

**Testimony of  
S. William Becker  
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State and Territorial Air Pollution Program Administrators  
and the  
Association of Local Air Pollution Control Officials  
on the U.S. Environmental Protection Agency's  
October 29, 1999  
Notice of Proposed Rulemaking on the  
Control of Emissions from 2004 and Later Model Year  
Heavy-Duty Highway Engines and Vehicles and  
Revision of the Light-Duty Truck Definition  
  
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Philadelphia, Pennsylvania**

Good morning. My name is Bill Becker and I am the Executive Director of STAPPA – the State and Territorial Air Pollution Program Administrators – and ALAPCO – the Association of Local Air Pollution Control Officials – the two national associations of air quality officials in the 55 states and territories and more than 165 major metropolitan areas across the country. I am pleased to be here this morning to provide the associations' testimony on the U.S. Environmental Protection Agency's (EPA's) recent proposal on the control of emissions from 2004 and later model year onroad heavy-duty engines and vehicles and the revision of the light-duty truck definition, as published in the *Federal Register* on October 29, 1999 (64 FR 58471).

The regulation of heavy-duty engines and fuels is a critical issue for state and local air officials and I commend EPA for issuing a proposal that not only looks beyond the near-term, but also takes a comprehensive systems approach to controlling the onroad segment of this very significant source of air pollution.

As you are aware, for the past several years, STAPPA and ALAPCO have played an active role in the development of a systems approach for addressing emissions from cars and light trucks. We have been, and remain, vigorous advocates of strong programs for both federal Tier 2 motor vehicle standards and a national low-sulfur gasoline program because of a critical air quality need and the tremendous environmental benefits offered by these programs. We are equally committed to addressing heavy-duty engine emissions and diesel fuel quality with the same vigor.

While our forthcoming written comments will provide our perspectives on your complete proposal for onroad heavy-duty engines, including aspects related to the regulation of heavy-duty gasoline engines, today I would like to focus my comments on a few fundamental issues related to heavy-duty diesels and their fuel.

There is probably no more visible or offensive kind of air pollution than the thick, noxious, suffocating exhaust from big diesel trucks and buses. Moreover, the adverse health impacts of diesel pollution are dire, posing a serious threat to public health nationwide, and especially in urban areas. The hazardous mixture that comprises diesel exhaust contains hundreds of different chemical compounds. From a health perspective, three of the most significant pollutants in diesel exhaust are oxides of nitrogen (NO<sub>x</sub>), particulate matter and toxic compounds.

Mobile sources are responsible for almost one-half of all NO<sub>x</sub> emissions nationwide. EPA's own projections show that by 2010, NO<sub>x</sub> from mobile sources will near 8 million tons, with more than half of this – over 4 million tons – coming from diesel engines. Further, one-third of this diesel contribution to NO<sub>x</sub> is attributed to onroad heavy-duty diesels and two-thirds to offroad. These NO<sub>x</sub> emissions are primary precursors to the formation of ground-level ozone. With close to 100 million people nationwide living in areas that continue to violate the one-hour standard for ozone, aggressive steps to address emissions from heavy-duty diesel engines and their fuels are absolutely critical.

Mobile sources also generate primary emissions of particulate matter (PM), accounting for 20 percent of direct PM<sub>10</sub> emissions nationally. This is in addition to the secondarily formed particulate that occurs when NO<sub>x</sub> emitted into the atmosphere is transformed into dangerous fine particulate matter. EPA projects that by 2010 direct PM<sub>10</sub> emissions from mobile sources will exceed 600,000 tons, with diesel engines contributing nearly 70 percent. Of this diesel contribution to PM<sub>10</sub>, onroad heavy-duty diesels account for 9 percent and offroad heavy-duty diesels for 60 percent.

Particulate emissions pose a tremendous public health problem. The World Health Organization has concluded that, globally, particulate matter causes 460,000 premature deaths each year. The most hazardous particulate is that which is very small. It is these especially fine particles that are able to evade our respiratory defense mechanisms, lodge deep within our lungs and cause or contribute to a variety of health problems, including asthma, chronic bronchitis, pneumonia, heart disease and even premature death. Up to 95 percent of the fine particulate from diesels is smaller than one micron in diameter.

And, finally, there is the very serious health threat posed by the toxic emissions from diesels. Diesel exhaust contains over 40 chemicals that are listed by EPA and California as toxic air contaminants, known human carcinogens, probable human carcinogens, reproductive toxicants or endocrine disrupters. In 1998, California declared particulate emissions from diesel-fueled engines a toxic air contaminant, based on data that supported links between diesel exposure and human cancer.

There is also an array of other significant, adverse environmental impacts to which diesel emissions contribute, including regional haze, acid rain and global warming.

Based on the substantial contribution of heavy-duty diesel emissions to air pollution and very serious public health and environmental problems, we have no alternative *but* to impose greater controls on heavy-duty diesels and their fuels, and to do so in a truly meaningful way. Further, because many of these vehicles constantly travel back and forth across the country, their emissions are ubiquitous. For this reason, we must not only regulate these emissions, we must do so on a national basis.

STAPPA and ALAPCO applaud EPA for its proposal on Tier 2 vehicle standards and low-sulfur gasoline, which demonstrates tremendous leadership. The programs proposed by EPA and announced by President Clinton himself in May, and the timeframes on which they are based, are absolutely critical to state and local efforts to achieve and sustain clean, healthful air nationwide. We urge EPA to exercise similar leadership in comprehensively addressing heavy-duty engines and their fuels. The regulatory program we envision is a comprehensive one that takes a systems approach that includes three fundamental prongs: stringent emission standards, tight controls on sulfur in diesel fuel and rigorous and effective programs to ensure continued compliance with standards when the vehicles are in-use. STAPPA and ALAPCO are extremely pleased that EPA is pursuing such a three-pronged systems approach.

Let me first address emission standards. While we believe that more stringent emission standards for onroad heavy-duty diesels would have been appropriate in 2004, we understand that EPA instead plans to move forward with implementation of the standards as promulgated in 1997, with the intent of pursuing more stringent standards in a next phase of regulations, to take effect in 2007. Notwithstanding our disappointment in the timing, we commend the direction in which the agency appears to be moving regarding more stringent standards and strongly urge that at least three fundamental principles underlie EPA's efforts.

First, 2007 must be a firm date; substantially more stringent emission standards must be in place for all onroad heavy-duty diesels nationwide by *no later* than 2007.

Second, these more stringent emission standards must be based on the most advanced technologies possible.

And third, because compliance with more stringent future standards based on advanced technologies is dependent on the availability of low-sulfur diesel fuel, such fuel must be provided nationally far enough in advance to ensure successful implementation of the emission standards. Which brings me to the second prong of the comprehensive strategy – the control of diesel fuel quality.

Earlier this year, STAPPA and ALAPCO adopted recommendations for low-sulfur diesel fuel, to take effect early in the next decade. Our associations have called upon EPA to cap sulfur in diesel fuel at no higher than 30 ppm by 2004. In addition, we have recommended that, based on additional study, EPA further lower national standards for sulfur in diesel fuel and set appropriate standards for other characteristics affecting diesel fuel quality and/or emissions, to take effect in 2007. A copy of our resolution on sulfur in diesel fuel is attached to my written statement; I also refer you to STAPPA and ALAPCO's July 13, 1999 comprehensive written comments to EPA regarding the agency's May 13, 1999 Advance Notice of Proposed Rulemaking on the control of diesel fuel quality.

I would also like to draw your attention to the fact that STAPPA and ALAPCO's recommendations to lower sulfur in diesel fuel apply not only to onroad diesel fuel, but to offroad diesel fuel as well and, further, include a preliminary step to cap sulfur in offroad diesel fuel at 500 ppm as soon as possible prior to 2004, so that this fuel is subject to the same sulfur standards as currently apply to onroad diesel fuel, before sulfur levels for both onroad and offroad diesel are cut even further.

STAPPA and ALAPCO view the control of offroad diesels to be as critical as the control of onroad diesels. Further, we firmly believe that the technological advances that will occur in order to meet future, more stringent onroad heavy-duty diesel standards will carry over to offroad equipment, but only if the low-sulfur diesel fuel is available for this sector as well. We are extremely concerned, however, that EPA may not be proceeding as quickly or aggressively as necessary to develop offroad diesel engine and fuel programs that are commensurate with the enormous contribution offroad engines make to air pollution; more must be done.

To this end, STAPPA and ALAPCO urge EPA to integrate more closely its program development strategies for onroad and offroad diesel engines and fuels, so that we can more effectively reduce the huge air quality and public health problems posed by these sources.

Let me now turn to the third prong of the strategy – in-use compliance. It is absolutely essential that we ensure that heavy-duty engines operate in use the way they are expected to operate. STAPPA and ALAPCO remain very concerned with the loss of a significant level of anticipated and much-needed NO<sub>x</sub> emission reductions that has resulted from the Consent Decrees settling complaints against seven heavy-duty diesel engine manufacturers who equipped their engines with “defeat devices,” adversely affecting the engines’ NO<sub>x</sub> emission control systems in use. Our concern is only heightened by the fact that the agency has chosen to remove in-use testing and onboard diagnostics provisions from this proposal and, instead, based on industry’s objections to the scope of the proposal and the short time frame, merely include vague, noncommittal language to defer action to a subsequent rulemaking.

Both EPA and engine manufacturers have been aware for quite some time that significant in-use compliance problems exist and that these problems must be addressed in a timely manner. For engine manufacturers to argue that more time is now needed to address this issue is somewhat disingenuous. We strongly urge that, at a minimum, EPA explicitly commit in this rule not only to the implementation of a strong and effective in-use compliance program that will ensure against future transgressions, such as those that necessitated the recent Consent Decrees, but also to a firm starting date of no later than 2004.

Finally, before I conclude, I would like to say a word about EPA’s proposal regarding light-duty trucks weighing over 8,500 pounds. STAPPA and ALAPCO strongly support subjecting especially large passenger vans and sport utility vehicles (SUVs) weighing over 8,500 pounds to the Tier 2 motor vehicle emission standards proposed by the agency in May. Given the continuing growing trend toward use of heavier light-duty trucks for personal transportation, it is entirely appropriate to subject these vehicles to the same standards as apply to other passenger vans and SUVs. In fact, in our associations’ April 7, 1998 resolution on Tier 2, we urge EPA to consider applying the Tier 2 standards to those vehicles, such as SUVs, full-size vans and pickup trucks, weighing over 8,500 pounds GVWR used predominantly for personal transportation.

Once again, on behalf of STAPPA and ALAPCO, I commend the agency for crafting a comprehensive approach to addressing emissions from onroad heavy-duty diesel engines and fuels and thank you for this opportunity to provide the associations' preliminary perspectives on the recent proposed rulemaking that establishes the first steps in this multi-phase strategy. In the coming weeks, we will be more thoroughly analyzing the complete proposal and developing written comments on the many issues raised. We look forward to working closely with the agency as it continues its work on these extremely important programs.