

**Testimony of
Nancy Kruger
Deputy Director
National Association of Clean Air Agencies**

**U.S. Environmental Protection Agency
Hearing on the
Control of Emissions from Nonroad Spark-Ignition Engines and Equipment
Proposed Rule
72 *Federal Register* 28098
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I am Nancy Kruger, Deputy Director of NACAA – the National Association of Clean Air Agencies – which represents the air pollution control agencies in 54 states and territories and over 165 metropolitan areas across the country. On behalf of our association, I thank you for this opportunity to testify on the U.S. Environmental Protection Agency’s (EPA’s) proposed rule to control emissions from newly manufactured small land-based spark-ignition engines and equipment and marine spark-ignition engines and vessels, as proposed in the *Federal Register* on May 18, 2007 (72 FR 28098).

NACAA strongly supports prompt EPA action to reduce emissions from these sources. We believe this long-awaited proposal – which includes hydrocarbon (HC), nitrogen oxide (NO_x) and carbon monoxide (CO) exhaust emission standards, as well as evaporative emission standards – is a critically important step forward.

There Is a Compelling Need to Control Emissions from Small Nonroad Spark-Ignition and Marine Spark-Ignition Engines and Equipment

State and local clean air agencies across the country are facing the enormous challenge of developing strategies to achieve and maintain the health-based National Ambient Air Quality Standards (NAAQS) for ozone and fine particulate matter (PM_{2.5}). Air quality in approximately 120 areas of the nation currently violates the 8-hour ozone standard, the PM_{2.5} standard or both, exposing more than 150 million people to

unhealthful levels of air pollution. Clearly, considerable efforts by EPA, states and localities will be needed to reduce the widespread health and environmental impacts associated with emissions from contributing sources. In addition, EPA has already taken action to tighten the PM_{2.5} NAAQS and is considering similar action on the ozone standard, which will increase the challenges facing states and localities. Further, many areas of the country are plagued by unacceptably high levels of toxic air pollution.

Emissions from the nonroad spark-ignition engines covered by this proposal are substantial. Use of lawn and garden equipment totals more than 3 billion hours a year. A push mower currently emits as much hourly pollution as 11 cars, a riding mower as much as 34 cars. Recreational watercraft can emit as much hourly as 348 cars. The resulting emissions contribute to unhealthful concentrations of PM_{2.5}, ozone, CO and toxic air pollutants, which translate into serious adverse health impacts, including premature death, heart disease, aggravated asthma and other respiratory conditions, as well as a host of environmental harms, such as visibility impairment and acid rain.

As EPA appropriately acknowledges, absent action to reduce emissions, by 2020 these engines will contribute more than one quarter (1,352,000 tons) of mobile source volatile organic compound (VOC) emissions, nearly a third (16,374,000 tons) of mobile source CO, 16 percent (39,000 tons) of mobile source PM_{2.5} and 4 percent (202,000 tons) of mobile source NO_x. However, the agency's proposal, by 2030, will reduce annual emissions from affected sources by an estimated 630,000 tons of VOCs, 2.7 million tons of CO, 98,000 tons of NO_x and 6,300 tons of direct PM_{2.5}. Among the quantifiable benefits that would, in turn, occur from these reductions is the prevention, annually, of an estimated 450 PM-related premature deaths, 500 hospitalizations and 52,000 lost work days. The total annual benefits in 2030 are estimated at \$3.4 billion versus \$240 million in annual costs.

Emission Control Requirements for Small Nonroad Spark-Ignition and Marine Spark-Ignition Engines and Equipment Should Achieve the Greatest Reductions Feasible As Soon As Possible

In Section 101(a)(3) of the Clean Air Act, Congress vests state and local clean air agencies with "primary responsibility" for the control of air pollution. This is a

responsibility we take very seriously. As we seek to achieve and sustain clean, healthful air throughout the country, we must consider the full measure of emission reductions feasible from every source of pollution as quickly as possible. With respect to nonroad spark-ignition engines smaller than 50 horsepower, however, states and localities other than California, very unfortunately, are preempted from adopting standards or other requirements. Therefore, it is incumbent upon EPA to ensure that this rule achieves the greatest degree of reductions possible as soon as possible. Toward that end, NACAA urges the agency to consider the following comments and recommendations.

Small Spark-Ignition Engines and Equipment

First, NACAA supports the federal adoption of exhaust emission standards for small spark-ignition engines consistent with those adopted by the California Air Resources Board. However, with respect to the implementation dates, we question the need for the substantial additional lead time that EPA has proposed beyond the implementation dates enacted by California – five years (until 2012) for Class I engines and three years (until 2011) for Class II engines. We believe an accelerated federal schedule is technically feasible and recommend that EPA give consideration to more rapid implementation.

Second, based on the agency's March 2006 safety study and the Regulatory Impact Analysis for this proposal, as well as public statements by engine makers, it is evident that additional, more stringent emission standards are feasible for small spark-ignition engines, especially commercial equipment, which operates hundreds, if not thousands of hours a year. Therefore, NACAA recommends that EPA consider adding another tier of more rigorous standards for Class I and Class II engines.

Third, data available in the EPA docket indicates in-use compliance failures by various models of lawn and garden equipment. This has been a continuing concern of NACAA's that is now heightened by the fact that EPA has not proposed a mandatory in-use testing program for these engines. We urge EPA to consider the addition of such a

testing program, to ensure in-use performance at the levels envisioned by the regulation.

Marine Spark-Ignition Engines and Vessels

With respect to marine spark-ignition engines and vessels, NACAA supports EPA's proposal to set CO standards for all sectors.

We also support the agency's proposal to establish the first-ever federal standards for vessels powered by sterndrive or inboard engines. However, we note that sterndrive and inboard engines with catalysts are already in production and engine manufacturers are already tooled to produce catalyzed engines for California for 2008. Therefore, although we believe the proposed federal implementation schedule – beginning in 2009 – is appropriate and should not be delayed, we recommend that EPA also require that once a certified engine is available in California it be sold nationwide.

With respect to personal watercraft and outboard engines, we support the proposed standards for implementation in 2009. We note that EPA anticipates manufacturers will meet these standards with readily available technology – improved fueling systems and other in-cylinder controls – and, therefore, question why the agency did not assess the feasibility of catalysts for these engines, for the purpose of pursuing future, more rigorous catalyst-based standards. We recommend that the agency conduct such an analysis and proceed with additional standards accordingly.

Evaporative Emissions

NACAA also supports EPA's inclusion of evaporative emission standards for all nonroad spark-ignition equipment and watercraft covered by this rule. We are pleased that EPA has proposed fuel line controls in 2008 for Class I and II small spark-ignition engines and tank permeation, diffusion and running loss standards, as well. We question, however, the absence of diurnal emission controls for small spark-ignition engines and urge the agency to reconsider this omission. Likewise, for marine spark-ignition engines, we support the evaporative emission standards included in the

proposal and encourage the agency to implement these standards on the schedule identified.

Preemption

Finally, through this proposal, EPA has solicited comments on a July 12, 2002 petition by the American Road & Transportation Builders Association (ARTBA) to amend the agency's rules on the preemptive scope of Section 209(e) of the Clean Air Act to preempt state and local requirements that impose "(1) restrictions on the use, hours of operation, and fuel of both new and non-new nonroad vehicles, and (2) fleetwide averaging, early retirement, and purchase sale requirements." Any preemption of state and local authority on nonroad engines would inappropriately intrude on the ability of state and local governments to appropriately mitigate the impacts of construction not only for air quality reasons, but also for noise and other environmental impacts such as traffic congestion and water quality concerns. NACAA vigorously opposes any such preemption and strongly urges that EPA deny ARTBA's petition.

Conclusion

In conclusion, NACAA is pleased that, after considerable delay, EPA has proposed this regulation for nonroad spark-ignition engines. We are further pleased that this proposal is based on the expectation that manufacturers will use catalytic converters for the first time ever on many types of watercraft and lawn and garden equipment. After rigorous analysis and extensive work with diverse stakeholders, EPA determined that such a strategy is feasible and safe, and NACAA supports that determination. We appreciate this opportunity to offer some recommendations that we believe will strengthen the rule's public health and environmental benefits and, during the remainder of the comment period, will continue to review the proposal and the various issues on which EPA seeks comment. Finally, we urge timely action to publish a final rule by the end of this year and look forward to working in partnership with EPA as the agency completes this important program.