Clean Air Act Forums: State, Local, and Federal Cooperation Under the Clean Air Act

Hosted by House Subcommittee on Energy and Power Hon. Ed Whitfield, Chair

Forum 2 of 2 - Thurs., Aug. 2, 2012

Advance Statement of:

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I thank the Subcommittee Members for this opportunity to respond to the written preforum questions, as a representative from greater metropolitan Los Angeles - - a region described geographically as California's South Coast Air Basin. I have served as Executive Officer of the South Coast Air Quality Management District (South Coast AQMD) for the past 15 years.

The South Coast AQMD is the air pollution control agency for the urban portions of Los Angeles, Riverside, and San Bernardino Counties and all of Orange County. This is an area of over 10,000 square miles, home to more than 16 million residents and represented by over 20 Congressional districts. South Coast does not meet healthful air standards for ground-level ozone or fine particulates, and in fact suffers the worst air quality impacts in the country. Nonetheless, as the result of a sustained and comprehensive smog reduction program - - and despite a 400% increase in population - - today's ozone levels are just one-quarter of what they were five decades ago, and we are on track to attain the current PM2.5 standards within the next few years. Failure to meet clean air standards in our region means health impacts occur on a routine basis, including cardiovascular harm and even premature death, for many tens of thousands of residents annually. Because air pollution represents a serious public health problem, it is critical that USEPA remain charged with the duty to establish national ambient air quality standards that are based solely on the best available health science. The goal of the clean air program—the standards needed to protect public health—cannot be diluted by incorporating concerns about the cost or burdens of achieving those standards; these concerns can and must be addressed during the implementation phase. The suggestions we will provide in this testimony will help ensure a reasonable path forward that protects public health and our economy.

It is my privilege to offer the following responses to your written questions.

Question 1. In Implementing the Clean Air Act, what is and what is not working?

Overall, the Federal Clean Air Act ("Act") is one of the greatest environmental success stories in U.S. history. Many tens of thousands of premature deaths to American citizens have been prevented by reductions in air pollution in direct response to various Clean Air Act provisions. The economic benefits of Clean Air Act implementation have also outweighed the expense of pollution controls, a fact delineated in every major State Implementation Plan (SIP) amendment for the greater Los Angeles area for the last 20 years. The cleanup of our air has also occurred during a period of both population and economic growth that would have otherwise resulted in higher pollution levels. The ongoing advances in pollution control technology, due in large part to the Act, border on miraculous and underscore that American ingenuity and inventiveness is alive and well. In addition, the Act allows for some local tailoring of the pollution control program, such as Section 116, to avoid an unreasonable one-size-fits-all approach. Such provisions in the Act, combined with the current latitude granted USEPA in select program areas, have allowed for timely and relatively efficient implementation of many provisions across the nation without need for statutory change.

Nonetheless, there are some areas of the Act that may need fine-tuning because of changes to 'conditions on the ground' or recent and upcoming court decisions. These items need to be considered very carefully on a case-by-case basis, and evaluated in terms of whether USEPA has latitude to resolve any implementation difficulties under existing law or whether statutory change is required. The South Coast AQMD believes that protection of public health must remain the highest priority, but that Congress never intended to penalize a region on an ongoing basis for unanticipated consequences such as truly infeasible requirements or extreme and unfair penalties.

Examples of some items that may need further review by USEPA, and/or if unresolved by USEPA, then addressed during the next Congress, are as follows:

• Federal Sources

Of key interest to the South Coast air district, and many other regions, is the adequate control of pollution sources that are subject exclusively or principally to Federal regulatory authority (i.e., "federal sources"). Federal sources include ships, locomotives, and aircraft. Attainment planning is a "zero sum game" where if one pollution source category doesn't do its fair share of the clean-up, excessive burdens are placed on others. In many regions of the nation, some of the federal sources are slipping behind the levels of control being placed on sources subject to local control requirements. In addition, the USEPA needs to break with past tradition and accept an obligation to control federal sources proportionately to their contribution to the problem. In addition, the USEPA needs to make this commitment at the time of approving a region's state implementation plan, so that appropriate credit may be taken for the federal measures. Absent such a change in policy, onerous control of stationary sources will be required in order to have an approvable plan that demonstrates the

region will attain the standards. Even with a virtual shutdown of all stationary sources, attainment may well be impossible for a number of regions across the country. What has worked best is when the federal government controls those sources that travel across state boundaries (such as airplanes and interstate trucks) or are both significant and pervasive throughout the nation. For example, the New Source Performance Standards establish a uniform minimum standard of regulation to help ensure a level playing field from region to region.

• Section 182(d)(1)(A)

This section has recently been interpreted by the Ninth Circuit Federal Court of Appeals in a way that could make it impossible for states to comply. This section requires severe and extreme ozone nonattainment areas to include transportation control measures and transportation control strategies in their SIP that are sufficient to offset growth in emissions due to growth in vehicle miles traveled or vehicle trips. For twenty years, and in several SIP approvals, USEPA has interpreted this requirement to be satisfied if the total on-road motor vehicle emissions in an area are dropping each year; in short, there are no "increased" emissions to offset. Recently, the Ninth Circuit Court of Appeals rejected this interpretation and ordered USEPA to require the South Coast region to implement transportation control measures that will offset emissions growth due to additional vehicle trips and miles traveled. Traditional transportation control measures such as ridesharing, public transit, and high-occupancy vehicle lanes do not provide sufficient emission reductions to meet this test. Using the narrowest reading of the Clean Air Act, the California Air Resources Board estimated that in order to comply, the region would need to impose daily no-drive days on approximately one quarter of its population or the equivalent of the entire population of Orange county every day, or prohibiting all vehicles in the South Coast Air Basin from operating one day out of every five-day period (this includes truck traffic, including port deliveries). Similar requirements would need to be met in other severe and extreme ozone areas. We are hopeful that USEPA can interpret the term "transportation control strategies" within Section 182 in a way that would make it feasible for regions to comply. But if not, or if the courts reject such an interpretation, the section will require the impossible and must be changed.

• Section 185

This is a provision of the 1990 Amendments that does not reflect current conditions in some areas of the nation. Section 185 requires severe and extreme ozone nonattainment areas to impose a penalty on major stationary sources if the region does not attain the national ambient air quality standard on time. The penalty is a fee for each ton of emissions of VOC or NOx that is emitted that is more than 80% of what was emitted in the attainment year. The fee is set at \$5,000 per ton but has increased by the consumer price index (CPI) since 1990 - - so that it is now over \$8,500 per ton. The fee stays in effect until the region attains the standard. In the South Coast region, major

sources are already subject to the most stringent controls in the nation, and requirements for existing sources are continuously updated to reflect technology advances. In short, major sources have no choice but to cut their production by 20% on an ongoing basis or face in some circumstances an unaffordable fee increase. In extreme areas such as South Coast, major sources include sources emitting as little as 10 tons per year (compared to 100 tons per year in most of the nation), and so the fee affects numerous small business and public agencies such as sewage treatment plants. In our region, the fee is fundamentally unfair in that ALL stationary sources (not just major sources) represent only about 10% of our region's NOx emissions, with mobile sources contributing 90%, yet mobile sources are not penalized. Twenty years ago, Congress may have assumed that stationary sources would be a bigger percentage of the air pollution problem than they are; the provision is now outdated.

Ironically, case law has held that this "penalty-fee" provision must be enforced against stationary sources when a region fails to attain even a national ambient air quality standard that USEPA has revoked as not necessary to protect public health. USEPA has required the South Coast and San Joaquin Districts to adopt a penalty fee since neither region attained the revoked 1-hour ozone standard by the end of 2010, although only a few days of exceedances occurred. USEPA is willing to allow these areas to substitute an equivalent "not less stringent" program, such as one imposing fees on mobile sources, under CAA Section 172(e). USEPA has been sued once and lost on procedural grounds for issuing guidance to allow such alternative programs; plaintiffs are poised to sue again as soon as USEPA finalizes its approval of any alternative program shortly. If USEPA's allowance of equivalent programs is set aside by the courts, Congressional action will likely be needed.

Importantly, Section 172(e), under which USEPA may allow an alternative equivalent program, applies only when USEPA makes a standard less stringent (or, as here, revokes the standard). There is no such flexibility when a state fails to attain a currently-effective national ambient air quality standard. Thus action is needed to remove or make more equitable the Section 185 penalty fee provision well before the severe or extreme attainment deadlines of 2019 and 2024.

• Contingency Measures

The Clean Air Act requires all nonattainment area plans to include "contingency measures" as described in Section 172(b)(9). These measures must take effect if the region fails to attain on time or to make reasonable further progress and satisfy applicable milestones. The purpose of contingency measures is to ensure that the region continues to make progress after such a failure, while it revises its attainment plan to rectify the failure. Because contingency measures are designed to remedy unanticipated failures to make required progress, they must require emission reductions above-and-beyond what is needed to timely attain the standards. In the South Coast region, we need every feasible measure just to attain the standards. In the case of

ozone, we need to depend on the technology-advancement measures authorized by Section 182(e)(5) for extreme areas — which means we need measures that go beyond what is currently available. As a result, it is virtually impossible to develop contingency measures that go beyond what is required to attain the standards.

Indeed, the contingency measure provision creates an inherent conflict within the Clean Air Act, which also requires an agency to adopt every measure available to attain the standards as expeditiously as practicable [CAA §172(a)(2)(A)]. In short, if a measure is feasible, it must be in the basic attainment strategy. By definition, contingency measures are infeasible. Moreover, they are supposed to be adopted as rules before the SIP is submitted so that they can be implemented "without further action by the State or the Administrator" when triggered. This requirement potentially embroils the state in the need to adopt virtually infeasible rules even though they may never be needed. The contingency measure requirement no longer makes sense in some regions given the new scientific information requiring USEPA to tighten the standards to the point that there are simply no excess emission reduction measures available to serve as contingency measures.

• DERA

Under the Diesel Emissions Reduction Act created in 2005, USEPA has been able to provide funding to the South Coast region totaling over 26 million dollars over approximately four years to reduce diesel emissions from vehicles, engines, and equipment. That money, and allocations elsewhere in the nation, have been crucial in developing and demonstrating advanced technologies that will pave the way to making our transportation industry into an engine for cleaning the air. In the South Coast alone, DERA has paid for retrofitting 200 heavy-duty trucks with USEPA-verified diesel particulate filters (DPFs), replacing 46 diesel school buses and 476 heavy-duty diesel trucks with natural gas vehicles, replacing 54 older diesel delivery trucks with zeroemission medium-duty trucks, and replacing 25 older heavy-duty trucks with 2010 compliant models. DERA funds also helped demonstrate Johnson Matthey's combined DPF and selective catalytic reduction (SCR) system on 173 heavy-duty diesel trucks; a technological approach now in common use. DERA funds have also helped push technology in the area of marine vessels, funding a demonstration of a combined DPF and SCR De-NOx system on a tugboat; demonstrating an Advanced Marine Emission Control System to control emissions at the stack from ocean-going vessels; and installing shore power and retrofitting vessels with shore power connectivity. South Coast AQMD estimates these projects will annually reduce emissions by 20 tons of diesel particulate, 718 tons of NOx, 26 tons of hydrocarbons, 112 tons of CO, and 3 tons of SOx per year. More importantly, these investments will demonstrate that advanced clean technologies are realistic and practical, thus creating a market for technology developers and enabling fellow state and local agencies to rely on those technologies. It is very important to nonattainment areas across the country that programs such as DERA continue into the future at expanded levels.

• Section 103/105 Grants

Air pollution control agencies throughout the nation rely heavily on USEPA grants under Sections 103 and 105 of the Clean Air Act. These funds are critical to ensure the control program is based on the best available scientific information to ensure the most effective and efficient path toward attaining the national ambient air quality standards, and to minimize costs by enabling the agencies to determine where investments in controls will produce the largest return. Among the vital programs supported by these grants are the Photochemical Assessment Monitoring Stations (PAMS). This program monitors ozone precursors and meteorological parameters that provide the data for ozone modeling to help us evaluate which controls are most effective. Also, USEPA grants help support our lead monitoring program, which ensures that we attack the serious health risks that can be caused by lead emissions, especially for children. Other monitoring, air sampling, and lab analysis programs that are critical to sound scientific analysis are supported by USEPA grants.

Among other things, we also use USEPA grant funds to support our small business assistance program and technical assistance to businesses, air quality forecasting, notifying the public of air quality conditions, and the Public Information Center, which not only provides the public with information about air quality and the South Coast AQMD, but also provides suggestions to help them be part of the solution by taking simple actions to reduce air pollution and conserve energy. It is critical that Congress and the Administration continue these programs and enhance the federal support available as the standards are tightened and the task becomes more difficult. As each new SIP is developed, the agencies must use more technically sophisticated tools, including expanding air monitoring networks, such as has been required for the new NO2 standard and is proposed for the new PM2.5 standard. Federal grant funding needs to keep up with these new technical demands.

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

The Clean Air Act has allowed California and the South Coast region to implement a number of innovative programs tailored to our particular needs. For example, under USEPA's interpretation that the requirement for Reasonably Available Control Technology could be implemented on an aggregate basis, the South Coast adopted nearly 20 years ago the nation's first large "cap and trade" program for oxides of nitrogen (NOx) and sulfur oxide (SOx) emissions from stationary sources. By providing facilities flexibility to reduce their emissions in the way that is most cost-effective or best for them, or to trade allocations with other facilities that have reduced their emissions more than required, the program has enabled us to achieve all the reductions we projected for these two pollutants for this source category. And it has done so at lower cost than traditional command and control rules.

Another example is the South Coast district's internal offset accounts under New Source Review (NSR). Based on the interpretation that a region may satisfy offset requirements for new and modified sources in the aggregate, the USEPA has approved a system whereby the District collects so-called "orphan shutdown" emissions from sources that shut down or reduce emissions but do not obtain private market emission reductions credits. The District then uses these reductions to offset the emissions from major sources exempt from offsets under District rules but not under federal law. This includes essential public services, innovative technology, equipment modernization, and pollution control projects.

On the other hand in an area such as the South Coast district, where the vast majority of emissions are from mobile sources and the new and modified stationary sources are already subject to the most stringent and best control technologies, emission offsets have become very scarce and unaffordable. In this case the NSR program should allow for an alternative offset program such as use of mobile sources or mitigation programs to allow permitting and economic growth for stationary sources. Finally, Section 116 of the Act allows state and local governments to go beyond federal requirements in most cases to address their own local needs. It is crucial to maintain this ability.

Question 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?

For the most part, yes. The South Coast AQMD processes about 10,000 permits each year. Federal Title V permits implemented at the state and local level are subject to USEPA review. The South Coast District has implemented an "integrated" Title V program, under which facilities may not commence construction until they have their Title V permit, or any needed revision to their permit. USEPA has been timely in providing comments and approvals of our Title V permits. We have our own Permit Streamlining Task Force that continuously implements suggestions and ideas to further improve our own processes. A member of our staff also co-chairs USEPA's Clean Air Act Advisory Committee's working group on streamlining GHG permits, which is developing useful approaches such as how to develop general permits, or permits by rule.

There is one area in which the federal government could improve the timeliness of permitting. Under the Prevention of Significant Deterioration (PSD) program, where USEPA issues a permit or a state issues a permit under a delegated program, a citizen or environmental group can appeal the permit to the Environmental Appeals Board (EAB). During this process, the permit is stayed and construction may not commence. EAB appeals may last up to two years. Such a significant delay may mean 'life or death' for many projects. USEPA should allow states that have expeditious permit appeal processes, such as the independent hearing board appeal under California State law, to substitute that process instead. Any changes to the USEPA review process

should be fair to both the project proponent and to the concerned citizens, while protecting the environment and being sensitive to environmental justice issues.

Question 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 believe federal, state, and local agencies in our region are making commendable efforts to develop SIPs through a cooperative and open process. However, the process could be improved by clarifying USEPA's authority and responsibility to assist states in attaining the standards through the regulation of "federal sources," i.e. sources under federal jurisdiction.

The 1990 Amendments created a promise that has remained unfulfilled. Those amendments largely preempted state and local agencies from establishing emission standards for nonroad engines such as locomotives, marine vessels, and farm and construction equipment. There was already a preemption for aircraft standards. In turn, the 1990 amendments gave certain responsibilities to USEPA to regulate these sources. We believe Congress expected that through this system, enough controls could be put in place to allow the entire country to attain the ambient air quality standards. This is not the case. Without an additional 65% reduction in NOx from all sources beyond the rules that would otherwise be in effect at the South Coast ozone attainment date of 2024, we will not attain the health-based 80 ppb ozone standard. And the problem simply gets worse as the standards get tightened. We need USEPA to regulate federal sources by an amount proportionate to their contribution.

The system could be improved by clarifying three points. (1) that USEPA has the authority to regulate existing as well as new nonroad sources; (2) that USEPA may require airlines, shippers, and railroads to route their cleanest equipment into the areas that need emission reductions the most; and finally, (3) that USEPA's regulations authorized under the Clean Air Act may regulate marine vessels flying foreign flags, including "flags of convenience" but doing substantial business with U.S. ports. As an example of the need for these clarifications, we note that USEPA has adopted Tier 4 emission standards for new locomotives which will be effective in 2015. But because locomotives have a very long useful life, the benefits of USEPA's rule may not be felt for years to come in the areas that need those emission reductions the most. Federal regulatory or incentive measures are needed to cause the railroads to route their cleanest locomotives to such areas. We also recommend that it be clarified that USEPA shares the responsibility to attain the standards for areas that legitimately cannot attain the standards without further control of federal sources. The current Clean Air Act places all the responsibility on the states, but then deprives them of the needed authority through preemption provisions. This is not a fair situation. If USEPA has the sole authority, it must also have the responsibility.

Some of these goals could potentially be achieved through federal incentive programs instead of regulation. Also, the federal government can play a key role in funding technology development. We see a great need to focus local, state and federal efforts on the transportation and freight movement systems, which contribute overwhelmingly to air pollution problems in many regions. We urge the federal government to foster innovative technologies and global markets for clean technology through incentives and investments in research and development as transportation planning continues.

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

This is a big issue for much of the country, but not in the South Coast region. However, we are very substantially impacted by goods movement sources coming into our state from elsewhere, whether it be international and/or interstate trucks, or sources such as locomotives, ships, and aircraft.

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

The Clean Air Act has worked very well as a model of cooperative federalism. Enormous progress has been made. It is imperative, based on recent health studies, that the nation not stray from the intended purpose of the Clean Air Act to protect public health for all communities and individuals. The federal government should also continue to implement the Act with sensitivity to the economy and with reasonable flexibility to address the different circumstances that exist between regions. In addition, we wish to emphasize the need for federal help in reducing emissions from sources subject to federal control, whether it be through incentives or regulation.

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