United States Environmental Protection Agency | Air and Radiation | EPA420-F-99-004 January 1999

Office of Mobile Sources

Regulatory Announcement

Proposed Finding on Emission Standards for New Large Spark-Ignition Nonroad Engines

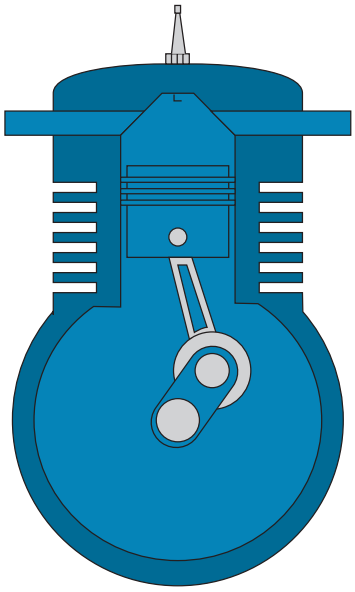
The U.S. Environmental Protection Agency (EPA) is proposing a finding that spark-ignition (SI) engines rated above 19 kilowatts (25 horsepower) contribute to air pollution in ozone or carbon monoxide nonattainment areas. EPA intends to propose a national program to control emissions from this currently unregulated source to help reduce the harmful health effects of ozone and carbon monoxide.

A National Emission Control Program

EPA intends to propose a national program to control emissions of oxides of nitrogen (NOx), hydrocarbons, and carbon monoxide from large nonroad SI engines. These engines are used in a variety of industrial equipment, including forklifts, airport ground-service equipment, generators, and compressors. Emissions from large nonroad SI engines account for approximately 2 percent of total mobile source NOx emissions nationwide.

The results of an EPA study completed in 1990 demonstrated the need for control of air pollution in the nonroad engine and vehicle arena. EPA published this finding in conjunction with the first rulemaking to set emission standards for nonroad engines, which was completed in June 1994. In September 1997, the Agency issued a proposal for more strin-

gent emission standards for diesel engines used in most nonroad applications. EPA has subsequently finalized emission standards for nonroad SI engines rated at or below 19 kilowatts, which consist predominantly of residential and commercial lawn care equipment.



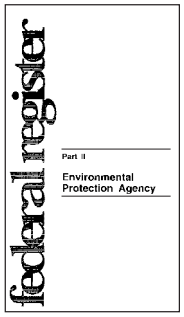
Many of the engines that would be affected by these new emission standards have counterpart engine models used in highway applications. While highway engines have seen extensive technological developments, the nonroad engine designs have changed little to reflect these improvements. Shifting toward these technologies that have been developed for cars and trucks, such as electronically controlled closed-loop injection systems with three-way catalytic converters, there is a great potential to dramatically improve engine performance and fuel economy in addition to the anticipated emission reductions.

Health and Environmental Benefits

If the standards are implemented as discussed, the resulting emission reductions would translate into significant, long-term improvements in air quality in many areas of the U.S. Application of basic automotive emission control technologies would reduce NOx and hydrocarbon emissions by 70 to 90 percent. The emission standards being considered are part of an overall program designed to ensure that engine emissions are controlled throughout a lifetime of field operation, not just in the laboratory. Overall, the program would provide much-needed assistance to states facing ozone and carbon monoxide air quality problems that are causing a range of adverse health effects for their citizens, especially in terms of respiratory impairment and related illnesses.

Public Participation Opportunities

EPA desires full public participation in the rulemaking process. The Agency solicits comments from all interested parties. Wherever applicable, full supporting data and detailed analysis should also be submitted to allow EPA to make maximum use of the comments. Commenters are especially encouraged to provide specific suggestions for changes to any aspects of the proposal that they believe need to be modified or improved.



EPA will accept comments on the proposed finding for 30 days after publication in the *Federal Register.* For instructions on submitting written comments, please see the *Federal Register* notice, which is available from the EPA Air and Radiation Docket by calling 202-260-7548; please refer to Docket No. A-98-1. In addition, the proposed finding and related documents are available electronically via the EPA Internet server at:

http://www.epa.gov/oms/nonroad.htm

There will also be an opportunity for oral and written comment when EPA publishes a subsequent Notice of Proposed Rulemaking.

For More Information

Document information is also available electronically at the Internet site given above, or by writing to:

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