



November 20, 2012

The Honorable Ed Whitfield Chairman, Subcommittee on Energy and Power U.S. House of Representatives 2125 Rayburn House Office Building Washington, DC 20515-6115

RE: Response to Questions – Forum for State, Local, and Federal Cooperation in the Clean Air Act

Dear Representative Whitfield:

The San Joaquin Valley Air Pollution Control District (District) appreciates the opportunity to participate in the forum entitled "State, Local, and Federal Cooperation in the Clean Air Act" on November 29, 2012. Please find attached responses to the participant questions, as requested in your October 22, 2012 letter. We look forward to participating in this important forum, and providing our local perspective regarding issues and potential solutions associated with implementation of the Clean Air Act.

Please do not hesitate to contact me if you should have any questions by email at seyed.sadredin@valleyair.org, or by phone at 559-230-6000.

Sincerely

Seved Sadredin

Air Pollution Control Officer/Executive Officer

Attachment

Seyed Sadredin

Executive Director/Air Pollution Control Officer

Southern Region

34946 Flyover Court

Clean Air Act Forum (Part III) State, Local, and Federal Cooperation under the Clean Air Act November 29, 2012

Seyed Sadredin, Executive Director/Air Pollution Control Officer San Joaquin Valley Air Pollution Control District

1. In your agency's experience implementing the Clean Air Act (CAA), what is working well? What is not working well?

Since its adoption, the Clean Air Act has led to significant improvements in air quality and public health benefits throughout the nation. However, we have reached the point of diminishing returns in areas of the nation with mature local air quality management programs. After more than 20 years since the last amendments to the Clean Air Act in 1990, our experience shows that many well-intentioned provisions are leading to unintended adverse consequences. The antiquated provisions of the Clean Air Act are now leading to confusion, and lack of updated congressional directive has rendered courts as policy makers.

We support the well-intentioned concepts in the Clean Air Act that call for routine review of health-based air quality standards, clean air objectives that are technology-forcing, and clean-air deadlines that ensure expeditious clean-up and timely action. However, we have reached a point where failure to take administrative and legislative action to update the Clean Air Act will lead to the following:

- 1. Standards and deadlines that are impossible to meet
- 2. Costly litigation leading to delays and confusion
- 3. Enormous administrative costs to state and local governments without any corresponding benefit to air quality
- 4. Enormous red-tape costs to businesses and individuals without any corresponding benefit to air quality

The key issues on concern are highlighted as follows:

Upcoming Health Standards and the Associated Deadlines are Impossible to Meet: In the current wording of the Clean Air Act, the Congress is silent on whether or not economic feasibly or technological feasibility can be considered by the EPA when setting new Ambient Air Quality Standards. In absence of Congressional guidance in the Act, courts have barred EPA from considering economic or technological feasibility in setting new standards.

Those who support the current regiment argue that standards should be solely based on health considerations and that the economic and technological feasibility concerns can be addressed in the implementation phase. This ignores the fact that

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under the current construct of the Clean Air Act, new standards are automatically accompanied by prescribed attainment deadlines and timelines that are devoid of any economic and technological feasibility considerations. Standards set by EPA do not simply or solely identify acceptable health thresholds. In fact, they come with preset attainment and implementation milestones, and failure to meet these milestones are punishable by severe sanctions.

Many areas in the nation, such as the San Joaquin Valley, have already implemented very costly and stringent clean air measures that have exhausted the limits of available or foreseeable control technologies. Despite major progress, EPA is on the verge of setting new standards that approach background concentrations for ozone and particulates. For instance, meeting the new 8-hour ozone standard being considered by EPA will require a total ban on fossil fuel combustion or full utilization of combustion technologies that can result in zero emissions from fossil fuel by 2032.

We recommend the Act be amended to allow for consideration of the following critical factors in establishing attainment deadlines and implementation milestones for new standards:

- 1. Natural environment (climate, geography, topography)
- 2. Magnitude of the needed emission reductions
- 3. Availability of technology (maturity of existing control program, time needed to develop new technologies)
- 4. Economic feasibility
- 5. Pollution transport from other regions and countries

The Act should allow region-specific deadlines that can take into account the above considerations subject to review and approval by EPA.

Transition between standards is chaotic: CAA section 109(d)(2)(B) requires EPA to review criteria pollutant standards every five years. Once a National Ambient Air Quality Standard is set, EPA must designate areas as in attainment, nonattainment or unclassifiable. State implementation plans (SIPs) are due three years after the designation. Once an area submits its SIP, EPA is required to approve, disapprove or partially approve/disapprove the SIP within 18 months. The approved SIP could have attainment deadlines that are 10 to 20 years away. The current regiment leads to a great deal of redundancy, overlap, and confusion. For instance, currently in the San Joaquin Valley, we have five SIPs in effect for ozone and particulates (including one for the 1-hour ozone standard that was revoked by EPA in 2005), with overlapping strategies that often target the same pollutants.. In early 2013, a new SIP addressing the latest EPA standard for PM2.5 will be adopted, which will result in 6 SIPs being in effect at the same time, and increased overlap and complexity.

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Each plan carries separate and redundant timelines and mandates for the affected parties.

We recommend a two-fold solution. First we recommend that the timeline for standard review be extended. The current timeframe for EPA's approval of a SIP for an older standard occurs at approximately the same time that EPA is finalizing a new standard. Furthermore, the current timeframe does not provide adequate time to fully review all available health research, engage in a dialogue with the scientific community, and allow for public and stakeholder review and commenting. Second, we suggest that the Act be amended to provide for an orderly transition to the new standards. This can be done by allowing new standards and the associated mandates to subsume those associated with the old standard without any backsliding.

Requiring contingency measures in extreme nonattainment areas is irrational and unnecessary: The Clean Air Act requires all attainment plans to include contingency measures, defined as extra control measures that go into effect without further regulatory action if planned emissions controls fail to reach the goals or targets specified in the attainment plan. While requiring backup measures was a well-intentioned provision, it does not make sense in areas that have been classified as "extreme" non-attainment for ozone. These areas, by definition, have already implemented all available and foreseeable measures and still a "black box" of future measures to define and employ. The term "black box" refers to reductions that are needed to attain the standard, but technology to achieve such reductions does not yet exist. No measures are held in reserve in areas that are classified as "extreme" non-attainment for ozone. With no stones left unturned in such plans, requiring contingency measures in such areas makes no sense.

We recommend that the Act be amended to waive the requirement for contingency measures in areas classified as "extreme" non-attainment by EPA.

Section 185 of the Clean Air Act is unfair and ineffective: Section 185 of the Clean Air Act mandates that "Severe" and "Extreme" ozone nonattainment areas adopt a program requiring major NOx and VOC stationary sources of air pollution to pay nonattainment fees in the event the area fails to reach attainment by the required attainment date. Affected businesses would be required to pay these fees on an annual basis until the area reaches attainment.

When Section 185 was first enacted by the United States Congress, it was intended to serve as a hammer compelling stationary sources to install additional controls to reduce emissions and expedite attainment. Given today's circumstances, however, these fees, if applied to stationary sources, will not have the intended impact in San Joaquin Valley. Most stationary sources in the San Joaquin Valley are already equipped with Best Available Retrofit Control

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Technology (BARCT) or Best Available Control Technology (BACT). In reality, with the mature control programs that are in place in the San Joaquin Valley, most businesses have already made significant investments and installed the most advanced controls available for their facilities. Please refer to the District's recent 2010 Ozone Mid-Course Review for a detailed assessment of various stationary source regulations that Valley businesses must comply with. Under these circumstances, Section 185 has become a punitive fee with no real ability by most facilities to reduce their emissions. The only options available to Valley businesses to reduce or avoid the fees would be to curtail production or go out of business. Given the Valley's chronic high unemployment rates combined with the current global and regional economic distress, the consequences can be devastating.

We commend EPA for devising and approving alternative means of complying with Section 185 requirements through the use of revenue from other sources. This approach, however, has been legally challenged by some groups arguing lack of authority by the EPA. To remove legal uncertainty surrounding this matter, we recommend that the Act be amended to repeal Section 185 penalties for businesses that have already employed Best Available Control technology, or amend the Act to codify the alternative compliance means approved by EPA.

The Clean Air Act requirements for severe and extreme ozone nonattainment areas to address vehicle-related emissions growth must be clarified: CAA section 182(d)(1)(A) requires such areas to develop enforceable transportation control measures (TCMs) and transportation strategies "to offset any growth in emissions from growth in vehicle miles traveled ... and to attain reduction in motor vehicle emissions as necessary." An area's vehicle miles traveled (VMT) may increase due to increases in population (i.e., more drivers), people driving further (i.e., sprawl), or increases in pass-through traffic (i.e., goods movement).

Historically, EPA's section 182(d)(1)(A) approach has allowed the use of vehicle turnover, tailpipe control standards, and the use of alternative fuels to offset the expected increase in VMT. This has allowed for the actual emissions reductions occurring from motor vehicles to be considered in meeting the applicable requirements. A recent Ninth Circuit court decision, however, has called EPA's current approach for demonstrating the offsetting of vehicle mile-related emissions growth into question, and has forced EPA to re-evaluate its approach. Any change in approach that would require regions to offset vehicle growth regardless of population growth, and without recognition of emission reduction measures such as vehicle turnover and tailpipe control standards, would have a significant impact on the many regions' ability to develop an approvable attainment strategy, and, under a strict interpretation, would actually render attainment impossible. Many TCMs and transportation strategies have already

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been implemented in nonattainment areas, and remaining opportunities are scarce and extremely expensive to implement, with relatively small amounts of emissions reductions available. A less inclusive section 182(d)(1)(A) approach would effectively penalize nonattainment areas for having population growth, and would not give credit to the significant emissions reductions being achieved from motor vehicles. To illustrate this issue, such an interpretation applied to the District's 1997 8-hour ozone standard attainment plan would require the elimination of 5.1 million vehicles, where the vehicle population of the Valley is projected to be 2.6 million vehicles in 2023.

EPA recently established new guidance to address this issue that provides a potential path for reasonably addressing this CAA requirement. However, the path provided under this guidance will undoubtedly be challenged in court as it is utilized by regions like the San Joaquin Valley in the coming years. To provide certainty moving forward, the CAA should be amended to clearly include the methodology for reasonably satisfying this requirement.

State and local air agencies are penalized for delays at the federal level: State and local air agencies are under strict timelines and deadlines under the Act. Failure to meet these deadlines often results in significant sanctions and penalties. EPA is also subject to deadlines for acting on regulations and plans submitted by state and local air agencies. However, aside from litigation, there are no remedies for state and local agencies when EPA fails to meet those deadlines. Often, there are legitimate reasons for delays by EPA when acting on plans and regulations. This is especially true in areas like the San Joaquin Valley with mature programs and complicated scientific and socioeconomic issues. Delays could also be related to staffing and resource constraints at the federal level. While we believe that some delays by EPA may be unavoidable, there needs to be an orderly process that provides adequate time for local and state air agencies to respond and redirect when needed. Surely, it is unfair to penalize state and local air agencies for failure to meet their obligations under the CAA due to delayed action by EPA. Under the Act, EPA has 18 months to act on rules and plans submitted by state and local air agencies. Even when there are legitimate reasons for delay in EPA action, there can be unintended detrimental effects for state and local agencies. For one, a delayed EPA SIP action results in a situation where other federal agencies do not have to meet "general conformity" requirements when undertaking projects, relieving these agencies of their duty to keep emissions in their jurisdictions at a de minimis level.

Delays in the EPA approval process can also create a disincentive for advancing air quality science, such as emissions models and inventories. This was well illustrated in the recent suit against EPA for taking action on the San Joaquin Valley's 1-hour ozone plan six years after it was submitted. EPA did not quickly act on the District's 2004 plan for the 1-hour ozone standard because the standard was revoked in 2005. Subsequently, federal court decisions reinstated many 1-hour ozone requirements.

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EPA then approved the 1-hour ozone plan in 2010, but due to the passage of time, the emissions models and inventories had been updated, leaving the assumptions on the District's plan stale at best. As a result, the court had no choice but to determine that EPA's failure to consider the more recent science before approving the 2004 plan was arbitrary. Of course, the burden of implementing any required plan changes will likely fall squarely on the District's shoulders. The net result of the situation, however unintended it may have been, is that local jurisdictions are penalized for proactively improving their air quality models and emissions inventories.

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

In the San Joaquin Valley, we enjoy an excellent working relationship with EPA. We commend EPA staff at the Regional office and the leadership at Headquarters for working cooperatively and intelligently to craft creative solutions while exercising rigorous and reasonable oversight. The Clean Air Act, however, contains certain structural deficiencies that hinder these efforts.

Under the Act, local air agencies are tasked to develop cost-effective measures to meet those standards that were set without considering the economic costs. Achieving that balance in areas such as San Joaquin Valley where businesses are already subject to the toughest air regulations in the nation is extremely difficult. As standards become increasingly difficult (and potentially infeasible) to meet, and given the existing prescriptive and unreasonable overlays of EPA guidance and policy, the ability to develop meaningful attainment plans has been significantly diminished. The existing federal framework for implementing attainment strategies often results in a "one size fits all" approach that results in redundant, duplicative, or otherwise less-effective strategies than potentially feasible under a more creative approach.

EPA currently limits the ability by local agencies to develop attainment plans that rely on new and enhanced future measures. Section 172(c)(6) requires nonattainment plans to include sufficient emission control measures, as well as schedules and timetables for compliance, to provide for attainment by the applicable attainment date. Currently, EPA requires that the vast majority of emissions reductions come from already-adopted control measures. More specifically, EPA has historically only approved SIPs that contain commitments for future measures that account for no more than 10% of the needed reductions. This 10% threshold is unnecessarily inflexible and is not grounded in any CAA Section, legislation, or implementation rule. More importantly, more reductions in emissions are needed in extreme nonattainment areas despite the fact that every conceivable measure has already been implemented. Prohibiting reliance on future control measures impedes air

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quality progress by severely restricting an area's ability to adopt a progressive attainment plan that phases in new and stronger measures over time.

This challenge is further exacerbated by the fact that the majority of remaining emissions in regions like the San Joaquin Valley come from mobile sources. For example, in the San Joaquin Valley, mobile sources contribute approximately 80% of the total NOx emissions, the significant precursor to both ozone and PM2.5 concentrations. Although local air agencies have been diligent in reducing emissions from sources within their control, they have limited jurisdiction over mobile sources. Meeting tough new standards will require that the federal government also do its fair share to reduce emissions from sources under its regulatory authority. This would result in air quality benefits nationwide since more and more areas are receiving a nonattainment designation as standards become more stringent. In addition to regulatory measures, the federal government should also assist by providing funding for incentive-based strategies to improve public health.

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

No, the current federal permitting system (Title V) adds significant cost and administrative burden to local agencies and affected businesses with no air quality benefit, and hinders timely permitting for businesses.

The 1990 amendments to the federal Clean Air Act added, among other things, Title V, which required major sources of air pollution to obtain federally enforceable operating permits. In some parts of the country where there was not a local permitting program, this was the first time that major sources of air pollution received operating permits. In such locations, Title V provided for the first time a mechanism that required facilities to operate in compliance with all applicable federal regulations.

However, in California, local air permitting agencies such as the San Joaquin Valley have required operating permits for decades. These permitting programs include enforceable permits to operate that specify all applicable requirements, require monitoring and testing, and are enforced by routine site inspections. Additionally, the District's permit program requires permits for minor sources of emissions, with emissions as low as two pounds per day, while Title V regulates only major sources.

Unfortunately, implementing a Title V permitting program adds significant, resource-intensive administrative duties for both Valley businesses and the District, but adds no substantive requirements to the District permitting program that would further protect air quality.

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

As stated earlier, while the 1990 CAA amendments have resulted in healthier air for many areas, their implementation over the last two decades has led to several unintended consequences that need to be reevaluated and addressed. This is especially true in areas like the San Joaquin Valley with mature air quality programs where multiple attainment plans have been adopted and implemented since the 1990 CAA amendments, and where the bulk of remaining emissions come from mobile sources outside of their control. Additionally, as EPA develops new tougher standards, the new standards and ambient air quality levels are encroaching on natural background levels, particularly in regions like the San Joaquin Valley with unmatched natural challenges. Under the existing CAA implementation framework, the responsibility of attaining federal standards falls squarely on the shoulders of local regions, as do any penalties that may result as the result of not meeting the standards. Overall, this creates a reality where local regions are responsible for meeting increasingly infeasible new standards without the authority to address the primary source of emissions (mobile sources), and with no mechanism for developing a coordinated approach that compels action at all levels, including at the federal level.

How could the mechanism be improved?

In addition to the recommendations made earlier in this document, we offer the following suggestions:

- CAA sanctions should not apply if failure to meet a standard is due to emissions from other regions or countries. For instance in San Joaquin Valley, studies show that approximately 15% of the ozone concentrations may be due to transport from Asia. This is partially due to rapid growth and large increase in coal combustion in China.
- CAA sanctions should not apply if failure to meet a standard is due to emissions from sources under the legal jurisdiction of the federal government.
- CAA should shift from imposing preset attainment deadlines to imposing
 aggressive but achievable goals. Air quality has improved significantly under
 the current structure of the CAA in many regions. However, some regions like
 the San Joaquin Valley and South Coast still have significant air quality
 challenges and have been unable to demonstrate attainment of current and
 upcoming standards even after implementing all of the economically and

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technologically feasible regulatory measures. In lieu of preset attainment deadlines, the Act should require adoption all reasonably available control technologies with ongoing review and assessment o add new measures as they become available.

• Do not set any limits for including future, more stringent measures in attainment plans. Attainment of upcoming standards is likely to require more emissions reductions than are already occurring under existing strategies, and it is likely to require transformative measures that need sufficient time to be planned and implemented. The 10% EPA threshold discussed earlier has no CAA or implementation rule basis. Instead, the focus should be on whether the state and local agencies are capable of fulfilling their commitments and whether those commitments are for a reasonable and appropriate timeframe. Alternatively, EPA should consider conditionally approving an attainment plan as already allowed under CAA Section 110 (k)(4), with final approval upon fulfillment of the control measure commitments. This conditional approval would prevent the application of sanctions associated with plan disapproval.

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

Unlike some of the other regions in the United States, the San Joaquin Valley isn't significantly impacted by air pollution from other states. The Clean Air Act does include provisions that attempt to address transport from other regions within California that may impact the District. The Act, however, does not include adequate provisions for accounting for emissions transported from other countries, which is an important issue for regions such as the San Joaquin Valley experiencing potentially significant emissions transport from China and other countries. These transported emissions could make up a sizable portion of the background ozone levels outside of the control of local agencies, and should be accounted for in the setting of new standards and implementation of attainment strategies. Ultimately, it is unfair for local regions to be held responsible and penalized for emissions that are outside of their control.

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

The new standards being considered by EPA encroach on background concentrations in the San Joaquin Valley, and will require significant reductions in emissions from the already lower levels that have been achieved through decades of implementing clean air strategies. In light of these difficult circumstances, it is imperative to craft innovative implementation strategies that enable regions with

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mature air quality programs to focus efforts on meeting new standards in the most expeditious fashion through deployment of scarce resources in a manner that provides the utmost benefit to public health. Towards that end, we recommend a more strategic approach in which public health serves as the key factor in prioritizing control measures, regulated pollutants, and sources of emissions. Utilizing a "Risk-Based" approach in lieu of the current "Mass-Based" in setting health-based standards provides for a more cost effective and health protective approach.

The current mass-based approach can essentially be characterized as a shotgun approach where all pollutants and their species are treated equally regardless of their public health impact. By contrast, a risk-based approach will be a more strategic approach that targets pollutants and species that have the greatest impact on improving public. Under the risk-based approach, the following scientific factors could take taken into account in establishing standards and associated clean air strategies:

- Particle size, surface area
- Chemistry and toxicity
- Effect on formation or reduction of secondary pollutants (e.g., NOx and VOC impact on ozone formation, ammonia and ammonium nitrates)

For example, the latest health research has shown that with regard to PM2.5, not all particles are the same, and that the multiple types of PM2.5 have a significantly varying severity of health effects. EPA has recognized this in its consideration of potential new PM2.5 standards, and, while not proposing a strategic approach that takes this science into account, has cited the potential of developing strategies in the future that utilize a more targeted approach than the existing "mass-based approach" that treats all PM2.5 the same.