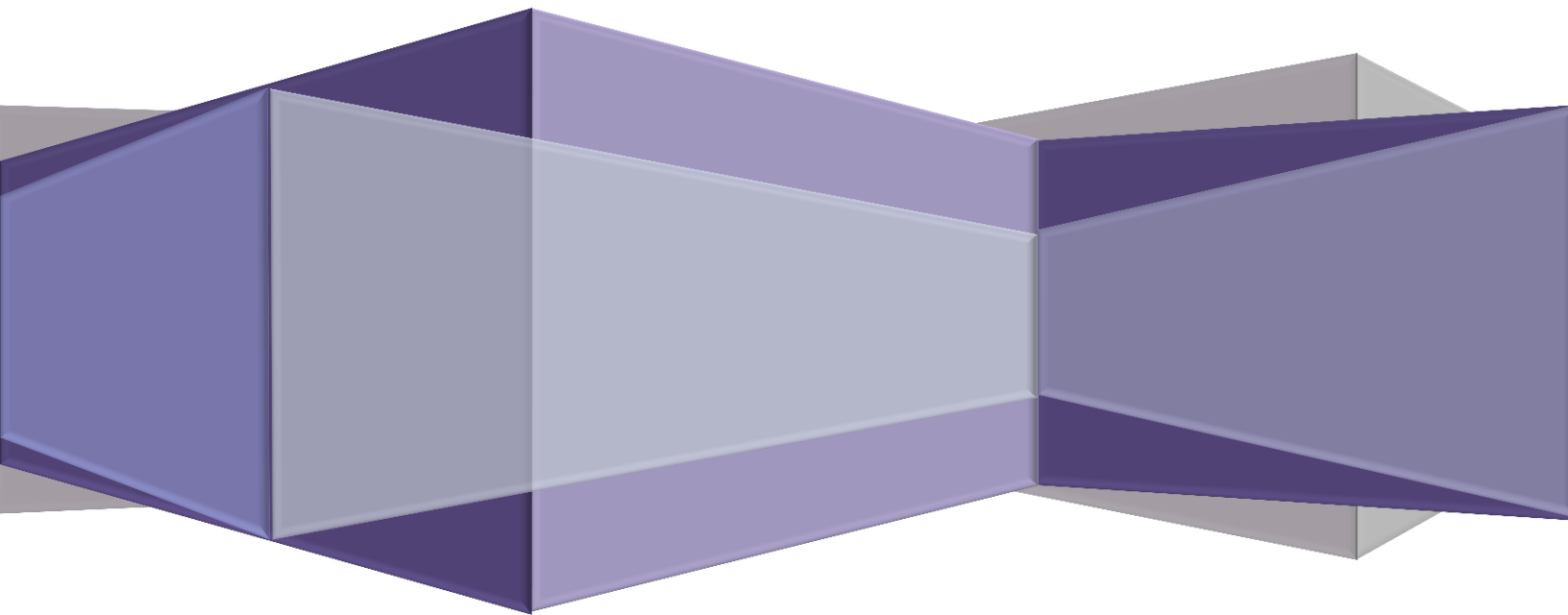


Executive Summary

2016 Moderate Area Plan for the 2012 PM2.5 Standard



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Executive Summary

This *2016 Moderate Area Plan for the 2012 PM_{2.5} Standard (2016 PM_{2.5} Plan)* addresses the federal mandates for areas classified as “Moderate” nonattainment for the 2012 PM_{2.5} federal annual air quality standard of 12 µg/m³. This is the latest PM_{2.5} standard for which the Valley is classified as a Moderate nonattainment. On July 29, 2016, two months before the plan for the 2012 PM_{2.5} standard is due and decades after promulgation of the 1997 and 2006 PM_{2.5} Standards, EPA released the PM_{2.5} Implementation Rule that outlines the applicable requirements for preparation and submittal of the required PM_{2.5} attainment plans.

Consistent with the Guiding Principles adopted by the District Governing Board on August 18, 2016 and the provisions of the PM_{2.5} Implementation Rule, the *2016 PM_{2.5} Plan*:

- Satisfies the mandate to submit a Moderate attainment plan due to EPA by October 2016
- Demonstrates impracticability of attaining the 2012 PM_{2.5} standard by the Moderate nonattainment area deadline of 2021
- Includes a request to reclassify the Valley to a Serious nonattainment area for the 2012 PM_{2.5} standard
- Satisfies all applicable federal Clean Air Act requirements for Moderate nonattainment areas
- Demonstrates that emissions are continuing to be reduced in the Valley

In addition to the many attainment plans that the District has already developed and implemented, the District is mandated under the Clean Air Act to develop and adopt a number of new ozone and particulate matter plans in the coming years. With respect to PM_{2.5}, the Valley has now reached a point where it is subject to three federal PM_{2.5} standards with multiple attainment plans required for each standard, leading to multiple overlapping requirements and deadlines as summarized below.

1997 PM_{2.5} Standard (24-hour 65 µg/m³ and annual 15 µg/m³)

- Serious Attainment Deadline: December 31, 2015
- 5% Plan due December 31, 2016

2006 24-hour PM_{2.5} Standard (35 µg/m³)

- Serious Attainment Deadline: December 31, 2019
- Serious attainment plan due August 2017: Attainment demonstration requires a clean data finding for the consecutive three-year period of 2017 through 2019. This means that the 35 µg/m³ standard needs to be reached by 2017 or much lower concentrations must be achieved in 2018 or 2019. Given that the State’s truck and bus regulation will not be fully implemented until after 2023 and that EPA imposition of a national standard for trucks and locomotives, even if contemplated by EPA, cannot be implemented in that timeframe, it is impossible to craft an approvable attainment plan. The Clean Air Act provides a mechanism

for seeking an extension of up to five years. However, EPA's recent inaction on the extension request for the 1997 PM_{2.5} standard sets a hurdle that is not achievable for seeking an extension. Furthermore, attaining the standard by 2024 is highly unlikely even if EPA grants a five-year extension.

2012 Annual PM_{2.5} Standard (12 µg/m³)

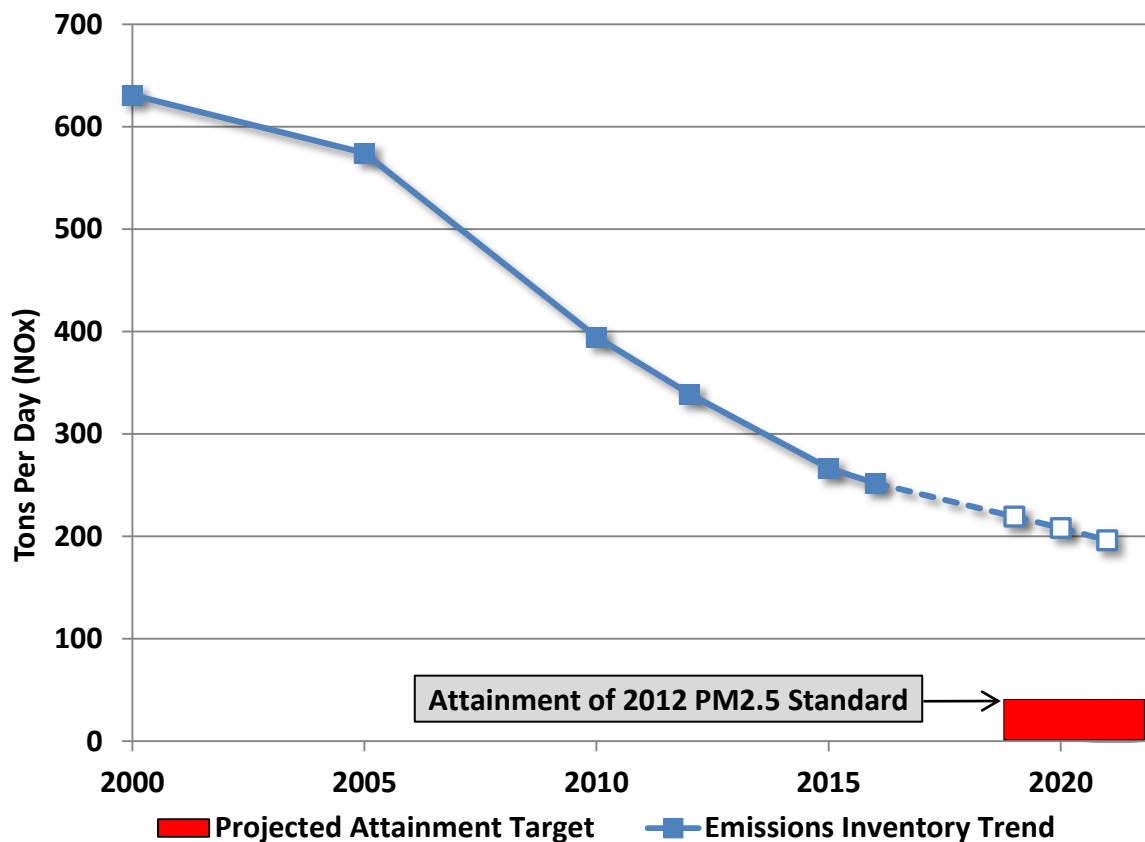
- Moderate Attainment Deadline: December 31, 2021
- Moderate attainment plan due October 2016
- The District can bump up to a Serious nonattainment classification with an attainment deadline of 2025 if a request is submitted by October 2016 and approved by EPA demonstrating that attainment by the Moderate deadline of 2021 is impracticable and that the District meets all other applicable requirements for Moderate areas. The attainment plan under a Serious classification will then be due four years after EPA approves reclassification to Serious. The Clean Air Act also provides a mechanism for seeking an extension of up to five years beyond the 2025 Serious attainment deadline. However, EPA's recent inaction on the extension request for the 1997 PM_{2.5} standard sets a hurdle that is not achievable for seeking an extension. Furthermore, attaining the standard by 2030 is highly unlikely even if EPA granted a five-year extension.

Under the antiquated provisions of the Clean Air Act, even though the District is already classified as Serious for the less stringent 1997 and 2006 PM_{2.5} standards, the District must still submit another attainment plan including a request to EPA to be classified as Serious for the more stringent 2012 PM_{2.5} Standard. Furthermore, even though attainment is not possible under a Moderate area classification, the Clean Air Act requires two plans to be submitted, one for a Moderate classification and another for a Serious classification for the same standard.

Attainment by Moderate Area Deadline of 2021 is Impracticable

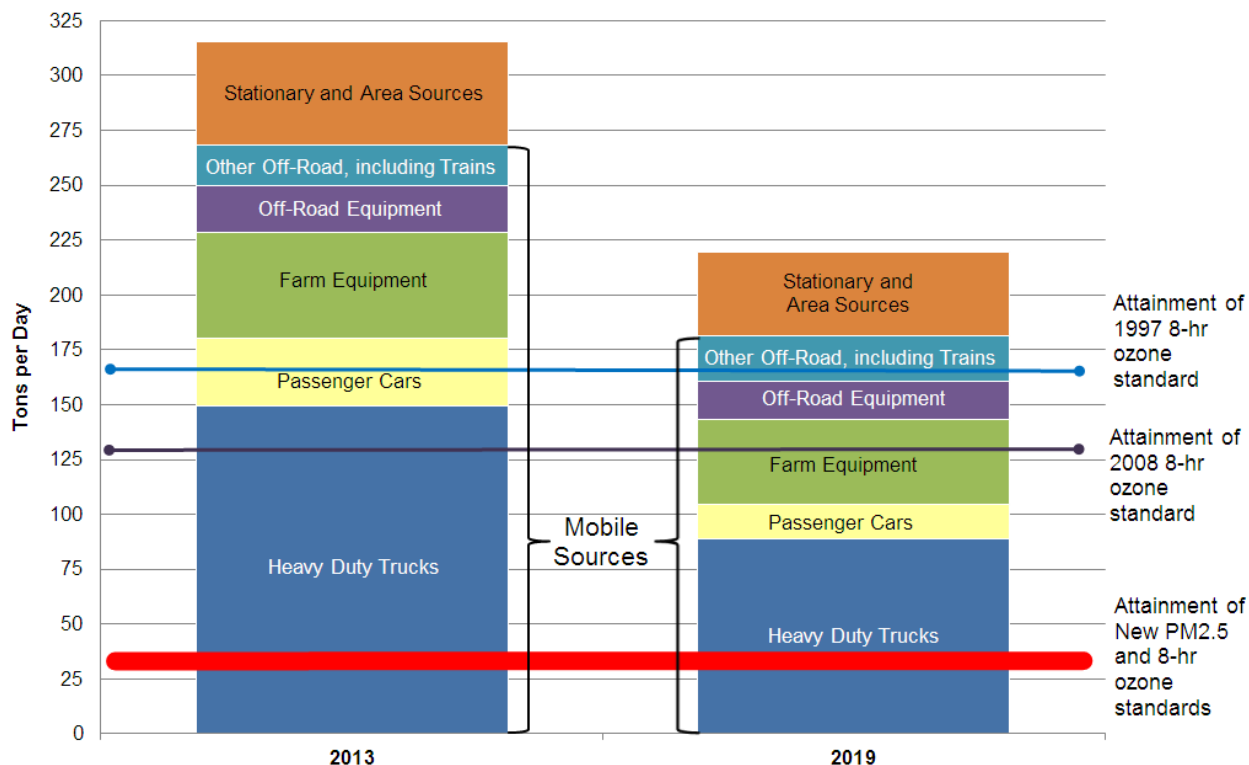
The Valley will need enormous additional emission reductions to meet the 2012 PM_{2.5} standard and attainment is not possible by the mandated Moderate area deadline of 2021. Under the Clean Air Act, demonstrating attainment requires a clean data finding for three consecutive years from 2019 through 2021. This means that the needed reductions must be achieved by 2019 or extra reductions must be made in 2020 or 2021 for the three-year average concentration to be below the standard. As illustrated in Figure ES-1, this is physically impossible given that critical mobile source regulations such as the ARB truck and bus regulation and off-road engine regulation will not be fully implemented until 2023. In addition, despite the significant progress and stringent regulations on stationary and mobile sources, extensive modeling performed by ARB demonstrates that attainment of the 2012 PM_{2.5} Standard is not possible by the mandated Moderate area deadline of 2021 (see Appendix A).

Figure ES-1 – San Joaquin Valley NOx Emissions Inventory and Target for Attainment of 2012 PM2.5 Standard



Furthermore, as illustrated by Figure 2 below, after reducing Valley air pollution by over 80%, we have reached a point where we cannot reach attainment even if we eliminated all Valley businesses, agricultural operations, or trucks traveling through the San Joaquin Valley.

Figure ES-2 – San Joaquin Valley NOx Emissions and Target for Attainment of Latest PM2.5 and Ozone Standards



Given the impracticability of meeting the Moderate attainment deadline date for the 2012 PM_{2.5} standard, this 2016 PM_{2.5} Plan includes a request that the Valley be reclassified to Serious nonattainment with a new attainment deadline of 2025. This reclassification will provide the Valley the time needed to develop an attainment plan aimed at achieving expeditious attainment of the standard. As required by the Clean Air Act, the new attainment plan will be submitted to EPA no later than four years after EPA reclassification of the Valley to Serious nonattainment.

Plan Satisfies all Federal Clean Air Act Requirements

As a result of the District’s exhaustive efforts to reduce emissions in the Valley through decades of implementing multiple plans and hundreds of regulations, the District already meets or exceeds all emissions control requirements applicable to Moderate areas as demonstrated in this plan. In addition, this plan satisfies all other applicable federal Clean Air Act requirements for areas classified as Moderate nonattainment for the 2012 PM_{2.5} standard as shown in Table ES-1 below.

Table ES-1 Summary of Federal Requirements for PM_{2.5} Moderate Nonattainment Areas

Requirement	Federal Regulation/ Guidance	Summary of 2016 PM _{2.5} Plan
CAA Subpart 1 – Nonattainment Areas in General		
Reasonable Further Progress (RFP)	§172(c)(2)	Demonstrate reasonable further progress
Emissions Inventory	§172(c)(3)	Includes an accurate and current emission inventory
Contingency Measures	§172(c)(9)	Includes contingencies if area fails to meet reasonable further progress or attain by the attainment date
CAA Subpart 4 – Additional Provisions for Particulate Matter Nonattainment Areas		
Permit Program	§189(a)(1)(A)	Includes a permit program providing that permits are required for the construction and operation of new and modified major stationary sources
Attainment Demonstration	§189(a)(1)(B)	Demonstration that attainment by applicable date is not possible and a request for reclassification is included
Reasonably Available Control Measures (RACM)	§189(a)(1)(C)	Demonstrates that all control measures meet or exceed RACM
Plan Submissions	§189(a)(2)(B)	Demonstrates that plan is being submitted within the appropriate timeline
Quantitative Milestones	§189(c)(1)	Demonstrates that Plan includes quantitative milestones which are to be achieved every three years until the area is redesignated attainment and which demonstrate reasonable further progress toward attainment by the applicable date