides of Nitrogen (NOx) %
Caterpillar's PM Filter	≤ 30 ppm	≤ 30 ppm	89	90	93	n/a

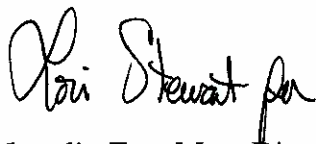
The following operating criteria must be met in order for appropriately retrofitted engines to achieve the aforementioned emissions reductions:

1. The applicable vehicles or engines must be operated on a fuel which contains no more than 30 ppm of sulfur.
2. The DPF requires an exhaust temperature of 260 degrees C for 40% of the cycle for NOx:PM ratios of less than or equal to 20:1 and for NOx:PM ratios equal to or greater than 25:1, only 200 degrees C for 40% of the cycle is required. (As there may be significant variations from application to application, Caterpillar will review actual vehicle operating conditions and perform temperature data-logging prior to retrofitting a vehicle with their PM filter system to ensure compatibility.)
3. Caterpillar will install a backpressure monitor and high pressure indicator light on all vehicles equipped with this DPF.
4. The engine should be well maintained and not consume lubricating oil at a rate greater than that specified by the engine manufacturer. Crankcase oil burning systems may not be used with this product.

Information on the DPF, percent reductions, applicable engines, and in-use testing program will be posted on the EPA Voluntary Diesel Retrofit Program website (www.epa.gov/otaq/retrofit). As you know, Caterpillar will be responsible for completing the required in-use testing program and for submitting all in-use testing data to EPA.

Thank you for participating in EPA's Voluntary Diesel Retrofit Program. If you have any questions or comments, please contact Kuang Wei, of my staff, at (202) 343-9329.

Sincerely,



Merrylin Zaw-Mon, Director
Certification & Compliance Division
Office of Transportation and Air Quality