Chapter 3

Implementation Requirements for 2008 8-hr Ozone Standard

2016 PLAN FOR THE 2008 8-HOUR OZONE STANDARD

San Joaquin Valley Air Pollution Control District	June 16, 2016
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Chapter 3: Implementation Requirements for 2008 8-hr Ozone Standard

Federal Clean Air Act (CAA) Section (§)108 and §109 require the U.S. Environmental Protection Agency (EPA) to periodically review and establish health-based air quality standards (often referred to as National Ambient Air Quality Standards, or NAAQS) for six criteria pollutants, including ozone and particulates. Achieving the primary federal standards protects public health, reduces the region's health care costs, and improves the quality of life for residents of the San Joaquin Valley (Valley).

When EPA revises an air quality standard, it considers the extent to which existing EPA regulations and guidance are sufficient to implement the standard and whether any revisions or updates to those regulations and guidance would be helpful or appropriate in facilitating the implementation of the revised standards. Where the nature of revisions to a standard indicates that additional regulations or guidance may be helpful, EPA provides those to facilitate preparation of air quality attainment plans (also called state implementation plans, or SIPs). For example, EPA promulgated an implementation rule for the 2008 8-hour ozone NAAQS in 2015¹ (2015 Implementation Rule) to provide the necessary guidance to assist states with plan development. Existing regulations in 40 CFR (Code of Federal Regulations) Part 51 continue to be applicable to SIPs as well.

This chapter summarizes the Clean Air Act (CAA) requirements for areas designated as extreme nonattainment for the 2008 8-hour ozone standard of 75 parts per billion (ppb). California state standards and requirements for ozone are also summarized in this chapter.

3.1 PLAN ELEMENT SUBMITTAL DEADLINES

Table 3-1 summarizes the deadlines for specific plan elements. These deadlines are based on the designation date of an area as explained in the federal 2015 Implementation Rule and consistent with CAA requirements. EPA classified the Valley as an extreme nonattainment area effective July 20, 2012. [2015 Implementation Rule, pp. 12265-12268]

3-1

¹ Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements; Final Rule. 80 Fed. Reg. 44. pp. 12264-12319. (2015, March 6), (to be codified at 40 CFR Parts 50, 51, 52, et al.) http://www.gpo.gov/fdsys/pkg/FR-2015-03-06/pdf/2015-04012.pdf

Table 3-1 Submittal Due Dates for Plan Elements

Plan Element	Federal CAA §	Submittal Due Date	
Emissions Inventory	182(a)(1)		
Reasonably Available Control Technology (RACT) Demonstration	182(b)(2)	July 20, 2014	
Emission Statement	182(a)(3)(B)]	
15 percent Rate of Progress plan*	182(b)(1)	July 20, 2015	
New Source Review*	172(b)		
3 percent per year reasonable further progress plan	182(c)(2)	July 20, 2016	
Serious and above area attainment demonstration plan	182(c)(2)	July 20, 2016	
Penalty Fee Program	185	July 20, 2022	
Demonstration of attainment of the standard as expeditiously as practicable but not later than 20 years after designation (Extreme nonattainment area) (3-year average using data from calendar years 2029, 2030, 2031)	181(a)	July 20, 2032	

^{*}Per sections 3.3.1.5 and 3.10 of this plan, the District has already satisfied these requirements.

3.2 MODELING AND ATTAINMENT DEMONSTRATION FOR EXTREME **NONATTAINMENT AREAS**

Attainment demonstrations must be submitted within four years of the designation date and be based on photochemical grid modeling or an equivalent effective model.² The procedures for modeling ozone as part of an attainment demonstration are well developed and described in EPA's "Guidance on the use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, PM2.5, and Regional Haze." To demonstrate attainment, the modeling results for the nonattainment area must predict that emissions reductions will result in ozone concentrations that meet the standard based on the most recent three complete years of ambient air quality data prior to the area's attainment date. [2015 Implementation Rule, pp. 12269-12270]

As described in Chapter 6 (Attainment Demonstration, RACM, RFP, and Contingency) and Appendix H (Modeling Attainment Demonstration), photochemical modeling for this plan demonstrates that all areas of the Valley will attain the 2008 8-hour ozone NAAQS by the 2031 deadline.

3.3 REASONABLE FURTHER PROGRESS (RFP) DEMONSTRATION

Part D of the CAA contains three separate provisions regarding the RFP demonstration. The general requirement for nonattainment plans requires the plans to provide for reasonable further progress; RFP is defined as "such annual incremental reductions in emissions" as required by CAA part D, or as required by EPA, for ensuring attainment of

² CAA §182(c)(2)(A) ³ CAA §172(c)(2)

the NAAQS.4 CAA subpart 2 contains specific percent reduction targets for ozone nonattainment areas classified as Moderate and above, and additional requirements specific to areas classified as Serious and above.

Areas classified as Moderate and above must reduce 15 percent of volatile organic compounds (VOC) emissions from the baseline anthropogenic emission within six years after November 15, 1990. EPA refers to this RFP requirement as rate-of-progress (ROP). Whereas, areas classified as Serious and above are required to reduce VOC emissions from the baseline emissions equal to the following amount averaged over each consecutive 3-year period beginning six years after November 15, 1990 and until the attainment date:6

- At least three percent of baseline emissions each year; or
- An amount less than three percent of such baseline emissions each year, if the State demonstrates to the satisfaction of the Administrator that the plan reflecting such lesser amount includes all measures that can feasibly be implemented in the area, in light of technological feasibility.

To lessen the three percent requirement, a State must demonstrate to the satisfaction of the Administrator that the plan for the area includes the measures that are achieved in practice by sources in the same source category in a nonattainment area of the next higher classification. 7

Reductions in oxides of nitrogen (NOx) may be substituted for VOC reductions provided those reductions would result in a reduction in ozone concentrations at least equivalent to that which would result from the amount of VOC emission reductions to meet the RFP requirement.⁸ [2015 Implementation Rule, p. 12271]

Demonstration of RFP, as described above, is satisfied in Chapter 6 (Attainment Demonstration, RACM, RFP, and Contingency).

3.3.1 Additional Provisions to Address RFP under the 2008 Ozone NAAQS

In the 2015 Implementation Rule, EPA provides a number of provisions to address issues relevant to implementing RFP under the 2008 8-hour ozone standard as summarized below.

3.3.1.1 Baseline year

EPA is providing that states should use the calendar year for the most recently available triennial emission inventory at the time ROP/RFP plans are developed as the baseline year for RFP, which in the case of areas designated nonattainment in 2012 translates to

⁴ CAA §171(1) ⁵ CAA §182(b)(1) ⁶ CAA §182(c)(2)(B) ⁷ CAA §182(c)(2)(B)

⁸ CAA §182(c)(2)(C)

2011. EPA recognizes that since the designations of most areas occurred on April 30, 2012, with an effective date 60 days after publication in the Federal Register, that 2012 is an appropriate alternative baseline year consistent with the CAA subpart 2 structure. States may use an alternate year between the years of 2008 to 2012 provided the state justifies such year is appropriate. [2015 Implementation Rule, pp. 12271-12272]

This 2016 Ozone Plan uses 2012 as the baseline year.

3.3.1.2 Emissions reductions from outside the nonattainment area

States may not take credit for VOC or NOx reductions occurring from sources outside the nonattainment area for purposes of meeting the 15% ROP and 3% RFP requirements of the CAA. [2015 Implementation Rule, p. 12273]

The District is not taking credit for emissions reductions that occur outside the nonattainment area when determining the emissions reduced to meet RFP for this 2016 Ozone Plan.

3.3.1.3 Emissions reductions measures for ROP/RFP requirements

All SIP-approved or federally promulgated emissions reductions that occur after the baseline emission inventory year from sources located in the nonattainment area are creditable for purposes of the ROP/RFP requirements, provided the reductions meet the standard requirements for creditability. [2015 Implementation Rule, p. 12274]

Only creditable emissions reductions have been used for the purposes of ROP/RFP, as demonstrated in Chapter 6 (Attainment Demonstration, RACM, RFP, and Contingency).

3.3.1.4 Pre-1990 control measures achieving de minimis reductions

EPA eliminated any obligation for states to continue to perform emissions reductions calculations for the pre-1990 control measures related to motor vehicle exhaust or evaporative emissions promulgated by January 1, 1990. Therefore, States no longer need to perform the complicated calculations for these control measures to ensure that they are not credited toward the 15% ROP requirements. [2015 Implementation Rule, p. 12274]

For this 2016 Ozone Plan, no emissions reductions calculations are being performed for the pre-1990 control measures related to motor vehicle exhaust or evaporate emissions promulgated by January 1, 1990.

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⁹ CAA §182(b)(1)(D)(i)

3.3.1.5 ROP/RFP plan requirements for areas that fulfilled the 15% ROP plan requirement for VOC for a former ozone NAAQS

2008 ozone nonattainment areas that have previously met the CAA requirement for a 15% ROP VOC reduction plan for the entire area are not required to fulfill that requirement again, consistent with the 1997 8-hour ozone NAAQS.

EPA approved the District's 1994 Ozone Attainment Demonstration Plan and its 15% ROP demonstration in the Federal Register on January 8, 1997, effective February 7, 1997. As such, the Valley has met the initial 15% ROP VOC reduction requirement.

For purposes of the 2008 ozone NAAQS, EPA interprets the RFP requirement of the CAA to require an area classified as Moderate and higher to achieve an average 3% annual reduction in VOC and/or NOx emissions for the first 6 years following the baseline year. [2015 Implementation Rule, p. 12276]

Demonstration of RFP is satisfied in Chapter 6 (Attainment Demonstration, RACM, RFP, and Contingency).

3.4 REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT) DEMONSTRATION

Plans for nonattainment areas must "provide for the implementation of all reasonably available control measures (RACM) as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology (RACT)) and shall provide for attainment of the national primary ambient air quality standards."¹¹

3.4.1 Control Techniques Guidelines and Alternative Control Techniques

States are directed to refer to the existing Control Techniques Guidelines (CTGs) and Alternative Control Techniques (ACTs) documents for purposes of meeting RACT and all relevant information that is available at the time of the development of RACT SIP demonstration reports. Additionally, EPA is allowing, in some cases, for states to conclude that sources already addressed by RACT demonstrations for the 1979 1-hour and/or 1997 8-hour ozone standard do not need to implement additional controls to meet the 2008 8-hour ozone standard RACT requirement. In cases where controls were applied due to the 1979 1-hour or 1997 8-hour ozone NAAQS RACT requirement, EPA expects that any incremental emissions reductions from application of a second round of RACT controls may be small and, therefore, the cost for advancing that small additional increment of reduction may not be reasonable. [2015 Implementation Rule, pp. 12278-12280]

¹⁰ 62 FR 1172

¹¹ CAA §172(c)(1)

The District adopted its 2014 RACT SIP on June 19, 2014 to satisfy requirements for the 2008 8-hour ozone standard pursuant to the proposed 2015 Implementation Rule guidance document. The 2014 RACT SIP analysis demonstrates that the District meets or exceeds RACT for all applicable NOx source categories. In addition, in developing this attainment plan, the District updated the RACT evaluation and included VOC sources in the evaluation in Appendix C (Stationary and Area Source Control Strategy Evaluations).

3.4.2 Area Wide Average Emission Rates

States may demonstrate as part of their NOx RACT SIP submittal that the weighted average NOx emission rate from all sources in the nonattainment area subject to RACT meets NOx RACT requirements; consistent with EPA's existing policy. [2015 Implementation Rule, pp. 12278-12280]

The District did not use area wide average emission rates to demonstrate RACT in their 2014 RACT SIP, but instead analyzed each applicable EPA source category individually to demonstrate that the District meets or exceeds RACT.

3.4.3 Maximum Achievable Control Technology (MACT)

States may streamline their RACT analysis by including a discussion of the maximum achievable control technology (MACT) controls and considerations relevant to VOC RACT. Historically, states have been able to rely on MACT standards for purposes of showing that a source has met VOC RACT. [2015 Implementation Rule, pp. 12278-12280]

The analysis in Appendix C (Stationary and Area Source Control Strategy Evaluations) demonstrates that the District meets or exceeds RACT for all applicable EPA source categories. In addition, the District evaluated and compared the Valley's various emissions control measures to EPA's MACT controls, as applicable, in Appendix C (Stationary and Area Source Control Strategy Evaluations).

3.4.4 Implementation of RACT Measures

States must implement RACT measures as expeditiously as practicable, but no later than January 1, 2017 (the 5th year after the effective date of nonattainment designation). States have the discretion to require beyond-RACT reductions from any source, and have an obligation to demonstrate attainment as expeditiously as practicable.

Although there are scientific studies that indicate that ozone formation is NOx-limited in the Valley, and changes in anthropogenic VOC emissions will have little effect on ozone concentrations, EPA is not prepared to establish a specific definition of "negligible effect." Therefore, states will, continue to conduct RACT determinations as they historically have. Additionally, EPA does not anticipate that any current NOx-limited

¹² Nitrogen Oxides Supplement to the General Preamble, 57 FR 55625. (1992, November 25)

nonattainment areas will immediately need to develop substantive new VOC RACT SIP submissions, and therefore does not expect that retaining the current RACT guidance will have any near-term impact on states or VOC sources in current NOx-limited nonattainment areas.

The 2014 RACT SIP demonstration submitted to EPA in 2014, in combination with this 2016 Ozone Plan, satisfy requirements for the 2008 8-hour ozone standard. The 2014 RACT SIP analysis shows that the District meets or exceeds RACT for all applicable EPA source categories.

3.5 REASONABLY AVAILABLE CONTROL MEASURES (RACM) DEMONSTRATION

The RACM provision requires a demonstration that the state has adopted all reasonable measures to meet RFP requirements and to demonstrate attainment as expeditiously as practicable and thus that no additional measures that are reasonably available will advance the attainment date or contribute to RFP for the area. States should consider all available measures, including those being implemented in other areas, and adopt measures determined to be economically and technologically feasible and that will advance the attainment date or are necessary for RFP. [2015 Implementation Rule, pp. 12282-12283]

The District has comprehensively evaluated the Valley's various emissions sources and identified potential opportunities for additional emissions reductions in Appendix C (Stationary and Area Source Control Strategy Evaluations). Demonstration of RACM is satisfied in Chapter 6 (Attainment Demonstration, RACM, RFP, and Contingency).

3.6 NEW VEHICLE INSPECTION AND MAINTENANCE (I/M) PROGRAMS

No new I/M programs are currently required for areas being designated and classified nonattainment for the 2008 ozone NAAQS. [2015 Implementation Rule, p. 12283]

3.7 TRANSPORTATION CONFORMITY

Transportation conformity is required to ensure that transportation plans, transportation improvement programs (TIPs), and federally supported highway and transit projects are consistent with the purpose of the plan and will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant standard or interim reductions and milestones. EPA's Transportation Conformity Rule ¹³ establishes the criteria and procedures for determining whether transportation activities conform to the SIP. In metropolitan areas (urbanized areas with a population greater than 50,000) the designated Metropolitan Planning Organization (MPO) and the Department of Transportation (DOT) must make a conformity determination with regard to the area's transportation plan and TIP for the 2008 ozone standard under the transportation conformity regulations no later than July 20, 2013 (1 year after the effective date of the nonattainment designation).

Existing 1997 8-hour ozone standard nonattainment and maintenance areas, regardless of their designation for the 2008 8-hour ozone standard, are no longer required to demonstrate transportation conformity for the 1997 8-hour ozone standard after that standard is revoked. States with previously approved Transportation Conformity plans should not need to revise those plans, unless they need to do so to ensure that existing state regulations apply in areas newly designated nonattainment for the 2008 8-hour ozone standard. [2015 Implementation Rule, pp. 12283-12284]

Demonstration of Transportation Conformity is satisfied in Appendix D (Mobile Source Control Strategy).

3.8 GENERAL CONFORMITY

Existing General Conformity Regulations remain appropriate for the 2008 ozone NAAQS and became applicable as of July 20, 2013 (one year after the effective date of nonattainment designations for the 2008 NAAQS). States with approved general conformity plans should not need to revise their plans unless they need to do so to ensure they are consistent with the April 5, 2010 revisions to the general conformity regulations to ensure the existing regulations apply in the appropriate newly designated areas. [2015 Implementation Rule, pp. 12283-12284]

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^{13 40} CFR 51.390 and part 93, subpart A

3.9 **CONTINGENCY MEASURES**

Nonattainment areas are required to submit contingency measures for approval into the SIP. Contingency measures must provide for the implementation of specific measures without any further rulemaking action if the area fails to attain or meet a milestone for RFP or attainment.¹⁴ Limited exceptions are allowed for Extreme nonattainment areas relying on plan provisions approved under CAA §182(e)(5).

The 3% contingency measure emissions reductions may be based entirely on NOx controls if the area has completed the initial 15% ROP VOC reduction and the state's analyses have demonstrated that NOx substitution would be most effective in bringing the area into attainment. The use of federal measures providing ongoing reductions into the future may also be used to meet contingency measure requirements for the 2008 ozone NAAQS.

The District has satisfied the 15% ROP VOC reduction requirement with the adoption and subsequent EPA approval of the District's 1994 Ozone Attainment Demonstration Plan and its 15% ROP demonstration. Additionally, this attainment plan demonstrates that the Valley is a NOx-limited area and NOx emissions reductions are the most effective way to bring the Valley into attainment.

EPA has discretion in approving Extreme nonattainment area plans that rely, in part, on future development of new control technologies for improvements of existing control technologies, where certain conditions are met. 15 This discretion can be applied as long as the state has demonstrated the following:

- All RACM, including RACT, have been included in the plan;
- The area's RFP demonstration during the first 10 years after designation does not rely on anticipated future technologies; and
- The state has submitted enforceable commitments to timely develop and adopt contingency measures to be implemented if the anticipated future technologies do not achieve planned reductions.

States may submit enforceable commitments to develop and adopt contingency measures meeting the requirements of CAA §182(e)(5) to satisfy the requirements for both attainment contingency measures in CAA §172(c)(9) and CAA §182(c)(9). CAA §182(e)(5) allows for provisions in an Extreme SIP that anticipate development of new control techniques or improvement of existing control technologies (i.e. "black box"). These enforceable commitments must obligate the state to submit the required contingency measures to EPA no later than three years before any applicable implementation date. [2015 Implementation Rule, pp. 12284-12286]

Modeling has demonstrated that the Valley will come into attainment of the 2008 8-hour ozone standard by 2031 without a Black Box. However, the federal Clean Air Act's

¹⁴ CAA §172(c)(9) and §182(c)(9) ¹⁵ CAA §182(e)(5)

antiquated requirement that additional emissions be withheld for attainment contingency purposes will now force the plan to rely on a Black Box to come into attainment by 2031. This is discussed in further detail in Chapter 6 (Attainment Demonstration, RACM, RFP, and Contingency).

3.10 NEW SOURCE REVIEW (NSR) REQUIREMENTS - MAJOR STATIONARY SOURCE THRESHOLDS

New Source Review (NSR) programs for nonattainment areas established in part D of the CAA contain specific requirements for the preconstruction review and permitting of new or modified major stationary sources of air pollutants.

The District satisfies this requirement through District Rule 4001 (New Source Performance Standards).

3.11 EMISSIONS INVENTORY

3.11.1 Emissions Inventory Requirements

States are required to submit periodic emissions inventories no later than the end of each 3-year period after submission of the base year inventory for the nonattainment area. The periodic inventory must include ozone season day emissions of VOC and NOx for point, nonpoint, and mobile sources and fire-related event emissions. States are required to use the reporting requirements of the Air Emissions Reporting Requirements (AERR) to determine the data elements required for such inventories, while including an additional requirement to report ozone season day emissions.

The base year inventory for the nonattainment area is due no later than 2 years after the effective date of designations, and the emissions included in this inventory must be ozone season day emissions as defined in CAA §51.1100(cc). Ozone season day emissions are the most appropriate temporal basis for developing the emissions to be included in this inventory, rather than summer day emissions as required by past implementation rules or the AERR.

Ozone season day emissions means an average day's emissions for a typical ozone season work weekday as defined in CAA §51.1100(cc). The state will select, subject to EPA approval, the particular month(s) in the ozone season and the day(s) in the work week to be represented. The selection of days should be coordinated with the conditions assumed in the development of RFP plans and/or emissions budgets for transportation conformity to allow comparability of daily emissions estimates. The days should represent the conditions that contribute to high ozone that led to a nonattainment designation. [2015 Implementation Rule, pp. 12289-12291]

The emissions inventory, based on average ozone season day emissions as described above, are reported in Appendix B (Emissions Inventory).

3.11.2 **Emission Reporting Programs**

States must develop emission reporting programs, called emission statement programs, for VOC and NOx sources. 16 Most areas that need an emission statement program, the Valley included, already have one in place due to a nonattainment designation for an earlier ozone standard. If an area has a previously approved emission statement rule in force for the 1997 8-hour ozone standard or the 1-hour ozone standard that covers all portions of the nonattainment area for the 2008 ozone standard, such rule should be sufficient for the purposes of the emission statement requirement for the 2008 ozone standard, and may be relied on to meet the emission statement requirement for the 2008 ozone standard. In cases when an existing emission statement requirement is still adequate to meet the requirements of this rule, states can provide the rationale for that determination to the EPA in a written statement in the plan to meet this requirement. States should identify the various requirements and how much each is met by the existing emission statement program. [2015 Implementation Rule, p. 12291]

The District adopted Rule 1160 "Emission Statements" on November 18, 1992 that applies to all owners and operators of any stationary source category which emits or may emit nitrogen oxides or reactive organic compounds and submits all information to the state as required by Section 182 (a)(3)(B) of the CAA. The District has been submitting emissions inventory data to the state since 1993 and has continued to do so each year thereafter. Unlike other inventory systems that are static, the District not only submits the required information, but looks to enhance its inventory system each year as new requirements are known or foreseen. This ensures that future information and data requirements are able to be collected, processes are streamlined, and data is managed in an efficient manner.

The District requests annual emissions inventories from all permitted sources in the San Joaquin Valley. This process starts in January of each year: the District sends (paper or email) each permitted facility an inventory statement or inventory survey form. An emissions inventory statement is required for those facilities that have actual emissions of greater than or equal to 25 tons and an emissions inventory survey form is required for sources that have potential emissions less than 25 tons. It should be noted that the 25 ton threshold is not only applied to NOx and VOC, but to CO, SOx, and PM10 / PM2.5 as well. The District processes approximately 4,500 facilities annually. This data is submitted to ARB by August of each year.

3.12 AMBIENT MONITORING REQUIREMENTS

EPA's ambient monitoring requirements establish minimum ozone monitoring requirements based on population and levels of ozone in an area to better prioritize monitoring resources. 17 The Photochemical Assessment Monitoring Station (PAMS) program collects enhanced ambient air measurements in ozone nonattainment areas

¹⁶ CAA §182(a)(3)(B) ¹⁷ 40 CFR part 58

classified as Serious, Severe, or Extreme, like the Valley. 18 These requirements are unchanged from previous EPA guidance. [2015 Implementation Rule, p. 12291]

The District's 2015 Air Monitoring Network Plan (Network Plan) was approved by EPA December 28, 2015. The Network Plan demonstrates that the District meets all federal ambient monitoring requirements and revises the network as needed when Valley population increases and other factors trigger the need for new monitors or other changes to the network.

QUALIFYING FOR A 1-YEAR ATTAINMENT DEADLINE EXTENSION

A nonattainment area may be eligible for a 1-year extension of its attainment date if that area that fails to attain the 2008 ozone standard by its attainment date and if for the attainment year the area's 4th highest daily maximum 8-hour ozone average is at or below the level of the standard. Thus to be eligible for the first 1-year extension, the 4th highest daily maximum 8-hour ozone value for an area would need to be at or below 0.075 parts per million (ppm). The area would be eligible for a second 1-year extension if the area's 4th highest daily maximum 8-hour ozone value, averaged over both the original attainment year and the first extension year, is at or below the level of the standard (0.075 ppm).¹⁹ [2015 Implementation Rule, p. 12292]

The modeling performed for the development of this attainment plan demonstrates that the Valley will attain the standard by the 2031 attainment deadline, as reported in Appendix H (Modeling Attainment Demonstration). No extension of the deadline is being requested at this time.

3.14 IDENTIFICATION OF RURAL TRANSPORT AREAS

Ozone nonattainment areas that are rural in nature and that can demonstrate that sources in the area do not make a significant contribution to ozone concentrations measured in the area or in other areas may be determined to be "rural transport" nonattainment areas.²⁰ These areas are subject to Marginal nonattainment area requirements, regardless of the area's classification under CAA §181(a). This distinction was created for rural nonattainment areas whose ozone exceedances are the result of ozone and/or precursor transport into that area that is so overwhelming that the contribution of local emissions to concentrations above the level of the air quality standard is relatively minor and do not significantly contribute to ozone measured in other areas.

To qualify as a rural transport nonattainment area, the nonattainment area's boundary could not include or be adjacent to a current Office of Management and Budget (OMB)defined metropolitan statistical area (MSA). Under this approach, any nonattainment

¹⁸ CAA §182(c)(1) ¹⁹ CAA §181(a)(5) ²⁰ CAA §182(h)

area associated with a Census-defined micropolitan area (areas with central county or counties containing an urban cluster of 10,000-49,999 people plus adjacent counties having a high degree of economic and social integration as measured through worker commuting) or an area too sparsely populated to be included in a census-defined statistical area, may be able to qualify as a rural transport nonattainment area. During the designation process for the 2008 ozone NAAQS, the EPA did not identify any nonattainment areas as rural transport areas. [2015 Implementation Rule, p. 12292]

EPA has not identified any rural transport areas within the Valley.

3.15 OZONE TRANSPORT

Many states are affected by transported ozone and ozone precursors from upwind states, and such transported pollution may contribute significantly to air pollution that exceeds the standards in those states. Additionally, domestic ozone air quality can also be affected by emissions sources located across United States borders in Canada and Mexico, and even from other continents. Contributions to ozone concentrations from sources outside of the United States can affect to varying degrees the ability of some areas to attain and maintain the 2008 ozone standard. The following is a summary of EPA guidance with respect to interstate and international ozone transport.

3.15.1 **Interstate Transport**

There are two CAA provisions identifying the states' responsibilities to address interstate transport. States are to include provisions in their infrastructure plans to prohibit any source or other type of emissions activity in one state from contributing significantly to nonattainment, or interfering with maintenance, of an air quality standard in another state.²¹ States are directed to include provisions to establish a notification process in their infrastructure plans through which downwind jurisdictions can be alerted to specific sources of transported pollution.²² The EPA implementation rule does not address these requirements relating to transport. EPA has committed to address the transport in a separate action. [2015 Implementation Rule, p. 12293]

3.15.2 **International Transport**

EPA may approve an attainment demonstration for a nonattainment area if:

- The attainment demonstration meets all other applicable requirements of the CAA; and
- The submitting state can satisfactorily demonstrate that, "but for emissions emanating from outside of the United States," the area would attain and maintain the ozone standard, including consideration of emissions from North America or intercontinental sources.²³

²¹ CAA §110(a)(2)(D)(i) ²² CAA §126 ²³ CAA §179B

Although monitored data cannot be excluded for a determination of whether an area has attained a standard based solely on the fact that data are affected by emissions from outside the United States, such data may be excluded from consideration if they were significantly influenced by exceptional events as described in CAA §319(b). Where international transport meets the criteria and procedural requirements contained in the EPA's Exceptional Events Rule, ²⁴ it may be addressed by that rule. [2015 Implementation Rule, p. 12293]

3.16 CLEAN AIR ACT SECTION 182(F) NOx PROVISIONS

Per CAA §182(b)(2) and §182(f), ozone nonattainment areas are required to implement RACT for sources that are subject to CTGs and for major sources of VOC and NOx. Under certain circumstances an area may be granted a NOx waiver. A state with a previously approved NOx waiver for the 1979 1-hour or 1997 8-hour ozone standard would need to submit a new request for an exemption that is supported by analyses specific to the 2008 ozone standard. The new request should consider any relevant information developed after the 1979 1-hour or 1997 8-hour ozone standard waivers were granted. The January 14, 2005 memo²⁵ provides guidance on appropriate documentation for a waiver request for application to the 8-hour ozone program. [2015 Implementation Rule, p. 12294]

The District does not have a NOx waiver for the 1979 1-hour or the 1997 8-hour ozone standard and does not intend to request one for the 2008 8-hour ozone standard.

3.17 CLEAN FUELS

Section 182(e)(3) of the federal CAA directs extreme nonattainment areas to require: "that each new, modified, and existing electric utility and industrial and commercial boiler which emits more than 25 tons per year of oxides of nitrogen:

- Burn as its primary fuel natural gas, methanol, or ethanol (or comparable low polluting fuel), or
- Use advanced technology (such as catalytic control technology or other comparably effective control methods) for reduction of emissions of nitrogen."

District Rules 4305, 4306, and 4352 address NOx emission limits for the boilers in this category. Most of the boilers under Rules 4305 and 4306 are fired on natural gas and therefore satisfy the requirement of paragraph (A) above. Liquid-fuel fired boilers are also addressed by those rules and the applicable NOx emission limits satisfy the requirement of paragraph (B) above. Solid-fuel fired boilers are addressed by Rule 4352 and the applicable NOx emission limits satisfy the requirement of paragraph (B)

²⁴ 40 CFR 50.14

²⁵ Page, Stephen D., Director. Guidance on Limiting Nitrogen Oxides Requirements Related to 8-hour Ozone Implementation. Office of Air Quality Planning and Standards, to Air Directors, Regions I-X.

above. The District already complies with this requirement and there is no need to include additional control measures in this plan to satisfy this section of the federal CAA.

3.18 CALIFORNIA STATE STANDARDS

California sets ambient air quality standards for several pollutants, including ozone. The California ambient air quality standards are considerably more stringent than the federal standards and are more protective of human health. California's 1-hour ozone standard is 90 ppb, and its 8-hour ozone standard is 70 ppb. Despite the more stringent California standards, California Health and Safety Code §39602 states, "Notwithstanding any other provision of this division, the state implementation plan shall only include those provisions necessary to meet the requirements of the [federal] CAA." Therefore, this 2016 Ozone Plan focuses on demonstrating attainment with the federal NAAQS. While the federal standards provide the framework for SIPs, including this ozone plan, progress toward federal standards also brings areas closer to attainment of the lower, California standards.



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