

PRESIDENTIAL TRANSITION WHITE PAPER

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Since its adoption, the Clean Air Act has led to significant improvements in air quality and public health benefits throughout the nation. However, after more than 25 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.

In addressing challenges related to implementing mandates under the federal Clean Air Act through the United States Environmental Protection Agency (U.S. EPA), it is important to hear from regions throughout the nation that have worked over the last four decades to comply with these mandates.

Through decades of implementing effective air quality strategies, air pollution from San Joaquin Valley businesses has been reduced by over 80% through an investment of over \$40 billion. The pollution released by industrial facilities, agricultural operations, and cars and trucks are at historical lows for all pollutants. San Joaquin Valley residents' exposure to high smog levels has been reduced by over 90%. Unfortunately, after all this investment and sacrifice, we have reached a point where **we cannot attain the federal standards even if we eliminated all Valley businesses**, agricultural operations, or trucks traveling through the San Joaquin Valley.

Without administrative and legislative action at the federal level to bring about a commonsense approach that ensures effective and reasonable implementation of the federal clean air mandates, residents in the San Joaquin Valley and other regions in the near future face federal sanctions which will lead to economic devastation. The San Joaquin Valley Air Pollution Control District recommends the following actions which are designed to retain the core elements of the Clean Air Act that serve to protect public health while streamlining the administrative requirements and ensuring expeditious air quality improvement considering technological and economic feasibility:

- A. Eliminate duplicative requirements, confusion, and costly bureaucratic red tape by synchronizing progress milestones when a new standard is published by EPA.**
- B. In establishing deadlines and milestones, require control measures that lead to the most expeditious attainment while considering technological achievability and economic feasibility.**

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- C. Allow states 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 (e.g. greater weight for NOx reductions).**
- D. Eliminate the requirement for contingency measures in areas classified as “extreme” non-attainment.**
- E. Allow states to take credit for all transportation control measures and strategies and not punish areas that have implemented transportation control measures and strategies that have achieved early reductions in emissions.**
- F. Local regions should not be subjected to federal sanctions when their inability to attain federal standards is due to pollution sources outside their regulatory authority:**
 - 1. Direct EPA to work closely with local air quality agencies to develop incentive-based control measures that are federally approvable.**
 - 2. Provide federal funding for voluntary incentive-based control measures that expedite emissions reductions while investing in the national and local economy.**
 - 3. Adopt new national standards for on-road heavy-duty trucks and locomotives under federal jurisdiction.**
 - 4. Direct EPA to further streamline the process for considering Exceptional Events and to allow for reasonable inclusion of exceptional drought conditions as Exceptional Events.**
- G. Support adequate resources and policies to reduce the impact of wildfires and their attendant public health impact.**

Detailed Supporting Information

A. Eliminate duplicative requirements, confusion, and costly bureaucratic red tape by synchronizing progress milestones when a new standard is published by EPA.

Since the 1970's, EPA has established numerous ambient air quality standards for individual pollutants. We have now reached a point where various regions throughout the nation are subject to multiple iterations of standards for a single pollutant. For instance, there are currently 4 pending standards for ozone and 4 pending standards for PM2.5. Each of these standards requires a separate attainment plan which leads to multiple overlapping requirements and deadlines.

B. In establishing deadlines and milestones, require control measures that lead to the most expeditious attainment while considering technological achievability and economic feasibility.

Mobile and stationary sources of air pollution throughout the nation have now been subjected to multiple generations of technology forcing regulations that have achieved significant air quality benefits. Meeting the new standards that approach background concentrations calls for transformative measures that require time to develop and implement. These transformative measures require new technologies that in many cases are not yet commercially available or even conceived. The formula-based deadlines and milestones that were prescribed in the Clean Air Act 25 years ago now lead to mandates that are impossible to meet. For instance, Figures 1 and 2 below demonstrate the enormous reductions that are still needed to attain the new standard.

C. Allow states 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 (e.g. greater weight for NOx reductions).

Currently as it relates to the demonstration of Reasonable Further Progress or Rate of Progress, the EPA treats all precursors the same, regardless of their potency in harming public health or achieving attainment. Driven by a rapidly expanding body of scientific research, there is now a growing recognition within the scientific community that from an exposure perspective, the National Ambient Air Quality Standards metrics for progress are a necessary but increasingly insufficient measure of total public health risk associated with air pollutants. In particular, control strategies for sources of PM2.5 and ozone do not necessarily account for qualitative differences in the nature of their emissions. For PM2.5, toxicity has been shown to vary depending on particle size, chemical species, and surface area; and analyses conducted by the District and California Air Resources Board have repeatedly demonstrated that ammonia is not a significant precursor to exceedances of PM2.5 standards in the Valley. In the case of ozone, differences in the relative potency of ozone precursors, VOCs in particular, is not captured by a strict, mass-based approach to precursor controls.

D. Eliminate the requirement for contingency measures in areas classified as “extreme” non-attainment.

Requiring contingency measures in extreme nonattainment areas is irrational and unnecessary. In fact, it can lead to delayed cleanup if measures are set aside for later implementation as a contingency. Currently, EPA 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 need 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.

In fact, EPA recognized this issue in their proposed implementation rule for the 2008 ambient air quality standard for ozone, arguing that “If an Extreme area qualifies for the discretion authorized by section 182(e)(5), it could be argued that it is unreasonable to expect the state to provide for the contingency measures required by sections 172(c)(9) and 182(c)(9). Indeed, it is hard to know how an area whose attainment SIP can include measures that are not fully developed would be able to identify contingency measures that are more specific. And while the CAA does not limit these measures to “feasible” measures, we do not believe that such areas should be required to adopt unreasonable or draconian measures when all reasonable candidate contingency measures will already have been employed in the plan to meet the RACM and RFP requirements. In this case it could be argued that the section 182(e)(5) contingency measure provision is the only reasonable way to meet the section 172(c)(9) and 182(c)(9) contingency measure requirements.” Unfortunately, however, EPA abandoned this approach in their final rule.

Additionally, as specified in EPA’s implementation rules, EPA currently requires the equivalent of one year’s worth of Reasonable Further Progress (RFP) in order to approve an area’s contingency measure portion of the SIP. This is excessive and should be adjusted to account for areas such as the Valley that have very mature air pollution programs

E. Allow states to take credit for all transportation control measures and strategies and not punish areas that have implemented transportation control measures and strategies that have achieved early reductions in emissions.

The Clean Air Act requirements for severe and extreme ozone nonattainment areas to address vehicle-related emissions growth must be clarified. Section 182(d)(1)(A) requires such areas to develop enforceable transportation control measures (TCMs)

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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 reevaluate 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 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 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, while the vehicle population of the Valley is projected to be only 2.6 million vehicles in 2023.

EPA recently established new guidance to address this issue that provides a potential path for reasonably addressing this Clean Air Act 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.

- F. Local regions should not be subjected to federal sanctions when their inability to attain federal standards is due to pollution sources outside their regulatory authority:**
- 1. Direct EPA to work closely with local air quality agencies to develop incentive-based control measures that are federally approvable.**
 - 2. Provide federal funding for voluntary incentive-based control measures that expedite emissions reductions while investing in the national and local economy.**
 - 3. Adopt new national standards for on-road heavy-duty trucks and locomotives under federal jurisdiction.**

4. Direct EPA to further streamline the process for considering Exceptional Events and to allow for reasonable inclusion of exceptional drought conditions as Exceptional Events.

Over the next few years, the District must adopt a number of attainment plans to address the following standards:

- 1997 PM2.5 Standard (65 $\mu\text{g}/\text{m}^3$ 24-hr and 15 $\mu\text{g}/\text{m}^3$ annual)
- 2006 PM2.5 Standard (35 $\mu\text{g}/\text{m}^3$ 24-hr and 15 $\mu\text{g}/\text{m}^3$ annual)
- 2012 PM2.5 Standard (12 $\mu\text{g}/\text{m}^3$ annual)
- 2008 Ozone standard (75 ppb 8-hr)
- 2015 Ozone Standard (70 ppb 8-hr)

Despite achieving significant emissions reductions through decades of implementing the most stringent stationary and mobile source regulatory control programs in the nation, NO_x emissions (primary precursor for both ozone and PM_{2.5}) in the San Joaquin Valley must be reduced by an additional 90% in order to attain the latest federal ozone and PM_{2.5} standards that now encroach on natural background levels. This air quality challenge is unmatched by any other region in the nation.

The District has jurisdiction over stationary and area sources, which make up less than 15% of the total NO_x emissions inventory. Through a comprehensive regulatory program, the District has adopted over 600 rules and amendments that have reduced emissions of ozone and PM_{2.5} precursors by nearly 90% control from these stationary and area-wide emissions sources.

With over 85% of the Valley's remaining ozone and PM_{2.5} precursor emissions now coming from mobile sources under federal jurisdiction, the Valley cannot reach attainment even if all stationary sources were to be shut down (see Figure 1). While the District will leave no stone unturned in reviewing all existing stationary source categories and regulations for additional emission reduction opportunities, attaining the federal standards is not possible without significant reductions in emissions from mobile source categories.

Unlike attainment plans for federal ozone standards, attainment plans for PM_{2.5} standards are not able to rely on "black box" reductions from yet-to-be identified technologies and measures. Based on recent air quality modeling conducted by California Air Resource Board, precursor emissions in the San Joaquin Valley will need to be reduced by an additional 90% from current emissions to meet the latest PM_{2.5} standards. In order to develop a federally approvable attainment plan, this massive amount of emissions reductions must be achieved through clearly identified and legally enforceable control measures by 2019, much sooner than the 2031 attainment deadline for the federal 8-hour ozone standard of 75 ppb (see Figure 2).

Figure 1 – San Joaquin Valley NOx Emissions and Federal Air Quality Standards

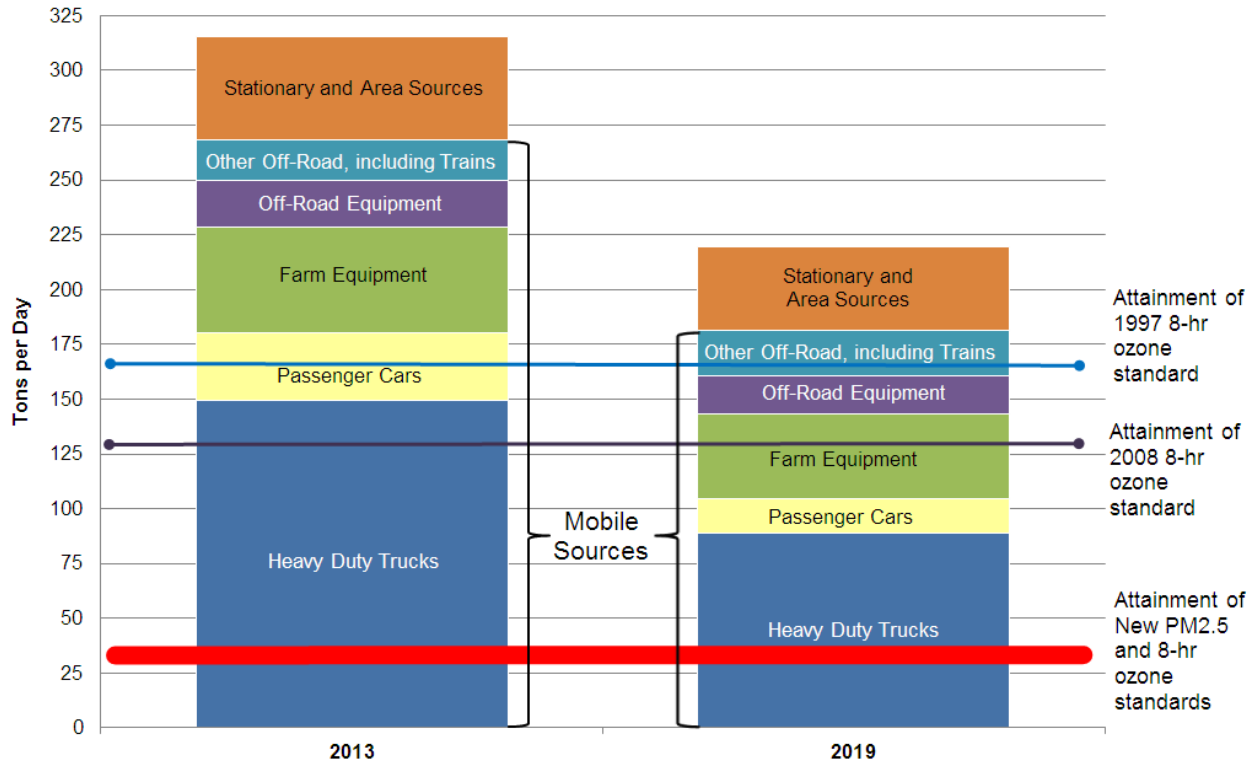
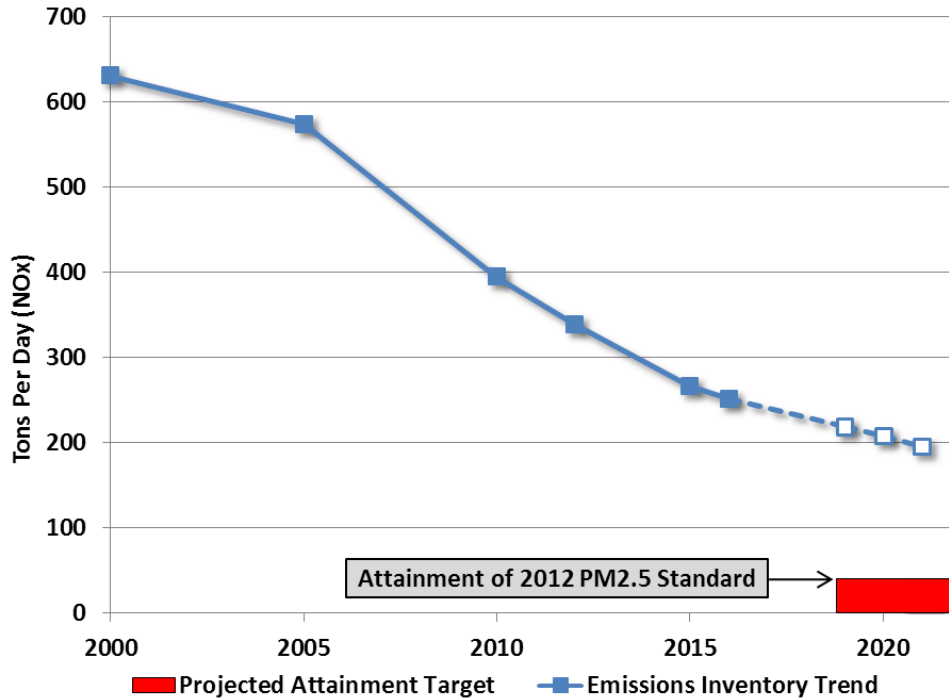


Figure 2 – San Joaquin Valley NOx Emissions Inventory and Targets for Attainment of Federal Air Quality Standards



While the bulk of the Valley’s remaining emissions come from mobile sources outside of the District’s regulatory authority, under the federal Clean Air Act, the responsibility to bring the region into attainment with the federal standards rests with the local air district, and the region will be subject to sanctions that would be devastating to the Valley’s economy if mobile sources under federal regulatory authority are not adequately controlled. These federal sanctions include:

- De facto ban on new and expanding businesses (2:1 offset requirement)
- Loss of federal highway funds (\$2.5 billion and numerous jobs lost in the San Joaquin Valley)
- Federal takeover and loss of local control
- Expensive federal nonattainment penalties

Given the enormity of the reductions needed for attainment, mobile sources, particularly in the goods movement sector, must transition to near-zero emission levels through the implementation of transformative measures. The District does not have the authority to implement regulations requiring ultra-low tailpipe emissions standards on mobile sources. New state and federal regulations coupled with a robust incentive-based emission reduction strategy are necessary to have any chance to achieve the enormous reductions that are necessary to attain the federal standards.

In addition to the above-described need for incentive-based emission reduction strategies, much-needed reforms are needed to the process under which EPA determines “exceptional events” under the Clean Air Act by requiring those determinations to be based upon established criteria and evidence, allowing for judicial appeals of decisions, and instituting timelines to provide regulatory certainty for states. Furthermore, under current EPA policy the extreme drought conditions experienced in 2013 and 2014 in the San Joaquin Valley and other regions in California are not eligible to be declared “exceptional events” since stagnation and lack of precipitation are not considered eligible events and we recommend that EPA allow for reasonable inclusion of exceptional drought conditions as Exceptional Events.

G. Support adequate resources and policies to reduce the impact of wildfires and their attendant public health impact.

Wildfires result in significant loss of life and property. Air pollution generated from wildfires is enormous and well exceeds the total industrial and mobile source emissions in the San Joaquin Valley. These emissions result in significant adverse public health impacts in the San Joaquin Valley and in many regions throughout California. In the summer of 2008, California experienced a record number of wildfires, and the resulting emissions caused serious public health impacts and unprecedented levels of PM2.5 and ozone in the San Joaquin Valley and other regions throughout the state. Historically clean rural areas throughout the state and in the San Joaquin Valley experienced their worst air quality in decades, and pollutant levels and the number of daily exceedances of the health-based standards were significantly higher than ever before in recorded history. California experienced record setting drought conditions during the past four years. Due to these conditions, there is a tremendous amount of dead trees and materials that dramatically increase the risk of catastrophic wildfire.

Given the devastating public health impact that the Valley suffers from wildfires, the District recommends the support of measures that can help reduce the intensity and frequency of wildfires including those that promote effective and expanded use of prescribed burns and mechanical treatment to reduce fuel build-up, including the following:

1. Additional financial and staffing resources for public and private land managers to conduct prescribed burning as an effective means for reducing fuel supplies that lead to large and uncontrollable wildfires.
2. When wildfires occur, fighting wildfires should be funded as other natural disasters are funded. Funding should not be diverted from forest management and fuel reduction activities to fight wildfires.

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3. Lessening or removal of contradictory environmental protection policies that prohibit the use of mechanized methods, or prescribed burning to reduce fuels when those are the only feasible methods available.
4. Changes in the federal policies that better incorporate air quality concerns by shifting focus to prescribed burning and employing fire management techniques that reduce air quality impact when wildfires occur.