

Clean Air Act Forum
State, Local and Federal Cooperation Under the Clean Air Act
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Participant Question Responses by
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1. In your agency's experience implementing the Clean Air Act, what is working well? What is not working well?

SEMCOG is the Lead Clean Air Agency for Greater Detroit. As such, we work very closely with the Michigan Department of Environmental Quality, local governments and the private sector to improve our region's air quality and meet federal standards. Our successes are particularly noteworthy in a region in which manufacturing is a substantial, and important part of our region's economy.

Our region has achieved numerous successes under the CAA. The most important is that the air in Southeast Michigan is cleaner. Specific successes include:

1. Attainment for the 75 ppb ozone standard.
2. Redesignation as attainment area under the 80 ppb ozone standard.
3. Monitored compliance since 2009 for fine particulate matter (PM_{2.5}) after having some of the highest levels in the country.
4. Attainment for carbon monoxide, lead and nitrous oxide standards.
5. Identifying and developing cost-effective strategies for attaining all these standards.
6. Implementation of the emissions inventory through data collection, and implementation of travel and EPA MOVES models.
7. Actively engaged the state, private sector and local government sectors in development of cost-effective State Implementation Plan control measures and evaluation of the effectiveness of those control measures.
8. Conducted a pilot program to reduce emissions from high polluting vehicles through remote sensing and public awareness.
9. Created and continues to implement a high visibility, high public response *Ozone Action* program.
 - In a recent survey, a high 90% of respondents were aware of the program.
 - Well over 2/3 of respondents, took action on high ozone days.

2. Do state and local governments have sufficient autonomy and flexibility to address local conditions and needs?

The reality here is mixed. In answer to the second part of question #1 and question #2, below are challenges we have faced, both regulatory and with the CAA itself:

1. Overall Air Quality Standards
We clearly support the intent of the CAA to improve our air quality. The importance of standards to us at the state and regional levels can't be overstated. They determine what regions of the country are in non-attainment. They lead to

what controls will be imposed. They determine who will bear the burden of the control measures and who will pay for the control measures...the general public, the driving public, utilities, manufacturers and others. They determine what regions will be impacted by offsets. And, ultimately, they present opportunities for or barriers against growth, especially in our older, manufacturing-oriented metropolitan regions. Those metropolitan areas in which we want to encourage revitalization – such as ours – can be the most disadvantaged by the imposition of certain control measures and offset requirements.

2. Continual Setting of Standards With Little Regard for Cost/Benefit

The CAA calls for setting standards every five years. While this may have made sense in the 1970s, it poses serious challenges today. First and foremost is the assumption that the science used in setting standards is definitive. By its very nature, different research on the same subject matter often leads to differing conclusions. Yet, the law presumes there is a bright line impact threshold that emerges from the research. The reality is, and will always be, that policy judgment is involved in the setting of standards. Unfortunately, the current process precludes considering the ratio of cost to benefit in setting air quality standards. The imposition of more stringent standards must be more risk-based and closely related to likely public health improvement considering costs.

For example, EPA's own Regulatory Impact Analysis of the recently recommended (and subsequently dropped) more stringent ozone standard found that the costs of implementing this standard could exceed the benefits achieved. Why would this be good public policy? In this time of inadequate resources for federal, state and local governments as well as a sputtering private sector economy, we must be more concerned than ever about the return on investment of resources.

Finally, related to continual setting of standards, the five-year setting of standards has two other implications. First, it does not allow us to evaluate the improvements to our air from one standard before another is imposed. And second, it creates continual uncertainty for both the public and private sectors on the amount of resources that must be committed to air pollution prevention. This uncertainty has adverse impacts on the business climate in our region which is subject to expensive controls at the places where vehicles are manufactured as well as on the emissions from those vehicles no matter where they are sold and used.

3. Overreliance on Modeling

We are concerned over the heavy reliance on modeling to meet ozone, fine particulate and sulfur dioxide standards. While a useful tool, there are inherent uncertainties in all modeling that must be taken into consideration when interpreting results. The emissions inputs to these models are based on limited available data and the results also vary greatly depending on the meteorological

conditions that are assumed in the modeling runs. Therefore, we must be very judicious in how we interpret and use the data that results from these analyses.

We have concrete examples of modeling results running counter to what actual monitoring data reveals...modeling results that would have us imposing control measures far in excess of what we know would comply with standards. Early ozone modeling would have had us imposing pollutant reductions of 30% to 40%; those might not have placed us in attainment if we were to rely solely on the modeling results. The proposed guidance on sulfur dioxide would require compliance based on modeling when our monitoring network demonstrates compliance across the network. The proposal required model use of inventories based on permitted maximum allowable emissions rather than actual monitored emissions. This resulted in grossly overestimated emissions. Areas with a significant number of sulfur dioxide sources would have great difficulty predicting attainment regardless of the local monitoring data using this methodology.

4. Data to More Strategically Determine Control Measures

As suggested in the point above, we need to rely more heavily on the “weight of evidence” of the data. We have several examples of actual data strategically identifying control measures that are more relevant and cost effective than modeling alone would have suggested.

For example, relative to ozone, inventory data revealed that a single facility had emission levels three-to-four times greater than the next highest emitters. Thus, we chose to focus improvements at that source, plus reductions derived from cleaner standards on newer automobiles. That led to our region’s ozone attainment.

Another example relates to fine particulates. Despite our objections, our entire region was declared non-attainment for fine particulates. This, despite an examination of the data demonstrated that fine particulate pollution was isolated in a relatively small area of Southwest Detroit and Dearborn, not the entire region. After an extensive analysis by our staff in cooperation with the regulatory agency in Michigan and the private sector, it was determined that some targeted emission reductions at a few sources would solve the problem. And it did, as reflected in our monitoring compliance since 2009.

Furthermore, we conducted a pilot auto tailpipe remote sensing study. We found a majority of the vehicles in our fleet are newer, reasonably maintained and low emitters. Requiring vehicle inspection and maintenance for them would not be cost effective. Yet, the current CAA automatically requires such a program in certain areas. The persistent, recording-setting temperatures of 2012 will result in unusually high levels of ozone throughout our country, triggering these automatic requirements for obsolete programs.

5. Timeframes for Compliance

Over the last 20-plus years since the timeframes and control measures were enacted, virtually all of the largest and most cost-effective control measures have been put in place. Additional measures will take longer to implement and be much more costly. This should be recognized as new standards are proposed and any penalties for non-compliance are enacted.

Also relating to timeframes, we should be able to look at monitoring over time and recognize unusual circumstances. The record-breaking heat and drought this summer has led to ozone exceedances on numerous days. This is despite repeated summers of meeting standards. EPA should be able to take such circumstances into account in determining attainment.

3. Does the current system balance federal, state and tribal roles to provide timely, accurate permitting for business activities, balancing environmental protection and economic growth?

We, in cooperation with the Michigan Department of Environmental Quality and the private sector, make it work with much success. Probably the biggest concern, as noted above, is the potential for continually changing standards. If we know the targets, we can work to cost effectively reach them. The uncertainty of being faced with new standards every five years is of concern to both the public and private sectors.

4. Does the CAA support a reasonable and effective mechanism for federal, state, tribal and local cooperation through State Implementation Plans? How could the mechanism be improved?

We have been quite successful in partnering to create responsible SIP recommendations that have led this region to attainment. The regional office of EPA appears to be able to take into account the monitoring data that lead to appropriate control measures.

5. Are cross-state air pollution issues coordinated well under the existing framework?

As noted, we are confident we are performing well in addressing our air quality issues. We continue to be concerned that Eastern states often call for more stringent control measures from our region as a first step, rather than after implementing their own controls first. The motivation appears to be lessening the measures they may be required to impose on themselves. We find this inconsistent with the CAA.

6. Are there other issues, ideas or concerns relating to the role of federalism under the CAA that you would like to discuss?

We have done our best within the context of the CAA, and our air quality is better for it. Many of the concerns we noted above can be addressed in the regulatory process. Yes, there are troublesome prescriptive requirements in the CAA. EPA has demonstrated in the past, however, that it has some latitude to allow us to do what makes sense for attainment on a variety of pollutants in Southeast Michigan. That latitude should be encouraged.

