REGIONAL AIR POLLUTION CONTROL AGENCY

Serving Clark, Darke, Greene, Miami, Montgomery & Preble Counties
117 South Main Street, Dayton, Ohio 45422-1280
(937) 225-4435 – Fax: (937) 225-3486
www.rapca.org

Testimony of
John Paul
Supervisor
Regional Air Pollution Control Agency, Dayton, Ohio
on
EPA's Proposed Revisions to the Particulate Matter NAAQS
before the
Clean Air, Climate Change and Nuclear Safety Subcommittee
of the Senate Environment and Public Works Committee

July 13, 2006

Good morning, Mr. Chairman and members of the Subcommittee. I am John Paul, Supervisor of the Regional Air Pollution Control Agency (RAPCA) in Dayton, Ohio and President of ALAPCO, the Association of Local Air Pollution Control Officials. While I appear here today on behalf of RAPCA, my testimony is endorsed by ALAPCO and its sister organization, STAPPA – the State and Territorial Air Pollution Program Administrators. These two national associations of clean air agencies in 54 states and territories and over 165 major metropolitan areas across the United States have primary responsibility under the Clean Air Act for implementing our nation's air pollution control laws and regulations and, even more importantly, for achieving and sustaining clean, healthful air throughout the country.

I commend you for convening this hearing on the U.S. Environmental Protection Agency's (EPA's) proposed revisions to the National Ambient Air Quality Standards (NAAQS)

for particulate matter, or PM. The PM NAAQS are critically important to state and local clean air agencies, which have an extensive record of comments to EPA on this issue. I, along with colleagues of mine from across the nation, provided testimony at all three of EPA's public hearings; we also offered comprehensive written comments.

Particulate matter is not only one of the most serious air pollution problems facing our nation, it is one of our country's most significant environmental problems. And the science bears this out.

In December 2005, over 100 doctors, scientists and public health professionals wrote to EPA Administrator Stephen Johnson citing the serious health effects of fine particulate matter, concluding:

> The major health effects of fine particulate matter include reduced lung function, cough, wheeze, missed school days due to respiratory symptoms, increased use of asthma medications, cardiac arrhythmias, strokes, emergency room visits, hospital admissions, lung cancer, and premature death – at levels well below the current national air quality standards.

Since the PM standard was last revised in 1997, there have been over 2,000 peer-reviewed scientific studies analyzing the health and welfare effects associated with this pollutant. The body of evidence, according to the scientists and health professionals, "validate[s] earlier epidemiological studies linking both acute and chronic fine particle pollution with serious morbidity and mortality…and identify[ies] health effects at lower exposure levels than previously reported" (December 2005 letter). In fact, EPA's own risk assessment estimates that

more than 4,700 people die prematurely each year in just nine U.S. cities at the current $PM_{2.5}$ levels.

The Clean Air Act defines the process EPA must follow in setting, or revising, the NAAQS. In Sections 108 and 109, the Administrator is required to set, and revise at five-year intervals, standards "the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health." The Administrator is also required to appoint an "independent scientific review committee" – the Clean Air Scientific Advisory Committee (CASAC) – that "shall recommend to the Administrator any new [NAAQS] and revisions of existing criteria and standards as may be appropriate."

There are existing NAAQS for two kinds of particulate matter: one for particles 10 micrometers and smaller (PM_{10}), set in 1987, and one for fine particles 2.5 micrometers and smaller ($PM_{2.5}$), established in 1997. In December 2005, EPA proposed revisions to the PM standards, including changing the fine particle standard and creating a new standard for inhalable coarse particles ($PM_{10-2.5}$), which are smaller than 10 micrometers in diameter, but larger than $PM_{2.5}$.

In its proposal, EPA recommends, among other things, 1) lowering the 24-hour fine particle standard from the current level of 65 micrograms per cubic meter ($\mu g/m^3$) to 35 $\mu g/m^3$, 2) retaining the level of the annual fine standard at 15$\mu g/m^3$ and 3) replacing the current PM_{10} standard with a new 24-hour $PM_{10-2.5}$ standard at 70 $\mu g/m^3$. In addition, EPA proposes

exempting from the coarse particle standard "any ambient mix of $PM_{10-2.5}$ where the majority of coarse particles are rural windblown dust and soils and PM generated by agricultural and mining sources."

We have carefully reviewed EPA's proposal to revise the PM NAAQS and are deeply troubled with several major aspects, including the levels of the $PM_{2.5}$ standard and the exemptions EPA proposes.

First, we are very concerned that EPA did not follow the recommendations of CASAC in setting the $PM_{2.5}$ annual standard. Rather than relying upon the consensus recommendation CASAC had proposed, EPA instead chose to retain the current annual standard. Perhaps not surprisingly, this prompted a significant reaction by CASAC, which sent EPA Administrator Stephen Johnson a letter (March 21, 2006) requesting that EPA reconsider its proposal and set the annual standard "within the range previously recommended" (13-14 $\mu g/m^3$) and clarifying why it was important to select a tighter level. CASAC stated:

> In summary, the epidemiological evidence, supported by emerging mechanistic understanding, indicates adverse effects of $PM_{2.5}$ at current average annual levels below 15 $\mu g/m^3$. The [CASAC] PM Panel realized the uncertainties involved in setting an appropriate health-protective level for the annual standard, but noted that the uncertainties would increase rapidly below the level of 13 $\mu g/m^3$. That is the basis for the PM Panel recommendation of a level at 13-14 $\mu g/m^3$. Therefore the CASAC requests reconsideration of the proposed ruling for the level of the annual $PM_{2.5}$ NAAQS so that the standard is set within the range previously recommended by the PM Panel, i.e., 13 to 14 $\mu g/m^3$.

Accordingly, we strongly urge that EPA follow CASAC's advice to tighten the annual $PM_{2.5}$ standard by selecting a level within the recommended range.

We are also disappointed with the level EPA set for the daily $PM_{2.5}$ standard. While we appreciate that EPA selected a level of the standard within the range recommended by CASAC, we note that the level – 35 $\mu g/m^3$ – was not only at the high end of the range, but was inconsistent with the EPA Staff Paper recommendation (June, 2005) that conditioned adoption of 35 $\mu g/m^3$ on tightening the annual standard.

With respect to the $PM_{10-2.5}$ standard, we strongly oppose EPA's exemptions for major sources contributing significantly to coarse PM emissions, especially agriculture, mining and other sources of crustal material. This appears to be an unprecedented action: to our knowledge EPA has never before set a NAAQS that allows major source categories to be altogether excluded from control requirements. CASAC is also concerned, commenting that its members "neither foresaw nor endorsed a standard that specifically exempts all agricultural and mining sources…."

We are very concerned that excluding these sources implies their emissions are not harmful, yet EPA does not provide any such evidence. It appears likely that pesticide-, herbicide- and toxic-laden coarse particles from agriculture, and metals-coated coarse particles from mining, respectively, pose risks similar to urban coarse PM that is dominated by resuspended dust from high density traffic and industrial sources. In addition, rural windblown dust (i.e., crustal material) may contain toxic elements. If any exemptions are warranted, they should be considered during the implementation phase – when costs and practicability issues are allowed to be considered – but not during the process of setting a health-based standard.

We are also very troubled that EPA is proposing to exempt major portions of the country – those with less than 100,000 people – from monitoring for coarse particles. This action has the

practical effect of ignoring the health and welfare of millions of people throughout the nation. We believe this is not only an unprecedented action, it totally ignores the recommendations of CASAC, which concluded "it is essential to have data collected on the wide range of both urban and rural areas in order to determine whether or not the proposed…standard should be modified at the time of future reviews" (March 21, 2006).

Finally, we believe, as CASAC suggests, that EPA should set a sub-daily standard for $PM_{2.5}$ to protect against visibility impairment. In its proposal, EPA relies on the primary daily standard for visibility protection, but this is not sufficient to help states and localities make reasonable progress toward their regional haze goals, as mandated under the Clean Air Act.

Once EPA sets the *new* PM standards, states and localities will begin their process of taking steps toward meeting the standards. This will involve, among other things, monitoring air quality, designating new "nonattainment" areas and developing State Implementation Plans (SIPs) that include all of the enforceable measures – federal, state and local – necessary to bring areas into attainment by the required deadlines. Areas will not be required to reach attainment of the new PM standards until 2015 for $PM_{2.5}$ and 2018 for $PM_{10-2.5}$, with the possibility of additional extensions for five or more years.

In the meantime, states and localities are *now* in the process of developing SIPs to meet the *existing* $PM_{2.5}$ standard, established in 1997. There are several actions Congress and EPA could take now, not only to assist state and local agencies in implementing the *existing* PM standard, but to also help make progress on our glide path toward achieving the *new* PM standards.

First, most areas of the country will need to rely heavily upon national or regional strategies to meet the existing $PM_{2.5}$ standard. These include strategies to regulate electric generating units, industrial boilers, cement kilns and the like. These industrial sectors offer the most significant and cost-effective opportunities for reducing $PM_{2.5}$ and its precursors. A national rule not only provides consistency and certainty for industry, but offers the added advantage of administrative expediency for state and local agencies, obviating the need for each state and/or locality to examine each sector and develop separate rules.

EPA took a good first step in publishing its Clean Air Interstate Rule (CAIR), designed as an interstate air pollution control strategy to regulate electric utilities in the eastern U.S. But, as we commented when that rule was proposed, the compliance deadlines are too long, the emissions caps are not sufficiently stringent and the rule only covers electric utilities, when other sources – such as industrial boilers and cement kilns – also warrant a national approach.

It is important to recognize that the development of SIPs requires a "zero sum" calculation. To the extent that a federal rule falls far short of what an industrial sector can achieve in a cost-effective and/or timely manner, those lost opportunities will have to be made up by some other sector of the economy, generally a small business or other regulated entity for which the costs are higher and regulation is less cost effective.

Perhaps it is best to illustrate this with an example. EPA estimated that the benefits of CAIR are between 30 and 35 times as great as the costs. For every dollar spent under CAIR to control emissions of $PM_{2.5}$ precursors, society gets between $30 and $35 in benefits. And these

EPA benefit estimates do not include important non-monetary benefits, such as reducing acid deposition and improving visibility in many national parks.

We believe that EPA not only missed a huge opportunity with respect to regulating electric utilities, but it also ignored Executive Order 12291, which states, among other things, that when publishing regulations, "agencies should set regulatory priorities with the aim of maximizing the aggregate net benefits to society…." Given these huge benefit-to-cost ratios in favor of reducing $PM_{2.5}$ precursor emissions, we urge that EPA require further reductions from the electric utility sector, as well as from other promising sectors for national regulation, starting with industrial boilers and cement kilns.

Second, EPA must issue its $PM_{2.5}$ implementation rule, which identifies the general measures and other important provisions that will be required for SIPs. EPA has promised this rule for at least three years and there is simply no excuse for further delay. Most states need a year or more to fulfill their own administrative requirements for adopting rules and regulations and have already begun preparing their SIPs. But this effort is hampered by the lack of guidance from EPA on what these SIPs must contain. Not only is this rule crucial for states in preparing their SIPs, it is also vitally important for explaining to those living in nonattainment areas what requirements will apply to their areas.

Third, Congress and EPA can help states and localities meet their federally mandated responsibilities under the Clean Air Act by ensuring that state and local agencies have adequate funding and other important regulatory tools. This is essential at a time when agencies are significantly expanding their responsibilities, including the development of $PM_{2.5}$ SIPs. Unfortunately, the Administration's Fiscal Year 2007 budget calls for cuts in grants to state and

local air agencies of $35.1 million, including reductions for state and local agency staff under Section 105 of the Clean Air Act and for monitors – including PM – under Section 103. Additionally, the President's budget calls for a different mechanism for PM monitoring grants, requiring state and local agencies to match those grant funds, which could be a burden for many agencies. While the House of Representatives voted recently to restore the full $35.1 million cut, the Senate Appropriations Committee has restored just $15 million. We strongly urge the full Senate to restore the remainder of the cuts.

We also believe that Congress and EPA should increase federal funding for training programs that will provide federal, state and local governmental officials with the skills they need to successfully fulfill their Clean Air Act implementation and enforcement responsibilities. Doing so will not only ensure the greatest return on our clean air investments, it is also required by Section 103 of the Clean Air Act. However, because EPA has continued to reduce its financial support for training in recent years, state and local air agencies are now bearing a disproportionate share of the cost, contributing $2.0 million per year versus less than $500,000 annually from EPA.

Finally, we applaud you, Chairman Voinovich, and your colleagues on the Senate Environment and Public Works Committee, for your leadership in seeking to clean up emissions from diesel engines, which contribute significantly to PM levels. We not only support the Diesel Emission Reduction program included in the Energy Policy Act passed by Congress last year, we also endorse the President's request for $50 million for this program in FY 2007.

In conclusion, we urge that EPA make significant changes to the PM National Ambient Air Quality Standards by tightening the annual $PM_{2.5}$ standard, eliminating exemptions in the

$PM_{10-2.5}$ standard, requiring monitoring in both urban and rural areas, and taking important steps – regulatory and funding – to help states and localities comply with the existing and new PM standards.

Thank you for the opportunity to testify. I would be happy to answer any of your questions.