United States
Environmental Protection
Agency

Air and Radiation

EPA420-F-98-018
May 1998

Office of Mobile Sources

Regulatory Announcement

Advance Notice of Proposed Rulemaking: Emission Standards for New Large Spark-Ignition Nonroad Engines

The U.S. Environmental Protection Agency (EPA) is issuing an advance notice of proposal for control of emissions from new spark-ignition engines rated above 19 kilowatts (25 horsepower). Control of emissions from this currently unregulated source moves the Agency one step further in the initiative to reduce the harmful health effects of ozone and particulate matter from nonroad engine sources.

A National Emission Control Program

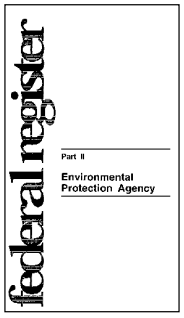
The results of an EPA study completed in 1990 demonstrated the need for control of air pollution in the nonroad engine and vehicle arena. EPA published this finding in conjunction with the first rulemaking to set emission standards for nonroad engines, which was completed in June 1994. In September 1997, the Agency issued a proposal for more stringent emission standards for diesel engines used in most nonroad applications. EPA has subsequently finalized emission standards for spark-ignition nonroad engines rated at or below 19 kilowatts, which consist predominantly of residential and commercial lawn care equipment. The Agency is now considering proposing a national program to control emissions of oxides of nitrogen (NOx) and hydrocarbons from large spark-ignition nonroad engines. These engines are used in a variety of industrial equipment, including forklifts, airport ground-service equipment, generators, and compressors. EPA is publishing an Advance Notice

of Proposed Rulemaking (ANPRM) to encourage a broader dialogue with the public regarding the emission standards under consideration. 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 catalysts, there is a great potential to dramatically improve engine performance and fuel economy in addition to the anticipated emission reductions.

Emissions from Large Spark-Ignition Nonroad Engines

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 particulate 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 ANPRM 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 ANPRM and related documents are available electronically via the EPA Internet server at:

http://www.epa.gov/OMSWWW/equip-hd.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:

U.S. Environmental Protection Agency
Office of Mobile Sources
2000 Traverwood
Ann Arbor, MI 48105