

SJVUAPCD

Chapter 6

Attainment Demonstration, RACM, RFP, and Contingency

PROPOSED 2016 PLAN FOR THE 2008 8-HOUR OZONE STANDARD

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Chapter 6: Attainment Demonstration, RACM, RFP and Contingency Measures

Under the federal Clean Air Act, attainment plans are required to address a number of requirements related to demonstrating attainment by the required deadline and progress towards attainment. This chapter shows that this plan satisfies the following federal requirements:

- Attainment demonstration, including the use of CAA 182(e)(5) “Black Box” provisions afforded to extreme nonattainment areas
- Reasonably available control measures (RACM)
- Reasonable further progress (RFP)
- Contingency measures for RFP and attainment

6.1 ATTAINMENT DEMONSTRATION

Under the federal Clean Air Act, the District must demonstrate attainment as expeditiously as practicable, no later than the attainment deadline of 2031 using air monitoring data for the period of 2029, 2030, and 2031. This requires another 207.7 tons per day in NO_x reductions from stationary and mobile sources throughout the Valley. The measures identified in this plan do achieve the necessary reductions. Through the comprehensive stationary and mobile source control strategy that has been adopted from prior regulatory actions and that is now included in this plan, the San Joaquin Valley will reduce NO_x emissions by over 60% between 2012 and 2031. The ambient ozone concentrations will decrease dramatically in all areas of the Valley with Valley residents experiencing cleaner air over time. The California Air Resources Board (ARB) used a modeled attainment test consistent with U.S. Environmental Protection Agency (EPA) guidelines to predict future 8-hour ozone concentrations at each monitoring site in the Valley to demonstrate attainment. Modeling shows that the Valley will attain the 8-hour ozone standard by 2031 based on implementation of these ongoing control measures.

The District could show expeditious attainment without the need to rely on “Black Box” provisions afforded under CAA §182(e)(5). Unfortunately, compliance with the contingency requirements under the federal Clean Air Act requires that the District hold back on 1.6 tons per day of NO_x reductions. To ensure that the plan is approvable with the necessary contingencies, the plan needs to include a “Black Box.” The District, however, hopes that the state Air Resources Board or federal EPA can adopt and implement necessary strategies relating to mobile sources resulting in further reductions in emissions that could satisfy contingency requirements and avoid delays in attaining the standard expeditiously.

Table 6-1 San Joaquin Valley Attainment Demonstration

	Attainment Demonstration Analysis (2031 Attainment Deadline)	Emissions (tons NOx per day, Summer Average)
A	San Joaquin Valley Emissions with Adopted Control Strategy	131.9
B	Attainment Emissions Target	131.9
C	San Joaquin Valley Emissions with Adopted Control Strategy and Deferred Emissions Reductions to Satisfy Attainment Year Contingency Requirement	133.5
D	Black Box Emissions Reductions	1.6
E	San Joaquin Valley Emissions with Black Box Emissions Reductions (Line C – D)	131.9
	Clean Air Act Attainment Demonstration Satisfied?	YES

As presented in Appendix J, the ARB used a modeled attainment test consistent with EPA guidelines to predict future 8-hour ozone concentrations at each monitoring site in the Valley and to demonstrate attainment. A photochemical model simulates the observed ozone levels using precursor emissions and meteorology in the region. The model also simulates future ozone levels based on projected changes in emissions while keeping the meteorology constant. This modeling is used to identify the relative benefits of controlling different ozone precursor pollutants and the most expeditious attainment date. Appendix I contains the modeling protocol for this plan. Appendix J contains a summary of the modeling process and results.

Without deferring emissions reductions to address the Clean Air Act attainment year contingency requirement, ARB's modeling shows that the Valley will attain the 8-hour ozone standard by 2031 based on implementation of the ongoing control measures. As illustrated in the following table, the monitoring site with the highest predicted ozone concentration is Clovis-N with a predicted design value at 74 parts per billion (ppb).

Table 6-2 Base-Year and Future-Year 8-hour ozone design values

Monitoring Station	Design Value (ppb)	
	2010-2012	2029-2031
Edison	93	64
Arvin DiGiorgio	91	64
Fresno-Garland	94	70
Clovis-N Villa Avenue	98	74
Fresno-Sierra Skypark #2	92	68
Parlier	92	69
Sequoia and Kings Canyon	93	65
Bakersfield-California	89	65
Porterville	90	63
Sequoia Natl Park-Lower	81	61
Visalia-N Church Street	87	60
Oildale- Manor Street	89	65
Fresno-Drummond Street	95	71
Hanford-S Irwin Street	90	64
Modesto-14 th Street	75	61
Shafter-Walker Street	86	62
Turlock-S Minaret Street	88	69
Tracy	80	66
Tranquility	77	60
Merced-S Coffee Avenue	83	65
Stockton-Hazelton Street	69	57
Maricopa-Stanislaus Street	87	63
Madera-Pump Yard	78	61
Madera-City	86	65

6.2 REASONABLY AVAILABLE CONTROL MEASURES (RACM) DEMONSTRATION

CAA Section 172(c)(1) requires attainment plans to provide for the implementation of RACM as expeditiously as practicable (including emissions reductions from existing sources in the areas as may be obtained through the adoption of at least reasonably available control technology) and shall provide for attainment of the standard.

Put another way, the total of all potential emissions reductions opportunities that are *not* included as plan commitments must not advance attainment by one year. Measures that are not necessary to satisfy reasonable further progress (RFP) or expeditious attainment are also not required RACM for the area.

To advance attainment by at least one year, the collective emissions reductions that could be achieved through unused but reasonably available controls would have to achieve the 2031 emissions levels by 2030. Modeling for this and other ozone plans has shown that the Valley is NO_x limited. NO_x emission reductions are most effective

in reducing Valley ozone concentrations, whereas Valley ozone is not as responsive to VOC emission reductions and therefore, VOC emission reductions have minimal impact on advancing attainment. Advancing attainment by one year would therefore depend on expediting NOx emission reductions.

6.2.1 District RACM Demonstration

Valley NOx emissions are already being significantly reduced as adopted regulations are fully implemented through fleet turn-over and normal equipment replacement. As illustrated in Appendix B to this plan, the majority of NOx emission reductions occurring between the 2012 base year and the 2031 attainment year come from mobile sources. These reductions cannot be expedited through additional stationary and area source regulations, for which the District has regulatory authority. Based on the difference between 2031 and 2030 NOx emissions levels, unused control measures would have to achieve 2.7 tons per day (tpd) of NOx emission reductions to advance attainment by one year. However, as previously discussed, there are no unused control measures in this plan because every reasonable control measure is used in this plan. As presented in Appendix C, all reasonable control measures under the District's jurisdiction are being implemented; therefore, there are no emissions reductions associated with unused regulatory control measures.

6.2.2 ARB RACM Demonstration

[This section provided by California Air Resources Board]

The Clean Air Act (the Act) requires a demonstration that control measures in ozone nonattainment areas meet a control level known as Reasonable Available Control Measures (RACM). At the State level, ARB is responsible for measures to reduce emissions from mobile sources and consumer products, and the Department of Pesticide Regulation (DPR) is responsible for emission reductions from pesticides. This chapter will discuss how California's measures for these categories meet RACM requirements.

6.2.2.1 RACM Requirements at the State Level

Subpart 1, section 172(c)(1) of the Act requires SIPs to provide for the implementation of RACM as expeditiously as practicable. EPA has interpreted RACM to be those emission control measures that are technologically and economically feasible and when considered in aggregate, would advance the attainment date by at least one year.

6.2.2.2 Mobile Source Control Program

Given the severity of California's air quality challenges, ARB has implemented the most stringent mobile source emissions control program in the nation. ARB's comprehensive strategy to reduce emissions from mobile sources includes stringent emissions standards for new vehicles, in-use programs to reduce emissions from existing vehicle and equipment fleets, cleaner fuels that minimize emissions, and incentive programs to accelerate the penetration of the cleanest vehicles beyond that achieved by regulations

alone. Taken together, California's mobile program meets RACM requirements in the context of ozone nonattainment.

6.2.2.2.1 Waiver Approvals

While the Act preempts most states from adopting emission standards and other emission-related requirements for new motor vehicles and engines, it allows California to seek a waiver or authorization from the federal preemption to enact emission standards and other emission-related requirements for new motor vehicles and engines and new and in-use off-road vehicles and engines that are at least as protective as applicable federal standards, except for locomotives and engines used in farm and construction equipment which are less than 175 horsepower (hp).

Over the years, California has received waivers and authorizations for over 100 regulations. The most recent California standards and regulations that have received waivers and authorizations are Advanced Clean Cars (including ZEV and LEV III) for light duty vehicles, and On-Board Diagnostics, Heavy-Duty Idling, Malfunction and Diagnostics System, In-Use Off-Road Diesel Fleets, Large Spark Ignition Fleet, Mobile Cargo Handling Equipment for heavy-duty engines. Other authorizations include Off Highway Recreational Vehicles and the Portable Equipment Registration Program.

Finally, ARB obtained an authorization from U.S. EPA to enforce adopted emission standards for off-road engines used in yard trucks and two-engine sweepers. ARB adopted the off-road emission standards as part of its "Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In Use Heavy-Duty Diesel-Fueled Vehicles," (Truck and Bus Regulation). The bulk of the regulation applies to in-use heavy-duty diesel on-road motor vehicles with a gross vehicle weight rating in excess of 14,000 pounds, which are not subject to preemption under section 209(a) of the Act and do not require a waiver under section 209(b).

6.2.2.2.2 Light- and Medium-Duty Vehicles

Light- and medium-duty vehicles are currently regulated under California's Advanced Clean Cars program including the Low Emission Vehicle III (LEV III) and Zero-Emission Vehicle (ZEV) programs. Other California programs such as the 2012 Governor Brown Executive Order to put 1.5 million zero-emission vehicles on the road by 2025, and California's Reformulated Gasoline program (CaRFG) will produce substantial and cost effective emission reductions from gasoline powered vehicles.

ARB is also active in implementing programs for owners of older dirtier vehicles to retire them early. The "car scrap" programs, like the Enhanced Fleet Modernization Program, and Clean Vehicle Rebate Project provide monetary incentives to replace old vehicles with zero emission vehicles. The Air Quality Improvement Program (AQIP) is a voluntary incentive program to fund clean vehicles.

Taken together, California's emission standards, fuel specifications, and incentive programs for on-road light- and medium-duty vehicles represent all measures that are technologically and economically feasible in the context of a RACM assessment.

6.2.2.2.3 Heavy-Duty Vehicles

California's heavy-duty vehicle emissions control program includes requirements for increasingly tighter new engine standards and address vehicle idling, certification procedures, on-board diagnostics, emissions control device verification, and in-use vehicles. This program is designed to achieve an on-road heavy-duty diesel fleet with 2010 engines emitting 98 percent less NOx and PM2.5 than trucks sold in 1986.

Most recently in the ongoing efforts to go beyond federal standards and achieve further reductions, ARB adopted the Optional Reduced Emissions Standards for Heavy-Duty Engines regulation in 2014 that establishes the new generation of optional NOx emission standards for heavy-duty engines.

The recent in-use control measures include On-Road Heavy-Duty Diesel Vehicle (In Use) Regulation, Drayage (Port or Rail Yard) Regulation, Public Agency and Utilities Regulation, Solid Waste Collection Vehicle Regulation, Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling, Heavy-Duty Diesel Vehicle Inspection Program, Periodic Smoke Inspection Program, Fleet Rule for Transit Agencies, Lower-Emission School Bus Program, and Heavy-Duty Truck Idling Requirements. In addition, ARB's significant investment in incentive programs provides an additional mechanism to achieve maximum emission reductions from this source sector.

Taken together, California's emission standards, fuel specifications, and incentive programs for heavy-duty vehicles represent all measures that are technologically and economically feasible in the context of a RACM assessment.

6.2.2.2.4 Off-Road Vehicles and Engines

California regulations for off-road equipment include not only increasingly stringent standards for new off road diesel engines, but also in-use requirements and idling restrictions. The Off-Road Regulation is an extensive program designed to accelerate the penetration of the cleanest equipment into California's fleets, and impose idling limits on off-road diesel vehicles. The program goes beyond emission standards for new engines through comprehensive in-use requirements for legacy fleets.

Engines and equipment used in agricultural processes are unique to each process and are often re designed and tailored to their particular use. Fleet turnover to cleaner engines is the focus for these engines. In the San Joaquin Valley, where agriculture has a larger impact on air quality than in other areas of the state, state incentive programs have been leveraged with Federal and local incentives to provide farmers assistance to replace their older, higher-polluting equipment with the cleanest available technology. ARB is also working with the San Joaquin Valley Air Pollution Control

District on developing a pilot project that gives farmers opportunity to replace their high-emitting equipment through a trade-up system.

Taken together, California's comprehensive suite of emission standards, fuel specifications, and incentive programs for off-road vehicles and engines represent all measures that are technologically and economically feasible in the context of a RACM assessment.

6.2.2.2.5 Other Sources and Fuels

The emission limits established for other mobile source categories, coupled with U.S. EPA waivers and authorization of preemption establish that California's programs for motorcycles, recreational boats, off-road recreational vehicles, cargo handling equipment, and commercial harbor craft sources meet the requirements for RACM.

Cleaner burning fuels also play an important role in reducing emissions from motor vehicles and engines as ARB has adopted a number of more stringent standards for fuels sold in California, including the Reformulated Gasoline program, low sulfur diesel requirements, and the Low Carbon Fuel Standard. These fuel standards, in combination with engine technology requirements, ensure that California's transportation system achieves the most effective emission reductions possible.

Taken together, California's emission standards, fuel specifications, and incentive programs for other mobile sources and fuels represent all measures that are technologically and economically feasible in the context of a RACM assessment.

6.2.2.2.6 Mobile Source Summary

California's long history of comprehensive and innovative emissions control has resulted in the most stringent mobile source control program in the nation. U.S. EPA has previously acknowledged the strength of the program in their approval of ARB's regulations and through the waiver process. In its 2011 approval of the Valley's 8-hour ozone plan which included the State's current program and new measure commitments, U.S. EPA found that there were no further RACM that would advance attainment of the standard in the Valley.

Since then, ARB has continued to substantially enhance and accelerate reductions from our mobile source control programs through the implementation of more stringent engine emissions standards, in-use requirements, incentive funding, and other policies and initiatives as described in the preceding sections.

The ARB process for developing the proposed State measures included an extensive public process and is consistent with U.S. EPA RACM guidance. Through this process ARB found that there are no additional RACM that would advance attainment of the 75 ppb 8-hour ozone standard in the Valley from emissions reductions associated with unused regulatory control measures. As a result, California's mobile source control programs fully meet the requirements for RACM.

6.2.2.3 Consumer Products

Consumer products are defined as chemically formulated products used by household and institutional consumers. For more than twenty five years, ARB has taken actions pertaining to the regulation of consumer products. Three regulations have set VOC limits for 129 consumer product categories. These regulations, referred to as the Consumer Product Program, have been amended frequently, and progressively stringent VOC limits and reactivity limits have been established. These are: Regulation for Reducing VOC Emissions from Antiperspirants and Deodorants; Regulation for Reducing Emissions from Consumer Products; and Regulation for Reducing the Ozone Formed from Aerosol Coating Product Emissions, and the Tables of Maximum Incremental Reactivity Values. Additionally, a voluntary regulation, the Alternative Control Plan has been adopted to provide compliance flexibility to companies. The program's most recent rulemaking occurred in 2013.

U.S. EPA also regulates consumer products. U.S. EPA's consumer products regulation was promulgated in 1998, however, federal consumer products VOC limits have not been revised since their adoption. U.S. EPA also promulgated reactivity limits for aerosol coatings. As with the general consumer products, California's requirements for aerosol coatings are more stringent than the U.S. EPA's requirements. Other jurisdictions, such as the Ozone Transport Commission states, have established VOC limits for consumer products which are modeled after the California program. However, the VOC limits typically lag those applicable in California.

In summary, California's Consumer Products Program, with the most stringent VOC requirements applicable to consumer products, meets RACM.

6.2.2.4 Pesticides

The DPR is the State agency responsible for regulating the application of pesticides, which are a significant source of VOCs in the San Joaquin Valley. DPR has adopted and implemented regulations to limit VOC emissions from use of agricultural fumigant and nonfumigant pesticides in the San Joaquin Valley. In October 2012, U.S. EPA approved DPR regulations requiring the use of low-emitting fumigation methods in the Valley and a commitment to manage VOC emissions from the use of pesticides to ensure they do not exceed 18.1 tons per day (tpd), as an average during the May-October period.¹ This emissions ceiling represents a 12 percent reduction from 1990 pesticide VOC emissions in the Valley. DPR is also required to annually prepare and make available to the public a pesticide emission inventory to track VOCs and determine compliance. U.S. EPA found the fumigant regulations provide for RACT for fumigant application in the San Joaquin Valley. Most recently, DPR amended the fumigant regulations effective April 2016, adding new low-emitting fumigation methods.

In February 2016, U.S. EPA proposed approval of nonfumigant regulations DPR adopted in 2013. Since nonfumigant emissions account for the majority of the pesticide

¹ 77 FR 65294, <https://www.gpo.gov/fdsys/pkg/FR-2012-10-26/pdf/2012-26311.pdf>

VOC emissions in the San Joaquin Valley, these regulations prohibit the use of certain high-VOC nonfumigant pesticides applied to specified crops in the San Joaquin Valley, if the estimated VOC emissions from nonfumigant use exceed 95 percent of the 18.1 tpd emissions ceiling for pesticides during the May-October ozone season. Once triggered, these prohibitions remain in effect until the estimated VOC emissions from nonfumigants comply with the VOC limit for at least two consecutive years. Requiring the restrictions during the ozone season and not year-round may have the added benefit of reducing emissions by shifting applications to other seasons, but would not provide additional emission reductions in the ozone season.

DPR is the regulator to reduce VOC emissions from the use of nonfumigant agricultural pesticides in the Valley, the most stringent in the State. As part of the regulation submittal process, DPR conducted an Analysis of Alternatives for Nonfumigant Pesticide Products. U.S. EPA found nonfumigant pesticides are subject to RACM but not to Reasonably Available Control Technology (RACT) requirements, because there are no major sources of nonfumigant VOCs in the Valley and no relevant U.S. EPA Technical Control Guidelines.² However, U.S. EPA pointed out that DPR has demonstrated these fumigant regulations are stringent enough to implement RACT-level controls on the application of pesticides.³ U.S. EPA also indicated these rules are consistent with the Act requirements and existing guidance on enforceability, stringency, and SIP revisions.²

Based on DPR's assessment, no other state requires measures to reduce VOC emissions from pesticides. In summary, DPR's pesticide regulations represent all measures that are technologically and reasonably available in the context of the 2016 8-hour Ozone Plan.

6.2.3 Metropolitan Planning Organizations (MPOs) RACM Demonstration

As discussed in Appendix D of this plan, all reasonable control measures under MPO jurisdiction are being implemented. There are no reasonable regulatory control measures excluded from use in this plan; therefore, there are no emissions reductions associated with unused regulatory control measures.

6.2.3.1 RACM Demonstration Conclusion

There are no reasonable regulatory control measures from any agency's jurisdiction that have been excluded from use in this plan; therefore, there are no emissions reductions associated with unused regulatory control measures.

² 81 FR 6481 <https://www.gpo.gov/fdsys/pkg/FR-2016-02-08/pdf/2016-02314.pdf>

³ U.S. EPA, 2016, Technical Support Document for EPA's Proposed Rulemaking for the California State Implementation Plan Revisions to the Department of Pesticide Regulation Nonfumigant Regulations

6.3 REASONABLE FURTHER PROGRESS (RFP) & CONTINGENCY FOR RFP

[This section provided by California Air Resources Board]

Clean Air Act (CAA) sections 172(c)(2) and 182(b)(1) require attainment plans to provide for reasonable further progress (RFP). RFP is defined in CAA section 171(1) as annual incremental reductions for the purpose of ensuring attainment by the attainment year. This requirement to show steady progress in emission reductions between the baseline year and attainment date ensures that areas will not delay implementation of emission control programs until immediately before the attainment deadline.

There are two separate requirements for nonattainment areas depending upon their classification. The first is a one-time requirement for a 15 percent reduction in Reactive Organic Compounds (ROG, also commonly called Volatile Organic Compounds, or VOC) emissions between the years of 1990 and 1996 for nonattainment areas classified as moderate or above (section 182(b)(1)). The second is an additional 3 percent per year reduction of ozone precursor emissions until attainment for ozone nonattainment areas classified as serious or higher (section 182(c)(2)(B)).

In addition to the RFP requirements, CAA section 172(c)(9) requires that plans provide for contingency measures in case the area fails to make RFP. U.S. EPA has interpreted this requirement to represent one year's worth of emission reduction progress, amounting to 3 percent reductions, to be achieved by measures that are already in place or that would take effect without further rulemaking action.

6.3.1 Fifteen Percent ROG-only Rate of Progress Requirement

The March 2015 U.S. EPA implementation rule (Rule) for the 2008 8-hour ozone standard interprets the CAA RFP requirements, establishing requirements for RFP that depend on the area's classification and whether the area has an approved 15 percent ROG-only reduction plan for a previous ozone standard that covers all of the 2008 8-hour ozone nonattainment area (80 FR 12264). In 1997, EPA approved a 15 percent rate of progress plan for the San Joaquin Valley for the 1-hour ozone standard covering the entire nonattainment area for the 2008 8-hour ozone standard (62 FR 1150). As a result, the 15 percent ROG-only requirement has been met for the San Joaquin Valley.

6.3.2 Reasonable Further Progress Requirements

Per the Rule, the San Joaquin Valley must demonstrate an 18 percent reduction in ozone precursor emissions for the first six years of the attainment planning period, and an average emission reduction of 3 percent per year after that until the attainment date (80 FR 12264). As detailed in CAA section 182(b)(1)(C), these emission reductions must be achieved through existing programs.

The San Joaquin Valley RFP demonstration is achieved by forecasted emission reductions from existing control regulations as shown in the planning inventory. Both ROG and NO_x emission reductions are needed to meet the RFP reduction targets. The

NOx substitution is used on a percentage basis to cover any percentage shortfall in ROG reduction.

The table below demonstrates that the Valley meets the RFP targets in the milestone years of 2018, 2021, 2024, 2027, 2030, and 2031, with a three percent contingency set-aside in 2018 and carried through to 2031 per the requirements of the Rule.

Table 6-3 San Joaquin Valley 2008 8-hour Ozone NAAQS Reasonable Further Progress (tons NOx/day, summertime inventory)

Year	2012	2018	2021	2024	2027	2030	2031
ROG (with existing Measures)	337.3	303.7	298.8	296.3	296.1	297.4	296.7
Required % change since previous milestone year (ROG or NOx)		18%	9%	9%	9%	9%	3%
Required % change since 2012 (ROG or NOx)		18%	27%	36%	45%	54%	57%
Target ROG levels		276.6	251.7	229.0	208.4	189.7	184.0
Shortfall (-)/ Surplus (+) in ROG reductions needed to meet target		-27.1	-47.1	-67.3	-87.7	-107.7	-112.7
Shortfall (-)/ Surplus (+) in ROG reductions needed to meet target, %		-8.0%	14.0%	20.0%	26.0%	-32%	-33%
ROG reductions since 2012 used for contingency this milestone year, %		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ROG reductions shortfall previously provided by NOx substitution, %		0.0%	8.0%	14.0%	20.0%	26.0%	31.9%
Actual ROG reductions Shortfall (-)/ Surplus (+)		-8.0%	-5.9%	-6.0%	-6.1%	-5.9%	-1.5%
Year	2012	2018	2021	2024	2027	2030	2031
NOx (with existing measures)	339.6	230.4	200.5	159.0	144.8	134.6	131.9
Change in NOx since 2012		109.2	139.0	180.6	194.8	205.0	207.7
Change in NOx since 2012, %		32.2%	40.9%	53.2%	57.4%	60.4%	61.2%
NOx reductions since 2012 already used in ROG substitution & contingency through last milestone year, %		0.0%	11.0%	17.0%	23.0%	29.0%	34.9%
NOx reductions since 2012 available for ROG substitution & contingency in this milestone year, %		32.2%	29.9%	36.2%	34.4%	31.4%	26.2%
NOx reductions since 2012 used for ROG substitution in this milestone year, %		8.0%	5.9%	6.0%	6.1%	5.9%	1.5%
NOx reductions since 2012 used for contingency in this milestone year, %		3.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NOx reductions since 2012 surplus after meeting ROG substitution & contingency needs in this milestone year, %		21.1%	24.0%	30.2%	28.4%	25.4%	24.7%
RFP shortfall (-) in reductions needed to meet target, if any, %		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total shortfall (-) for RFP and contingency, if any, %		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
RFP met?		YES	YES	YES	YES	YES	YES
Contingency met?		YES	YES	YES	YES	YES	YES

6.4 CONTINGENCY FOR ATTAINMENT

Contingency measures are extra emissions reductions that go into effect without further regulatory action. In an attainment plan, the measures must be “extra” in the sense that the reductions are not accounted for in the attainment demonstration. Attainment contingencies are used if a region fails to attain a federal standard by the final attainment date. The need to implement attainment contingencies is based on ambient air quality data as the end of the attainment year. If EPA finds that an area fails to attain a standard on time, contingency reductions must be implemented automatically. Depending on the requirements associated with the standard in question, an area may have to adopt a new attainment plan or incur other penalties.

Additional guidance on the CAA contingency measure provisions is found in the General Preamble, 57 FR 13498, 13510-13512 and 13520. The guidance indicates that states should adopt and submit contingency measures sufficient to provide for three percent emissions reductions.

Attainment contingency can be satisfied from the additional reductions occurring between the attainment year and the following year – in this case, the reductions between 2031 and 2032. These reductions occur through continued implementation of adopted regulations. Similar to RFP, the 3% attainment contingency reductions can come from either VOC or NOx. The Valley is a NOx limited region, therefore NOx emissions reductions will be used to satisfy the attainment contingency.

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. While requiring contingency measures is a well-intentioned provision, it does not make sense in areas such as the San Joaquin Valley that have been classified as “extreme” non-attainment for ozone. With no stones left unturned in such plans, requiring contingency measures in such areas makes no sense.

The District could show expeditious attainment without the need to rely on “Black Box” provisions afforded under CAA §182(e)(5). Unfortunately, compliance with the contingency requirements under the federal Clean Air Act requires that the District hold back on 1.6 tons per day of NOx reductions. To ensure that the plan is approvable with the necessary contingencies, the plan needs to include a “Black Box.” The District however hopes that the state Air Resources Board or federal EPA can adopt and implement necessary strategies relating to mobile sources resulting in further reductions in emissions that could satisfy contingency requirements and avoid delays in attaining the standard expeditiously.

Table 6-4 Attainment Contingency Demonstration

	Attainment Contingency Demonstration	NOx (tons/day)
A	San Joaquin Valley Emissions with Adopted Control Strategy in 2031	131.9
B	San Joaquin Valley Emissions with Adopted Control Strategy in 2032	129.5
C	Required surplus emissions reductions needed to demonstrate 3% attainment contingency requirement	4
D	Emission reductions from existing measures achieved in 2032 (Line A – Line B)	2.4
E	Emissions reductions from existing control strategy deferred towards contingency requirement in 2032	1.6
F	Attainment contingency met? (Line D + Line E) ≥ Line C	Yes

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