## CALIFORNIA INFRASTRUCTURE SIP

# REVISION FOR THE 0.070 PARTS PER MILLION FEDERAL 8-HOUR OZONE STANDARD

Report Release Date: August 24, 2018 Public Hearing Date: September 27, 2018



[This page intentionally blank]

### **TABLE OF CONTENTS**

Introduction	
The Infrastructure SIP Provision	
Emission Limits and Other Control Measures (§110(a)(2)(A))	
Ambient Air Quality Monitoring/Data System (§110(a)(2)(B))	
On-Going Monitoring Requirements	
New Federal Monitoring Requirements	
Programs for Enforcement of Control Measures (§110(a)(2)(C))	
Enforcement of Stationary Source Control Measures	
PSD and NSR Permitting Programs	1
PSD Permitting Programs	1
Minor NSR Permitting Programs	1
Interstate Transport and International Pollution Abatement (§110(a)(2)(D))	1
Interstate transport - significant contribution to nonattainment (Prong 1) &	
Interstate transport - interfere with maintenance (Prong 2)	
§ 110(a)(2)(D)(i)(I)	1
Interstate transport - prevention of significant deterioration (Prong 3)	
§ 110(a)(2)(D)(i)(II)	1
Interstate transport - protect visibility (Prong 4) § 110(a)(2)(D)(i)(II)	1
Interstate and international pollution abatement § 110(a)(2)(D)(ii)	1
Adequate Personnel Resources (§110(a)(2)(E))	1
Legal Authority, Funding, and Personnel	
Compliance with CAA § 128	
Stationary Source Monitoring System (§110(a)(2)(F))	
Monitoring Stationary Source Emissions	1
Reporting Stationary Source Emissions	2
Correlating Stationary Source Emission Reports with Stationary Source	
Stationary Source Emission Limits	2
Emissions Inventory Responsibilities	
Emergency Power (§110(a)(2)(G))	
Authority to Halt Pollutant Emissions	
Contingency Plans for Emergency Episodes	
Future SIP Revisions (§110(a)(2)(H))	2
Consultation with Government Officials, Public Notification, PSD, and	
Visibility Protection (§110(a)(2)(J))	2
Consultation	2
Public Notification	3
PSD and Visibility Protection	3
Air Quality Modeling/Data (§110(a)(2)(K))	3
Permitting Fees (§110(a)(2)(L))	3
Consultation/Participation by Affected Local Entities (§110(a)(2)(M))	3
Environmental Analysis	4
,	

ATTACHMENT 1: RELEVANT CALIFORNIA HEALTH AND SAFETY CODE

SECTIONS INCLUDED FOR INFORMATION ONLY AND NOT

TO BE INCLUDED IN CALIFORNIA'S STATE

IMPLEMENTATION PLAN

ATTACHMENT 2: CALIFORNIA GOVERNMENT CODE AND CALIFORNIA

**CODE OF REGULATIONS SECTIONS SUBMITTED FOR** 

APPROVAL AS PART OF CALIFORNIA'S STATE

**IMPLEMENTATION PLAN** 

ATTACHMENT 3: 2018 ANNUAL MONITORING NETWORK REPORTS

INCLUDED FOR INFORMATION ONLY AND NOT TO BE INCLUDED IN CALIFORNIA'S STATE IMPLEMENTATION

PLAN

ATTACHMENT 4: CALIFORNIA GOOD NEIGHBOR STATE

**IMPLEMENTATION PLAN** 

### LIST OF TABLES

IABLE	1:	Recent Federal Standard Adoptions / Revisions and	_
TADLE	ე.	Infrastructure SIP Submittals	2
TABLE	2.	Examples of California SIP-Approved Emission Control Measures	7
TABLE	٥. 1٠	California Districts with SIP-Approved PSD Programs	′
IADLL	٦.	or PSD Delegation	11
TABI F	5.	Examples of Rules Requiring Continuous Stationary Source	
., .,	0.	Emissions Monitoring	20
TABLE	6:	Examples of Rules Governing Stationary Source Emission	
		Reporting Requirements	22
<b>TABLE</b>	7:	General Area Included in California Intrastate Air Quality	
		Control Regions	26
TABLE	8:	Threshold Concentrations for Priority I and II Areas and	
		Significant Harm Levels	26
TABLE	9:	Current and Proposed Priority Classifications for Emergency	
TADLE	40.	Episode Plan Requirements	27
IABLE	10:	SIP-Approved Emergency Episode Plans for Areas	20
TABLE	11.	Required to have a Plan  California Districts and Jurisdictional Area	28 31
		Sampling of Stakeholders Consulted During	31
IADLL	12.	SIP Development Process	32
TARI F	13.	California District Title V Rules and Permit Fee Information	38
II (DLL	10.	Camornia Biotriot Fide V Ftalos and F Similar So information	
		LIST OF FIGURES	
FIGUR	E 1:	California Metropolitan Planning Organizations (MPOs) and	
		Regional Transportation Planning Agencies (RTPAs)	33

[This page intentionally blank]

#### INTRODUCTION

Each time the United States Environmental Protection Agency (U.S. EPA) adopts a new National Ambient Air Quality Standard (federal standard, standard, or NAAQS) or revises an existing standard, the federal Clean Air Act (CAA) requires states to develop and submit an Infrastructure State Implementation Plan (SIP). An Infrastructure SIP is administrative in nature as it describes the authorities, resources, and programs a state has in place to implement, maintain, and enforce the federal standards. It does not contain any proposals for emission control measures.

The overarching framework or infrastructure for California's air quality programs is well established. As the air pollution control agency responsible for all purposes set forth in federal law (California Health and Safety Code (H&SC) § 39602), the California Air Resources Board (CARB) submitted California's first Infrastructure SIP in response to the CAA of 1970. U.S. EPA approved this submittal in 1979 (40 Code of Federal Regulations (CFR) § 52.220). CARB has submitted several Infrastructure SIP revisions since that time, in response to new or revised federal standards. These revisions build on previous Infrastructure SIP submittals. When U.S. EPA approves an Infrastructure SIP revision, it becomes part of the overall statewide SIP.

Table 1 summarizes the federal standards that U.S. EPA most recently adopted or revised. As shown in Table 1, CARB previously submitted Infrastructure SIP revisions to comply with changes to the 1997 ozone standard and 2008 ozone standard.

The Infrastructure SIP revision documented here, along with supporting Attachments 1 through 4, provides additional information addressing all infrastructure requirements for the 0.070 ppm 8-hour ozone standard. CARB acknowledges there may be some overlap between this Infrastructure SIP revision and the previous Infrastructure SIP submittal. In such cases, the information in this Infrastructure SIP revision supersedes those previous submittals. Furthermore, because most infrastructure elements are general in nature, many parts of this current revision will be relevant to any new or revised federal standards in the future.

TABLE 1: Recent Federal Standard Adoptions / Revisions and Infrastructure SIP Submittals

Pollutant	Year Standard Revised	Standard Level	Averaging Time	Date CARB Submitted Infrastructure SIP Revision
	1997	0.08 ppm*	8-hour	November 16, 2007
Ozone	one 2008	0.075 ppm	8-hour	March 6, 2014
Ozone	2008	0.075 ppiii	6-110u1	January 19, 2016
	2015	0.070 ppm	8-hour	Due October 1, 2018

<sup>\*</sup> ppm = parts per million.

#### The Infrastructure SIP Provision

Under CAA Section 110(a)(2)¹ each state is required to submit specific elements that must be addressed in an Infrastructure SIP. Conceptually, an infrastructure SIP provides assurance that a state's SIP contains the necessary structural requirements to implement the new or revised NAAQS, whether by demonstrating that the state's SIP already contains or sufficiently addresses the necessary provisions, or by making a substantive SIP revision to update the plan provisions to meet the new standards. In particular, this revision does not address the portion of Section 110(a)(2)(I), which pertains to the specific requirements for attainment plans for areas designated as nonattainment. U.S. EPA interprets these requirements to be outside the scope of the Infrastructure SIP. Furthermore, the CAA provides separate statutory schedules for submitting planning requirements for areas designated as nonattainment. Table 2 lists the page number of this document that addresses each relevant infrastructure element.

<sup>&</sup>lt;sup>1</sup> 42 U.S.C. § 7410(a)(2)

TABLE 2: Required Infrastructure SIP Elements\*

Infrastructure SIP Element	Clean Air Act Requirement	Page Number of Element Description
Emission Limits and Other Control Measures	§110(a)(2)(A)	Page 5
Ambient Air Quality Monitoring/Data System	§110(a)(2)(B)	Page 8
Programs for Enforcement of Control Measures	§110(a)(2)(C)	Page 10
Interstate Transport and International Pollution Abatement	§110(a)(2)(D)	Page 14
Adequate Resources	§110(a)(2)(E)	Page 16
Stationary Source Monitoring System	§110(a)(2)(F)	Page 18
Emergency Power	§110(a)(2)(G)	Page 25
Future SIP Revisions	§110(a)(2)(H)	Page 30
Consultation with Government Officials, Public Notification, PSD, and Visibility Protection	§110(a)(2)(J)	Page 30
Air Quality Modeling/Data	§110(a)(2)(K)	Page 37
Permitting Fees	§110(a)(2)(L)	Page 38
Consultation/Participation by Affected Local Entities	§110(a)(2)(M)	Page 40

<sup>\*</sup> Note that states are not required to address elements in CAA Section 110(a)(2)(I) in the Infrastructure SIP. CAA Section 110(a)(2)(I) is specific to nonattainment areas, and as U.S. EPA interprets the CAA, SIPs incorporating any necessary local nonattainment area controls are not due within three years of promulgation of the federal standard, but rather are due at the same time as the nonattainment area planning requirements (75 FR 6474).

[This page intentionally blank]

#### Emission Limits and Other Control Measures [CAA Section 110(a)(2)(A)]

This section of the CAA requires states to establish control measures and programs that limit emissions.

CARB and local air pollution control districts and air quality management districts (local districts or districts) have a long history of developing, implementing, and enforcing measures and programs aimed at controlling emissions. Over time, these measures and programs have resulted in significant air quality improvements. Some parts of the State still exceed the ozone standards, but with continued enforcement of existing control measures and the development and implementation of new measures, California continues to move toward the goal of attaining and maintaining the ozone standards, statewide.

#### **Discussion**

California H&SC Section 39002 divides emission control activities into vehicular and non-vehicular sectors. CARB has authority to adopt and implement mobile source controls. This authority extends to both on-road and off-road mobile sources, as well as to the fuels that power them (H&SC § 39602.5). CARB also has authority to regulate consumer products, under H&SC Section 41712(b). In contrast, local air pollution control districts have authority to adopt and implement stationary source controls. The stringency of these district rules can vary, depending on the nature and severity of the local air pollution problem. If a district fails to meet its responsibilities, CARB is authorized to act in its stead. Over time, California has implemented one of the most comprehensive and stringent emission control programs in the world. These controls limit the emission of all pollutants and their precursors subject to federal standards, and they reflect the effective air quality partnership that exists at the state and local levels.

Over the last several decades, CARB has dramatically tightened motor vehicle and fuel standards. New cars are now 99 percent cleaner than their uncontrolled counterparts, while trucks are 98 percent cleaner. In addition, California has implemented a number of programs to reduce emissions from mobile sources that are already in use, i.e. the legacy fleet. For example, the Smog Check program ensures that passenger vehicles stay clean as they age and that on-board diagnostic systems identify smog control problems. Heavy-duty truck inspection programs help control smoke emissions and detect emission control mal-maintenance and tampering. CARB has adopted in-use vehicle regulations and has drastically lowered emission standards for off-road sources, such as lawn and garden equipment, recreational vehicles and boats, and construction equipment.

In addition to regulating sources that fall under State control, CARB has worked closely with U.S. EPA to regulate emissions where authority is split between California and the federal government. These efforts have impacted emissions from large diesel, gasoline, and liquid petroleum gas equipment. Requirements to use cleaner low-sulfur diesel fuel for near-shore ships is providing important emission benefits in California, and new Tier 4 locomotive engines are over 90 percent cleaner than uncontrolled engines. In April 2017, CARB petitioned U.S. EPA to lower emission standards for locomotives to be cleaner than Tier 4 by 2025.

California's 35 local districts have primary authority to control emissions from stationary sources and small local businesses. These controls are generally implemented through a combination of prohibitory rules that set emissions limits by facility type, facility permits that specify equipment use and other operating parameters, and a New Source Review program designed to accommodate industrial growth while mitigating environmental impacts. Many district rules reflect established emission control technologies, while others reflect some of the newest and state of the art technologies. In combination, district rules cover a wide range of sources including refineries, manufacturing facilities, cement plants, refinishing operations, electrical generation and biomass facilities, boilers, and generators. Furthermore, California district rules are among the most stringent in the nation.

Table 3 provides a sampling of the wide range of statewide and district rules adopted over the years and submitted as part of California's SIP. The information provided includes a brief description of the rule, the pollutant or precursor emissions controlled, the rule number, and a citation for the Federal Register approval notice. A number of the measures listed are pollutant-specific, while others target multiple pollutants, thus maximizing the cost-benefit. The rules listed in Table 3 demonstrate actions taken by the State and districts to adopt and implement the control measures needed to attain and maintain the federal standards, as authorized in the H&SC. A list of CARB and district rules included in California's SIP is available on U.S. EPA's website<sup>2</sup>.

<sup>&</sup>lt;sup>2</sup> http://yosemite.epa.gov/R9/r9sips.nsf/Casips?readform&count=100&state=California

TABLE 3: Examples of California SIP-Approved Emission Control Measures

TABLE 3. Examples of Camornia 311 -			
Rule Description	Pollutant or Precursor Emission Controlled*	Rule / Regulation Number**	Federal Register Citation
Exhaust Emissions Standards and Test Procedures - 1985 & Subsequent Model Heavy-Duty Engines and Vehicles	HC, NO <sub>x</sub> , PM, CO	State Regulation 13 CCR 1956.8	75 FR 26653
Exhaust Emissions Standards and Test Procedures - 2004 & Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles	HC, NO <sub>x</sub> , PM, CO	State Regulation 13 CCR 1961	75 FR 26653
California Reformulated Gasoline Regulations	HC, SO <sub>x</sub>	State Regulation 13 CCR 2250-2297	60 FR 43379 75 FR 26653
Regulations for Large Spark-Ignition Engines and Off-Road Large Spark Ignition Engine Fleet Requirements	HC, NO <sub>x</sub>	State Regulation 13 CCR 2433 13 CCR 2775- 2775.2	80 FR 76468
Consumer Products	VOC	State Regulation 17 CCR Subchapter 8.5 Article 2	77 FR 7535
RECLAIM (Regional Clean Air Incentives Market) Program	NO <sub>x</sub>	South Coast AQMD Rule 2002	80 FR 43176
NO <sub>x</sub> Emissions from Natural Gas Fired, Fan-Type Central Furnace	NO <sub>x</sub>	South Coast AQMD Rule 1111	81 FR 17390
Crude Oil Production Sumps	НС	San Joaquin Valley APCD Rule 4402	77 FR 64227
Confined Animal Facility Operations	VOC	San Joaquin Valley APCD Rule 4570	77 FR 2228
Portland Cement Kilns	NO <sub>x</sub>	Mojave Desert AQMD Rule 1161	68 FR 9015
Glass Melting Furnaces	VOC, NO <sub>x</sub>	Mojave Desert AQMD Rule 1165	77 FR 39181
Transfer of Gasoline into Vehicle Fuel Tanks	НС	Sacramento Metro AQMD Rule 449	78 FR 898
Stationary Internal Combustion Engines Located at Major Stationary Sources of NOx	NO <sub>x</sub>	Sacramento Metro AQMD Rule 412	61 FR 18962
NOx and CO From Boilers, Steam Generators and Process Heaters in Petroleum Refineries	NO <sub>x</sub>	Bay Area AQMD Rule 10	73 FR 17896

 <sup>\*</sup> HC = hydrocarbons; NO<sub>x</sub> = oxides of nitrogen; PM = particulate matter; CO = carbon monoxide; SO<sub>x</sub> = oxides of sulfur; VOC = volatile organic compounds; SO<sub>2</sub> = sulfur dioxide.
 \*\* CCR = California Code of Regulations; AQMD = Air Quality Management District; APCD = Air Pollution Control District.

#### Ambient Air Quality Monitoring/Data System [CAA Section 110(a)(2)(B)]

This section of the CAA requires states to monitor, compile, and analyze ambient pollutant concentrations and provide the data to U.S. EPA.

California's air monitoring program began during the 1960s and over the last five decades, has developed into one of the largest and most comprehensive programs in the world. In most cases, California's monitoring program far exceeds the minimum federal requirements.

#### Discussion

Under H&SC Section 39602, CARB is designated as the air pollution control agency responsible for ensuring compliance with federal law. This includes ensuring the collection of ambient air monitoring data and subsequent submittal of those data, in conformance with federal requirements. Furthermore, State law authorizes CARB to establish a program to collect air quality data and to monitor air pollutants in cooperation with the districts and other agencies (H&SC §§ 39607(a), 39607(c)). In response to this directive, CARB, local districts, private contractors, and other government entities (for example, the National Park Service) have established one of the most extensive air monitoring networks in the world.

The following subsections summarize California's on-going monitoring network. Monitoring requirements for ozone were described previously in the Infrastructure SIP revisions already submitted.

#### On-Going Monitoring Requirements

California's overall monitoring network comprises more than 700 individual monitors operating at over 250 sites. Instruments at these sites collect data for a variety of air pollutants and air pollutant precursors, as well as a number of meteorological parameters. Current information about California's air monitoring program, including information about individual monitoring sites, is available on CARB's website<sup>3</sup>. Data collected at the individual monitoring sites are compiled, analyzed, and reported to U.S. EPA's Air Quality System and are also available on CARB's website<sup>4</sup>.

As required by federal regulations, CARB and local districts annually evaluate the adequacy of the State monitoring network to meet federal monitoring requirements, and every five years conduct a more thorough assessment. CARB prepares and submits an annual monitoring network report covering 25 of California's 35 districts. Each of the remaining 10 districts prepare and submit their own report. U.S. EPA uses these reports as the mechanism for approving the State's overall monitoring program and identifying areas where monitoring can be improved. Annual air monitoring network reports for all areas of California are available on the web. Links to these reports are included in Attachment 3.

8

<sup>&</sup>lt;sup>3</sup> https://www.arb.ca.gov/aqd/aqmoninca.htm

<sup>&</sup>lt;sup>4</sup> https://www.arb.ca.gov/adam

The annual monitoring network reports document the existing State and Local Air Monitoring sites, National Core multi-pollutant monitoring stations, Chemical Speciation Network sites, Special Purpose Monitoring sites, and Photochemical Assessment Monitoring sites operated by CARB and the districts, as well as other data providers such as the National Park Service in more than 30 Core Based Statistical Areas. In addition, the reports describe proposed changes (additions, relocations, and terminations) in the ambient air monitoring network that are anticipated within an 18 month period following submittal of the report to U.S. EPA.

California air quality data used for federal purposes are measured using U.S. EPA-approved methods with either Reference or Equivalent monitors. These monitors are subject to the quality assurance requirements of 40 CFR Part 58, Appendix A, and are located at sites that meet the minimum siting requirements of 40 CFR Part 58, Appendix E. The resulting data are submitted to U.S. EPA's Air Quality System in accordance with the schedule prescribed by U.S. EPA in 40 CFR Part 58.

#### New Federal Monitoring Requirements

The 0.070 ppm 8-hour ozone standard did not establish new monitoring requirements. The current monitoring network is adequate to continue monitoring to establish attainment status for this ozone standard.

#### <u>Programs for Enforcement of Control Measures</u> [CAA Section 110(a)(2)(C)]

This section of the CAA contains three requirements. First, it requires states to enforce stationary source control measures. Second, it requires states to issue preconstruction permits to major sources and major modifications in areas designated as attainment or unclassifiable for a federal standard (Prevention of Significant Deterioration (PSD) program). Finally, it requires states to regulate new and modified minor sources and minor modifications of major sources (minor New Source Review (NSR) program).

California's compliance with all CAA requirements, including Section 110(a)(2)(C), rests with CARB and California's 35 local air districts. While CARB has primary responsibility for regulating mobile source emissions in the state, the air districts have primary responsibility for regulating station source emissions. Each district satisfies CAA Section 110(a)(2)(C) requirements by having a stationary source enforcement program and a minor-source, non-attainment NSR permitting program. CAA Section 110(a)(2)(C) also requires a state to have a SIP-approved PSD permit program.

#### Discussion

#### **Enforcement of Stationary Source Control Measures**

California H&SC Section 40000 gives districts the authority to control air pollution from stationary sources. This includes authority to adopt and enforce district rules and regulations needed to achieve and maintain the federal ambient air quality standards. In addition to the above authority with respect to district rules, State law gives districts

responsibility to enforce all applicable provisions of State and federal law (H&SC § 40001(a)). If a district fails to meet its responsibilities, CARB is authorized as the oversight agency to act in its stead (H&SC § 39002).

#### PSD and NSR Permitting Programs

The authority given to districts under H&SC Section 40000 extends to the adoption and enforcement of relevant PSD and minor NSR permitting programs. The type of permitting programs required for stationary source projects are determined by the attainment status of an area. PSD permits are required in areas that are designated as attainment or unclassifiable for a federal standard. In contrast, NSR permits are generally required in areas designated as nonattainment. In practice, stationary source permitting programs are quite complex, and permits can cover multiple pollutants, some of which require NSR permits and others that require PSD permits. The same source may require both types of permits, because the designation status for the different pollutants can differ within a particular area (e.g. an area can be in attainment with the NAAQS for NO<sub>2</sub> but non-attainment for ozone). The CAA specifies the emission thresholds that trigger the permitting requirements. Furthermore, for major source NSR permits, the requirements can become increasingly stringent, based on an area's classification. For example, major source NSR requirements in an extreme ozone nonattainment area can be more stringent than requirements in a moderate ozone nonattainment area.

In addition to the above requirements, stationary source projects with emissions below the trigger levels for PSD and NSR permits may be subject to a minor NSR permitting program. Like major NSR, minor NSR is intended to prevent the construction of sources that would interfere with attainment or maintenance of a federal standard in an area, or would violate the control strategy in a nonattainment area.

In California, major and minor NSR permits are issued by local districts, while PSD permits are issued either by local districts, U.S. EPA, or a combination of the two. Major NSR permit requirements are beyond the scope of the Infrastructure SIP and therefore, are not included here. They are however, included as part of an area's nonattainment SIP.

#### **PSD Permitting Programs**

PSD permits are pre-construction permits required for new major sources or major modifications to existing major sources in areas designated as unclassifiable or attainment with NAAQS. All areas of California are designated as unclassifiable or in attainment with NAAQS for NO<sub>2</sub>, SO<sub>2</sub>, and CO; therefore, PSD applies statewide for new major sources or major modifications to existing major sources of these pollutants. PSD applies in unclassifiable or attainment areas for the remaining pollutants and their precursors: ozone, PM, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead. A PSD permit is required for GHG emissions only when a facility is already required to obtain a PSD permit for other pollutants. Currently, facilities are not required to obtain PSD permits for GHG emissions alone.

In California, 14 districts have a SIP-approved PSD permit program satisfying the requirements of CAA Section 110(a)(2)(C). Four other districts have a limited applicability SIP-approved PSD permit program and a Federal Implementation Plan (FIP), and, therefore, do not fully satisfy the requirements of CAA Section 110(a)(2)(C) because U.S. EPA retains authority under a FIP to permit certain types of sources. Table 4 lists the districts with SIP-approved PSD rules.

TABLE 4: California Districts with SIP-Approved PSD Programs or PSD Delegation

PSD Authority in California			
District	Rule/Agreement	Effective Date	Authority
Bay Area Air Quality Management District	Bay Area Agency-Wide Provisions (Rules 2-1 & 2-2)	05/21/2018	SIP
Butte County Air Quality Management District	Butte County Agency-Wide Provisions (Rule 1107)	11/12/2015	SIP
Eastern Kern Air Pollution Control District	Kern County Agency-Wide Provisions (Rule 210.4)	02/08/2013	SIP
Feather River Air Quality Management District	Feather River Agency-Wide Provisions (Rule 10.10)	11/12/2015	SIP
Great Basin Unified Air Pollution Control District	Great Basin Agency-Wide Provisions (Rule 221)	11/12/2015	SIP
Imperial County Air Pollution Control District	Imperial County Agency-Wide Provisions (Rule 904)	02/08/2013	SIP
Mendocino County Air Quality Management District	Mendocino Agency-Wide Provisions (Rules 130, 200, 220, 230 & 240)	07/03/2017	SIP <sup>5</sup>
Monterey Bay Air Resources District	Monterey Bay Agency-Wide Provisions (Rule 207)	03/26/2015	SIP
North Coast Unified Air Quality Management District	North Coast Agency-Wide Provisions (Rules 130, 200, 220, 230 & 240)	08/30/1985	SIP <sup>2</sup>
North Coast Unified Air Quality Management District	Partial PSD Delegation Agreement (Stack height, NOx increment)	01/08/1993	Delegation
North Coast Unified Air Quality Management District	Partial PSD Delegation Agreement (NOx major modifications)	10/06/2015	Delegation
Northern Sonoma County Air Pollution Control District	Northern Sonoma Agency-Wide Provisions (Rules 130, 200, 220, 230 & 240)	10/06/2016	SIP <sup>2</sup>

\_

<sup>&</sup>lt;sup>5</sup> EPA retains authority to issue permits for certain specific types of projects, such as resource recovery facilities. See 40 CFR Section 52.270 for additional details.

PSD Authority in California				
District	Rule/Agreement	Effective Date	Authority	
Placer County Air Pollution Control District	Placer County Agency-Wide Provisions (Rule 518)	02/08/2013	SIP	
Sacramento Metro Air Quality Management District	Sacramento Metropolitan Agency-Wide Provisions (Rule 203)	07/20/2011	SIP	
San Joaquin Valley Air Pollution Control District	San Joaquin Valley Agency-Wide <u>Provisions</u> (Rule 2410)	11/26/2012	SIP	
San Luis Obispo Air Pollution Control District	San Luis Obispo Agency-Wide Provisions (Rule 220)	11/12/2015	SIP	
Santa Barbara County Air Pollution Control District	Santa Barbara Agency-Wide Provisions (Rule 810)	11/12/2015	SIP	
South Coast Air Quality Management District	South Coast PSD Delegation Agreement (Excluding GHG)	07/25/2007	Delegation	
South Coast Air Quality Management District	South Coast Agency-Wide Provisions - GHG Emissions only (Rule 1710)	12/10/2012	SIP	
Ventura County Air Pollution Control District	Ventura County Agency-Wide <u>Provisions</u> (Rule 26.13)	03/10/2017	SIP	
Yolo–Solano Air Quality Management District	Yolo–Solano Agency-Wide Provisions (Rule 3.24)	02/08/2013	SIP	

#### Minor Non-attainment NSR Permitting Programs

Non-attainment NSR programs are subdivided into major-source NSR and minor-source NSR. Minor NSR permitting programs are required in all areas regardless of attainment status. In contrast, major NSR applies only in nonattainment areas. U.S. EPA has determined that states do not need to address major NSR programs in their Infrastructure SIP because they are beyond the scope of the Infrastructure SIP. However, states must include information about minor NSR programs 40 CFR Sections 51.160 - 164.

The purpose of a minor NSR program is to prevent the construction of stationary sources that would interfere with attainment or maintenance of a federal standard or would violate the control strategy in a nonattainment area. In contrast to PSD programs, minor NSR programs address pollutants from stationary sources with lower emission levels than those triggering PSD.

As mentioned previously, local districts are responsible for regulating stationary sources in California (H&SC §§ 39002, 40000). This includes responsibility for adopting and enforcing rules and regulations to achieve and maintain the federal standards in all areas affected by emission sources under their jurisdiction and for enforcing all

applicable provisions of federal law (H&SC § 40001(a)). This responsibility extends to implementing a minor NSR program. Each of California's 35 local districts administers its own minor NSR program. Local districts have been issuing stationary source permits since the 1970s, and local NSR programs are at least as stringent, or more stringent, than federally required. In addition, CARB maintains a comprehensive listing of district NSR rules<sup>6</sup>. Many of these NSR rules are SIP-approved. Additional information about the approval status of district NSR rules is available from U.S. EPA.

## <u>Interstate Transport and International Pollution Abatement [CAA Section 110(a)(2)(D)]</u>

This section of the CAA prohibits the transport of pollutants from one state to another, where the pollutant could contribute significantly to violations of a federal standard, interfere with maintenance of a federal standard, or contribute to reduced visibility.

California has longstanding programs to reduce pollutant and precursor emissions from all types of sources as part of the statewide strategy to attain the federal standards. These programs also reduce the potential for interstate and international transport of California emissions that would contribute to violations or interfere with maintenance of a federal standard in another area. In addition to nonattainment and maintenance issues, pollutants can impact visibility. California's approved Regional Haze SIP mitigates any potential visibility impacts.

#### **Discussion**

CAA Section 110(a)(2)(D) contains three subsections: (D)(i)(I), (D)(i)(II) and (D)(ii). Subsection (D)(i)(I) addresses any emissions activity in one state that contributes significantly to nonattainment or interferes with maintenance of a federal standard in another state. These (D)(i)(I) requirements are generally referenced as "Prong 1" (significant contribution to nonattainment) and "Prong 2" (interference with maintenance).

Subsection (D)(i)(II) requires SIPs to include provisions prohibiting any emissions activity in one state from interfering with measures required of any other state to prevent significant deterioration of air quality or from interfering with measures required of any other state to protect visibility. These requirements are generally referenced as "Prong 3" (interference with PSD) and "Prong 4" (interference with visibility protection).

Subsection (D)(ii) addresses interstate and international pollution abatement regarding compliance with the applicable requirements of section 115 relating to international air pollution and compliance with the applicable requirements of section 126 relating to interstate air pollution.

Interstate Transport - Significant Contribution to Nonattainment (Prong 1) and Interstate Transport - Interference with Maintenance (Prong 2) CAA Section 110(a)(2)(D)(i)(I)

<sup>&</sup>lt;sup>6</sup> http://www.arb.ca.gov/nsr/dtvr.htm

CARB addresses Prongs 1 and 2 with its Good Neighbor SIP submission located in Attachment 4 for the 0.070 ppm 8-hour ozone standard. This attachment addresses potential downwind receptors which reach U.S. EPA's level of significance at sites that are projected to be nonattainment or maintenance in 2023 based on modeling conducting by the U.S. EPA. CARB has previously submitted a Good Neighbor SIP for the 0.075 ppm 8-hour ozone standard and in February of 2018, U.S. EPA proposed to approve this sip (83 FR 5375)

CARB's Infrastructure SIP demonstrates that California does not significantly contribute to nonattainment or interfere with maintenance of the 0.070 ppm 8-hour ozone standard in neighboring states.

Interstate Transport - Prevention of Significant Deterioration (Prong 3)
Section 110(a)(2)(D)(i)(II)

Previous California Infrastructure SIP submittals have also addressed Prong 3 (interference with PSD) and Prong 4 (interference with visibility protection). U.S. EPA approved California's submittals addressing Prong 3 (76 FR 48002, 81 FR 18766) and Prong 4 (76 FR 34608, 81 FR 18766) for the 1997 ozone and 2008 ozone standards. With respect to the other standards, the Infrastructure SIP Guidance indicates that Prong 3 is satisfied by SIP-approved PSD and NSR permitting programs. This is because SIP-approved PSD and NSR programs fully consider source impacts on air quality in other states. As described in the previous section titled Programs for Enforcement of Control Measures (CAA § 110(a)(2)(C)), 14 California districts have a SIP-approved PSD permit program satisfying the requirements of CAA Section 110(a)(2)(C). Four other districts have a limited applicability SIP-approved PSD permit program and a FIP, and, therefore, do not fully satisfy the requirements of CAA Section 110(a)(2)(C) because U.S. EPA retains authority under a FIP to permit certain types of sources. Table 33 in Attachment 4 lists the districts with SIP-approved PSD rules.

In contrast to PSD, which is implemented in attainment and unclassified areas to ensure that areas with good air quality continue to maintain good air quality, NSR is implemented in nonattainment areas to ensure that ambient air quality does not deteriorate further. Each California nonattainment district has adopted rules to implement federal NSR. Overall, these rules are as stringent, or more stringent, than federally required, and many of the rules have been approved as part of California's SIP. Current information about district NSR programs is available on U.S. EPA's website<sup>7</sup>. Regardless of how the PSD and NSR programs are implemented, programs in all California districts generally meet U.S. EPA requirements and therefore satisfy the Prong 3 requirements with respect to interference with PSD in other states.

<sup>&</sup>lt;sup>7</sup> https://www.epa.gov/caa-permitting/clean-air-act-permitting-california

#### Interstate Transport - Protect Visibility (Prong 4) Section 110(a)(2)(D)(i)(II)

Finally, the Infrastructure SIP Guidance states that Prong 4 (interference with visibility protection) is satisfied with an approved Regional Haze SIP. U.S. EPA fully approved California's Regional Haze SIP in June 2011 (76 FR 34608, June 14, 2011). A copy of the Regional Haze SIP is available on the CARB website<sup>8</sup> and satisfies the Prong 4 requirements for ozone. In addition, U.S. EPA approved California's previous Infrastructure SIP submittals for the 1997 ozone and 2008 ozone standards with respect to Prong 4 (76 FR 34608 (June 14, 2011) and 81 FR 18766 (April 1, 2016)).

#### Interstate and international pollution abatement [CAA Section 110(a)(2)(D)(ii)]

In addition to California's responsibilities specified under CAA Section 110(a)(2)(D), CAA Section 126 allows other states to petition the Administrator for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation of CAA Section 110(a)(2)(D)(ii). No such petitions have been filed for California. Furthermore, under CAA Section 115, the U.S. EPA Administrator may find that air pollutant(s) emitted in the United States cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare in a foreign country. The Administrator has not made any such findings for California.

#### Adequate Personnel Resources [CAA Section 110(a)(2)(E)]

This section of the CAA requires states and local districts to maintain adequate legal authority, funding, and personnel to implement their SIP and to comply with the conflict of interest and public interest requirements of CAA Section 128.

A majority of CARB and district budgets go toward meeting federal CAA mandates. Much of this funding comprises fees collected from regulated emission sources and dedicated to air pollution control activities. Additional funding comes from special program funds specifically earmarked for air quality efforts. CARB and districts have requirements in place that govern the conflict of interest and public interest requirements of CAA Section 128.

#### Discussion

#### Legal Authority, Funding, and Personnel

CARB is designated as the air pollution control agency for all purposes set forth in federal law and thus, has authority to carry out all SIP-related obligations (H&SC §§ 39600, 39602). This authority extends to implementing control activities in areas where local or regional authority fails to meets its responsibilities under state law (H&SC § 39002).

Each year, the California State Legislature approves CARB's funding and staff resources for carrying out CAA-related programs. Similarly, each year, district

<sup>&</sup>lt;sup>8</sup> http://www.arb.ca.gov/planning/sip/sip.htm

governing boards approve district budgets. The annual budget process provides a periodic update that enables CARB and the districts to adjust funding and personnel needs. Although it is not legally possible for CARB and the districts to provide specific commitments relative to future-year funding, the annual budget appropriations process undertaken by the California State Legislature enables CARB to present a request for resources required to meet the mandates of the CAA. These mandated programs have received State funding for more than three decades, and there is consistently strong public support in California for providing clean air. As of August 15, 2018, CARB's budget is \$1.370 billion per the Budget Act of 2018 (California Senate Bills 840 and 856). Therefore, it is reasonable to assume that implementation of CAA mandates will continue to be funded at an appropriate level.

Over the last several years, a majority of CARB's budget has gone toward meeting CAA mandates. Furthermore, a portion of CARB's budget comprises dedicated fees collected from regulated emission sources and other sources that can only be used for air pollution control activities. Most of CARB's fees are deposited into the Air Pollution Control Fund (APCF), as per H&SC Section 43015, "The Air Pollution Control Fund is continued in existence in the State Treasury. Upon appropriation by the Legislature, the money in the fund shall be available to the state board to carry out its duties and functions." Additionally, the revenues related to the ownership and operation of motor vehicles from fees and tax is deposited into the motor vehicle account. Per California Constitution Article XIX Section 3, these revenues shall be used for the mitigation of the environmental effects of the motor vehicles operations due to the air and sound emissions. Districts receive funding from fees paid by regulated businesses, motor vehicle registration fees, State and federal grants, and other local revenue sources. Collectively, the 2017-2018 CARB and district budgets totaled over \$2.2 billion, with more than 3,600 full-time equivalent staff positions.

#### Compliance with CAA Section 128

CAA Section 128(a) requires that SIPs contain legal requirements that any board approving permits or enforcement orders have a majority of members that "represent the public interest and do not derive any significant portion of their income from persons subject to permits or enforcement orders" and that those members, and the heads of executive agencies with similar powers, must disclose any potential conflicts of interest.

To satisfy Section 128(a), California submits the following California statutes and regulations under the California Political Reform Act of 1974 for inclusion in the SIP: California Government Code Sections 82048, 87103, and 87302 and CCR, Title 2, Section 18700 (refer to Attachment 2). In the aggregate, these statutes and rules satisfy the requirements of CAA Section 128(a) as detailed below.

Under Government Code Section 82048, a "public official" is "every member, officer, employee, or consultant of a state or local government" (Government Code § 82048(a)). CCR, Title 2, section 18700 explains that "member," within the meaning of Government Code Section 82048, includes any "individual who performs duties as part of a committee, board, commission, group, or other body" that "possesses decisionmaking authority" (CCR, Title 2, § 18700(c)(2)). Under this broad definition, those who approve permits or enforcement orders within California (e.g. hearing board members, local

district board members, or air pollution control officers) are "public officials" under California law.

Under CCR, Title 2, Section 18700, "public officials" may not "make, participate in making, or in any way use or attempt to use his/her official position to influence a governmental decision in which he/she knows or has reason to know he/she has a disqualifying conflict of interest" (CCR, Title 2, § 18700(a)). A conflict of interest exists if "the decision will have a reasonably foreseeable material financial effect on one or more of his/her economic interests..." (*Ibid.*). Section 18700's limitations on a public official's actions are on-going, and a public official must abide by them throughout his or her time as a public official.

Government Code Section 87103 defines a public official's "financial interest in a decision" as a situation where it is "reasonably foreseeable that the decision will have a material financial effect, distinguishable from its effect on the public generally, on the official, [or] a member of his or her immediate family." Section 87103 also provides that a public official has a financial interest in a decision if it involves: a business or property in which they have \$2,000 or more invested; any source of income amounting to \$500 or more within a year; any business where they are a director, officer, trustee, employee, or manager; or any donor who has given them \$250 or more within a year (Government Code § 87103, sub. (a) - (e)).

A board member's obligation to disclose potential conflicts of interest flows from Government Code Section 87302. Such disclosure is accomplished by the regular filing of a "Form 700" statement (CCR, Title 8, § 16430) of their economic interests. These statements are made public by the California Fair Political Practices Commission.

Together, these five statutes and regulations function to satisfy both the board composition and conflict of interest avoidance and disclosure requirements of CAA Section 128(a).

#### Stationary Source Monitoring System [CAA Section 110(a)(2)(F)]

This section of the CAA calls for states to require owners and operators of stationary sources to install, maintain, and replace equipment for monitoring stationary source emissions, to provide periodic reports on these emissions, and to correlate these reports with emission limits.

Local districts are responsible for developing stationary source emission monitoring and reporting requirements. In many cases, these monitoring and reporting requirements are part of the source-operating permit and go beyond federal requirements.

17

#### Discussion

Districts are responsible for monitoring emissions from stationary sources. Under the H&SC, districts must adopt and enforce rules and regulations to achieve the federal standards and must enforce all applicable provisions of federal law, which includes determining source-specific emissions (H&SC §§ 40001(a), 41511). Furthermore, districts are given the right of entry for the purpose of inspecting emission sources, including securing samples of emissions or securing records required to be maintained (H&SC § 41510).

The following subsections provide information on monitoring stationary source emissions, reporting stationary source emissions, and correlating emission reports with emission limits in permits and rules. In addition to a general discussion, each subsection includes examples of applicable rules that address the requirements. The cited examples are only a sampling of the relevant rules currently in place in California. California has 35 local districts, and each of these districts may have dozens of source-and industry-specific rules that include emissions monitoring and reporting requirements. Although this Infrastructure SIP includes only a few examples of applicable rules, lists of SIP-approved rules implemented in each local district are available on the web.<sup>9</sup>

#### Monitoring Stationary Source Emissions

California districts are responsible for implementing stationary source emission monitoring requirements. The federal stationary source emission monitoring requirements are set forth in 40 CFR Section 51.212, and the emission thresholds for sources subject to the emission monitoring requirements are specified in U.S. EPA's Air Emissions Reporting Requirements (AERR) Rule<sup>10</sup>.

Stationary source emissions reported under the AERR Rule include lead,  $NO_x$ ,  $PM_{2.5}$ ,  $SO_2$ , VOCs, and ammonia. Stationary sources subject to the annual and three-year AERR Rule reporting cycles are defined in 40 CFR Section 51.50, based on their level of emissions. Furthermore, the specified emission levels vary by pollutant. For example, the AERR Rule requires facilities emitting 2,500 tons per year (tpy) or more of  $NO_x$  to report their emissions annually, while facilities emitting from 100 to 2,499 tpy of  $NO_x$  report once every three years. In contrast, reporting requirements for  $PM_{2.5}$  sources are much lower. Facilities emitting only 250 tpy or more of  $PM_{2.5}$  must report their emissions annually, while facilities emitting from 100 to 249 tpy report once every three years.

Rules applicable in California require stationary source owners and operators to determine the amount of pollutants emitted by their facilities. Districts typically fulfill the stationary source monitoring requirements by adopting regulations that establish emission limits and other requirements, including emission reporting, for each industrial and commercial activity that significantly contributes federal standard-relevant air

<sup>&</sup>lt;sup>9</sup> California's district rules may be accessed at the District Rules Database maintained on CARB's website (<a href="http://www.arb.ca.gov/drdb/drdb.htm">http://www.arb.ca.gov/drdb/drdb.htm</a>). U.S. EPA-approved versions of the rules are largely available on Region 9's website (<a href="http://yosemite.epa.gov/r9/r9sips.nsf/Casips?readform&count=100&state=California">http://yosemite.epa.gov/r9/r9sips.nsf/Casips?readform&count=100&state=California</a>). <sup>10</sup> 40 CFR Part 51, Subpart A,

pollution in a given area. This includes any source emitting pollutants at rates above the AERR Rule thresholds. Once adopted, the district rules may be submitted to U.S. EPA for approval. The rules listed in Table 5 provide some examples of U.S. EPA-approved rules that fulfill the stationary source emission monitoring and reporting requirements. Some of the rules are generally applicable to all emission sources, while others are tied to specific stationary source categories and/or emission thresholds. Many of these rules contain requirements to make the data publically available. If not specified, public availability is generally covered under State law.<sup>11</sup>

The data resulting from such stationary source emission monitoring rules can be used for a variety of compliance purposes, including use as credible evidence to assess penalties in the event of an emissions limit violation, consistent with CAA Section 113(e) – Penalty Assessment Criteria.

<sup>&</sup>lt;sup>11</sup> California Government Code, Title 1, Division 7, Chapter 3.5, Inspection of Public Records, Article 1, § 6254.7, subdivision (b) provides for public availability of emissions data. Under subdivision (b), "All air or other pollution monitoring data, including data compiled from stationary sources, are public records" (http://leginfo.legislature.ca.gov/faces/codes\_displaySection.xhtml?lawCode=GOV&sectionNum=6254.7).

TABLE 5: Examples of Rules Requiring Continuous Stationary Source Emissions Monitoring

District	Rule Number	Description	Federal Register Citation
Bay Area AQMD	Regulation 2 Rule 1-501	Specifies that Continuous Emission Monitoring Systems (CEMS) required by the District to measure or analyze source emissions or ground-level concentrations of air contaminants at stationary sources must comply with the Bay Area AQMD's Manual of Procedures, Volume V, Continuous Emission Monitoring Policy and Procedures (49 FR 18822), which in turn includes requirements for equipment installation, maintenance, testing, record retention, reporting, and notification of violations and equipment breakdown.	64 FR 3850
Placer County APCD	Rule 233	Section (500) requires facilities to install, calibrate, operate, and maintain CEMS in accordance with applicable requirements in 40 CFR Part 60, Appendices B and F for oxides of nitrogen (NO <sub>x</sub> ). The rule also requires quarterly reporting of excess emissions and monitoring systems performance to the District's Air Pollution Control Officer (APCO) and specifies approved emissions test methods for NO <sub>x</sub> , including calculation procedures to correlate measured emissions with applicable emissions standards.	78 FR 53249
San Diego County APCD	Rule 69.3	Section (e) requires continuous monitors for the operational characteristics of the unit and of any NO <sub>x</sub> emissions reduction system, record retention, and that such records be made available to San Diego County APCD upon request. Rule 69.3 also requires the performance of annual compliance testing using CARB test method 100, which includes calculation procedures to correlate measured emissions with applicable emissions standards.	62 FR 32691
San Diego County APCD	Rule 175	Section (A)(2) specifies that all air or other pollution monitoring data, including data compiled from stationary sources, are public records.	42 FR 23805
Santa Barbara County APCD	Rule 328	Section (C) requires fossil fuel fired steam generators to be continuously monitored for $NO_x$ , oxygen or carbon monoxide (CO), sulfur dioxide ( $SO_2$ ), and opacity, new nitric acid plants to be monitored for $NO_x$ , sulfuric acid plants to be monitored for $SO_2$ , and fluid bed catalytic cracking units to be monitored for $SO_2$ and opacity.	46 FR 27116
South Coast AQMD	Rule 1146*	Requires industrial, institutional, and commercial boiler, steam generator, and process heater units greater than or equal to 40 million British thermal units (Btu)/hour and an annual heat input greater than 200 x 10 <sup>9</sup> Btu/year to install a CEMS to monitor NO <sub>x</sub> emissions.	67 FR 16640
South Coast AQMD	Rule 1110.2*	Requires CEMS for NO <sub>x</sub> and CO for certain size gaseous-fueled and liquid-fueled engines.	74 FR 18995
San Joaquin Valley APCD	Rule 4354	Section (5.9) requires CEMS for $NO_x$ , CO, volatile organic compounds, and $SO_x$ from Glass Melting Furnaces under certain conditions. Section (6.2.3) requires the facility operator to maintain records and make them available or submit them on request to the APCO, CARB, or U.S. EPA.	78 FR 6740
Yolo-Solano AQMD	Rule 2.42	Section (303) requires a CEMS for $NO_x$ emissions from nitric acid production facilities. Section (500) requires that records of $NO_x$ emissions be made available on request.	75 FR 25778
Bay Area AQMD	Regulation 11 Rule 1-500	Requires lead emission sources to provide, install, and maintain monitoring equipment.	46 FR 43968

<sup>\*</sup> CEMS required under Rules 1146 and 1110.2 are also subject to South Coast AQMD Rule 218 – Continuous Emission Monitoring and Rule 218.1 – Continuous Emission Monitoring Performance Specifications. Rule 218 requires CEMS to generate the required data in the units of the applicable standard and provides that emission summaries submitted to the South Coast AQMD be available for public inspection, 75 FR 32293 (June 8, 2010)

#### Reporting Stationary Source Emissions

Federal requirements for stationary source emission data reporting are set forth in 40 CFR Sections 51.211 and 51.321, and the AERR Rule. Stationary source owners and operators are responsible for reporting emission data to the local district, consistent with the district's stationary source emission monitoring regulations (refer to previous discussion). Some districts have separate stationary source emission reporting requirements, as described in the examples cited in Table 6.

As stated previously, the examples cited in Table 6 are only a small sampling of the relevant rules currently in place in California. In addition, districts generally have other rules incorporated into the SIP that also require emission reporting for stationary sources. These include requirements that are part of a permit program and are often more stringent than the AERR Rule requirements. For example, the reporting requirements for the Ventura County APCD<sup>12</sup> and the South Coast AQMD<sup>13</sup> specify emission monitoring thresholds of 25 tpy and 10 tpy for both NO<sub>x</sub> and VOC for stationary sources located in all or some of the district's area, respectively.<sup>14</sup> These levels are lower than those required in the AERR Rule.

\_

<sup>12</sup> http://www.vcapcd.org/title v.htm

<sup>13</sup> http://www.aqmd.gov/home/permits/title-v

<sup>&</sup>lt;sup>14</sup> Revisions to Ventura County APCD and South Coast AQMD Title V Programs were approved on September 5, 2012 (77 FR 54383). For Ventura County APCD, see Rule 33 sections A and B.2 and Rule 33.3 section A.3. Ventura County APCD is classified as a "serious" ozone nonattainment area for the 1997 and 2008 8-hour standards (40 CFR Section 81.305). CAA Sections 182(c) and (f) define a major stationary source in serious ozone nonattainment areas as one that emits or has the potential to emit at least 50 tpy of VOC or NO<sub>x</sub>. However, Ventura County APCD Rule 26.1 (New Source Review – Definitions), section 18 defines a major source at a more stringent level of 25 tpy of NO<sub>x</sub> or VOC. Rule 26.1 was SIP-approved on January 11, 2010 (75 FR 1284). For South Coast AQMD, see Rule 3001 (Applicability, Title V Permits), and Rule 3004 (Permit Types and Content), sections (a)(4) and (b)(2). South Coast AQMD's Title V program was originally approved on December 7, 2001 (66 FR 63503), and the latest revision was approved on September 5, 2012 (77 FR 54383).

TABLE 6: Examples of Rules Governing Stationary Source Emission Reporting Requirements

District	Emission Reporting Requirements  Rule District Description		
	Number		Approval Citation
Bay Area AQMD	Regulation 2 Rule 1-429	Requires sources that emit or may emit VOC or $NO_x$ and subject to the Rule to provide the District a written statement showing actual emissions from the source. Bay Area Manual of Procedures, Volume 4 (Source Test Policy and Procedures; 47 FR 29231), section (1.6) states that [stationary] source test records are public information, but proprietary information is not.	60 FR 16799
Santa Barbara County APCD	Rule 212	Section (C) requires stationary sources subject to the Rule to provide the District with a written statement each year showing the actual emissions of reactive organic compounds and $NO_x$ at the facility during the preceding calendar year.	69 FR 29880
Santa Barbara County APCD	Rule 608	Specifies that the District shall make daily summaries of air monitoring data in such a form as to be understandable by the public and that the summaries shall be publically available records. This requirement applies to all pollutants.	47 FR 26618
San Diego County APCD	Rule 19.3	Section (c)(3) requires stationary sources that emit 25 tons/year or more of VOC or $NO_x$ to submit Emissions Statement Forms to the District, annually. Under District Rule 175 (42 FR 23805), all air pollution monitoring data, including data from stationary sources, are public records.	65 FR 12472
South Coast AQMD	Rule 1420.1	Section (m) specifies that the owner or operator of a large lead-acid battery recycling facility shall keep daily records, including documentation of the amounts of lead-containing materials processed, results of ambient air lead monitoring, housekeeping and maintenance activities, control device inspection and maintenance, and unplanned shutdowns and corrective actions. These records must be maintained for a period of five years, at least two years onsite. Section (n) contains specific public notification provisions for activities such as unplanned shutdown of a control device and construction, renovation, or demolition activities.	78 FR 5305
Yolo-Solano AQMD	Rule 3.18	Section (301) requires stationary sources that emit or may emit VOC or NO <sub>x</sub> and subject to the Rule to provide the District with a written statement showing actual emissions from the stationary source. Under Yolo-Solano AQMD Rule 1.1(103), all air monitoring data, including data compiled from stationary sources, are public records (69 FR 13234).	69 FR 29880

<sup>&</sup>lt;sup>15</sup> The local version of Yolo-Solano AQMD Rule 3.18, adopted July 28, 1993, is Rule 3.7 ("Emission Statements") and it retains the referenced emission reporting requirement under the same section number, section 301.

#### Correlating Stationary Source Emission Reports with Stationary Source Emission Limits

Federal requirements for correlating stationary source emission reports with the emission limits applicable to each source are set forth in 40 CFR Section 51.116, while requirements for making such reports available for public inspection are specified in the AERR Rule. Emission monitoring data provide a basis for determining whether facilities meet performance standards established in various rules. Furthermore, emission estimates for stationary sources rely in part, on accurate emission monitoring data. California H&SC Section 41511 authorizes CARB and local districts to adopt rules and regulations requiring any emission source owner or operator to take reasonable steps to determine the amount of emissions released from the source. This includes emissions that contribute to a violation of any federal standard. California's 35 districts address the requirement to correlate stationary source emission reports with stationary source emission limits through requirements embedded in their stationary source emission reporting rules and through their stationary source testing, inspection, and compliance programs.

To determine the amount of emissions coming from a particular source, districts have rules giving the Air Pollution Control Officer authority to request the installation, use, maintenance, and inspection of Continuous Emissions Monitoring Systems (CEMS) equipment and to assess source compliance with applicable emission limits. These rules may include calculation procedures to correlate measured stationary source emissions with applicable stationary source emission standards. Some districts have rules that closely mirror the correlation requirement of 40 CFR Section 51.116(c). Several examples of such rules are provided below. These example rules apply to all air contaminants, including pollutants with federal standards and their precursors, and have been approved by U.S. EPA.

- Mendocino County AQMD Rule 240(e)(3) Permit to Operate Compliance
   Verification (50 FR 30942, July 31, 1985) states that emission data obtained
   from owners or operators of stationary sources will be correlated with
   applicable emission limitations and other control measures and will be
   available to the public during normal business hours at the District Office, or
   submitted to U.S. EPA or CARB, upon request.
- Great Basin Unified APCD Rule 215(D) Public Availability of Emission Data (42 FR 28883, June 6, 1977) specifies that emission data obtained from owners or operators of stationary sources will be correlated with applicable emission limitations and other control measures and will be available to the public during normal business hours at the District's office.

In addition, all districts in California have federally-approved Title V permitting programs. Title V requires all major stationary sources and some minor stationary sources of air pollution to obtain an operating permit which specifies all air pollution requirements that apply to the source, including emission limits and monitoring, record keeping, and reporting requirements.

#### **Emissions Inventory Responsibilities**

CARB is responsible for compiling stationary source emissions data<sup>16</sup> from the districts and reporting the information to U.S. EPA. In addition, CARB maintains an emissions inventory that includes VOC, NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, lead, and ammonia emissions and comprises information for more than 14,000 stationary sources in California. The inventory exceeds federal CAA requirements as it includes emission data for sources that emit pollutants at rates lower than the AERR Rule reporting thresholds. In addition to emissions information for stationary sources, the inventory includes emissions data for other types of sources, including mobile sources (such as cars, trucks, and ocean going vessels), area-wide sources (such as residential water heaters, residential central furnaces, and managed burning and disposal), and wildfires. The emissions inventory is relevant to all pollutants with federal standards, including lead, NO<sub>2</sub>, ozone, PM<sub>10</sub>, PM<sub>2.5</sub>, and SO<sub>2</sub>.

#### Emergency Power [CAA Section 110(a)(2)(G)]

This section of the CAA requires states to provide for authority comparable to that in CAA Section 303, to develop a contingency plan for emergency episodes (emergency episode plan), and to have adequate authority to implement the emergency episode plan in areas that meet specified threshold concentrations.

State law grants CARB and the districts authority comparable to U.S. EPA's authority to halt pollutant emissions that could cause a public health emergency or nuisance. These laws apply to a variety of emission violations and specify penalties equivalent to or exceeding federal penalties for comparable violations.

To facilitate planning efforts, including emergency episode planning, U.S. EPA divided California into Intrastate Air Quality Control Regions (IAQCR) and classified each IAQCR as Priority I, II, or III with respect to emergency episode planning, based on threshold levels specified in the CFR. Priority I and II areas have specific emergency episode plan requirements that are designed to prevent ambient concentrations from reaching specified significant harm levels. Significant harm levels are set at 0.6 parts per million (ppm) averaged over two hours. The concentration threshold for IAQCRs to qualify as Priority I areas, and for which emergency episode plans are required, is set at the much lower level of 0.10 ppm, averaged over 1 hour. Priority III areas have no plan requirements.

California air quality has improved substantially over the last four decades. Most of the IAQCRs have air quality meeting the ozone standard of 0.12 ppm, averaged over 1-hour (also known as the 1-hour ozone standard). However, the 0.10 ppm threshold for Priority I areas is set at a level below the 1-hour standard. This threshold uses the maximum 1-hour value occurring in a 3-year period, which is a less stable metric than a design value, which is used to judge attainment status. Correspondingly, interannual

<sup>&</sup>lt;sup>16</sup> http://www.arb.ca.gov/ei/disclaim.htm

variability in maximum ozone levels may result in additional IAQCRs qualifying as Priority I areas -- even while the long-term design value trend across California points to steadily improving air quality. Therefore, CARB is proposing that U.S. EPA reclassify a number of areas with respect to emergency episode plan requirements, based on current air quality data.

#### Discussion

#### Authority to Halt Pollutant Emissions

Under CAA Section 110(a)(2)(G), states are to provide for authority comparable to that in CAA Section 303, which gives U.S. EPA legal authority to halt the emission of air pollutants causing or contributing to injury of the public or welfare. U.S. EPA is further authorized to either bring a lawsuit in federal court or, if such civil action cannot assure prompt protection of public health or welfare, to issue such orders as may be necessary to protect public health, welfare, or the environment.

The California and district authority that is comparable to that in CAA section 303 flows from H&SC Section 42400, et seq. These sections of California law apply to a range of emissions violations and impose penalties that are equivalent to or exceed federal penalties for comparable violations. These penalties include the imposition of fines and/or imprisonment.

As described earlier (refer to section titled Emission Limits and Other Control Measures [CAA Section 110(a)(2)(A)]), CARB is responsible for controlling emissions from vehicular sources, while districts are responsible for controlling emissions from non-vehicular sources. Under H&SC Section 41700, sources are prohibited from emitting any pollutant(s) that cause injury, detriment, nuisance, or annoyance to the public or that endanger the comfort, repose, health, or safety of the public. Furthermore, H&SC Section 42450, et seq., gives districts specific authority to abate emissions from any source violating H&SC Section 41700 or any other order, rule, or regulation that prohibits or limits the discharge of pollutants, consistent with applicable notice and hearing requirements. Under H&SC Section 41509, CARB or other local agency rules cannot infringe upon a district's authority to declare, prohibit, or abate a nuisance, and California's Attorney General is authorized to enjoin any pollution or nuisance, either on his or her own, or by request.

#### Contingency Plans for Emergency Episodes

In the early 1970s, U.S. EPA defined IAQCRs under CAA Section 197 to facilitate air quality planning and compliance with federal standards. A table summarizing the general area included in each California IAQCR is provided in Table 7. The formal IAQCR boundary descriptions are codified in 40 CFR Part 81, Subpart B. After defining the IAQCRs, U.S. EPA classified the IAQCRs as Priority I (most severe), II, or III (least severe) for ozone based on air quality data available at the time and using the threshold levels specified in 40 CFR Section 51.150 (refer to Table 8).

TABLE 7: General Area Included in California Intrastate Air Quality Control Regions

Intrastate Air Quality Control Region General Area Included*		Code of Federal Regulations (CFR) Reference
Great Basin Valley	Alpine, Inyo, and Mono counties	40 CFR § 81.159
Lake County	Lake County	40 CFR § 81.273
Lake Tahoe	Lake Tahoe Air Basin portion of El Dorado and Placer counties	40 CFR § 81.275
Metropolitan Los Angeles	Orange and Ventura counties; South Coast Air Basin portion of Los Angeles, Riverside, and San Bernardino counties; coastal portion of Santa Barbara County	40 CFR § 81.17
Mountain Counties	Amador, Calaveras, Mariposa, Nevada, Plumas, Sierra, and Tuolumne counties	40 CFR § 81.274
North Central Coast	Monterey, San Benito, and Santa Cruz counties	40 CFR § 81.160
North Coast	Del Norte, Humboldt, Mendocino, and Trinity counties; North Coast Air Basin portion of Sonoma County	40 CFR § 81.161
Northeast Plateau  Lassen, Modoc, and Siskiyou counties; northeast portion of Shasta County		40 CFR § 81.162
Sacramento Valley	Butte, Colusa, Glenn, Sacramento, Sutter, Tehama, Yolo, and Yuba counties; southwest portion of Shasta County; Sacramento Valley Air Basin portion of Solano County	40 CFR § 81.163
San Francisco Bay Area	Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties; San Francisco Bay Area Air Basin portion of Solano and Sonoma counties	40 CFR § 81.21
San Diego	San Diego County	40 CFR § 81.164
San Joaquin Valley Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare counties; San Joaquin Valley Air Basin portion of Kern County		40 CFR § 81.165
South Central Coast  San Luis Obispo County; non-coastal portion of Santa Barbara County		40 CFR § 81.166
Imperial County; Mojave Desert Air Basin portion of Kern, Southeast Desert Los Angeles, and San Bernardino counties; Mojave Desert and Salton Sea air basin portions of Riverside County		40 CFR § 81.167

Note that these descriptions are general in nature, and the IAQCR boundaries may not reflect current air basin boundaries because air basin boundaries have changed over time. The reader is referred to 40 CFR Part 81, Subpart B for the official IAQCR boundary descriptions

TABLE 8: Threshold Concentrations for Priority I and II Areas and Significant Harm Levels

Pollutant	Averaging Time	Relevant Concentration Averaging Time		for
ronatant	Averaging Time	Priority I Area Threshold	Priority II Area Threshold	Significant Harm Level
Ozono	1-Hour	0.10 ppm	none specified	none specified
Ozone	2-Hour	none specified	none specified	0.6 ppm

Once classified, the CAA requires states to develop emergency episode plans designed to prevent air pollution in the IAQCRs from reaching significant harm levels (refer to Table 8). Under 40 CFR Section 51.152, the most comprehensive emergency episode plans are required for Priority 1 areas, and less rigorous plans are required for Priority II

areas. No plans are required for Priority III areas. The original emergency episode priority classifications for all areas of California are codified in 40 CFR Section 52.221.

Since U.S. EPA originally established the priority classifications, California air quality has improved substantially. However, the ozone concentration levels for most IAQCRs are still above the specified threshold levels. After analyzing current ozone data from 2015 to 2017, CARB is requesting that U.S. EPA reclassify a number of Priority III areas as Priority I areas, with emergency episode plan requirements. The details of this proposed Priority Classification are summarized in Table 9 and described in the following subsections.

TABLE 9: Current and Proposed Priority Classifications for Emergency Episode Plan Requirements

	Ozone (Photochemical Oxidants)		
Intrastate Air Quality Control Region	Current U.S. EPA Approved Classification*	CARB Proposed Classification Based on 2015-2017 Data	
Great Basin Valley	III	III	
Lake County	III	1	
Lake Tahoe	III	III	
Metropolitan Los Angeles	I	I	
Mountain Counties	I	I	
North Central Coast	III	I	
North Coast	III	III	
Northeast Plateau	III	III	
Sacramento Valley	I	1	
San Diego	I	I	
San Francisco Bay Area	I	I	
San Joaquin Valley	I	I	
South Central Coast	III	I	
Southeast Desert	I	I	

<sup>\* 40</sup> CFR 52.221

After reviewing the hourly ozone data from 2015 to 2017 for all 14 controlling regions as listed in Table 7, CARB staff found that the priority classification would not change for eleven regions, of which seven are Priority I areas and four are Priority III areas. CARB requests that the remaining three regions (Lake County, North Central Coast and South Central Coast) be reclassified from Priority III areas to Priority I areas as shown in Table 9. Of the total ten Priority I areas, seven of them (Metropolitan Los Angeles, North Central Coast, Sacramento Valley, San Diego, San Francisco Bay Area, San Joaquin Valley and Southeast Desert) have emergency episode plans in place for all districts subject to this requirement. A number of other air districts in the other three Priority I areas do not currently have emergency episode plans in place, as detailed in Table 10. CARB staff would work with these air districts and U.S. EPA staff to help ensure development and submittal of approvable emergency episode plans.

TABLE 10: SIP-Approved Emergency Episode Plans for Areas Required to have a Plan

Intrastate Air Quality Control Region	Subarea	Regulation	Federal Register Citation
Lake County	Lake County AQMD	n/a	
Metropolitan Los Angeles	Santa Barbara County APCD (p)	Regulation 7	47 FR 26618
	South Coast AQMD (p)	Regulation 7	64 FR 14391
	Ventura County APCD	Regulation 8	64 FR 13351
Mountain Counties	Amador County APCD	n/a	
	Calaveras County APCD	n/a	
	El Dorado County AQMD (p)	None specified	40 FR 47300
	Mariposa County APCD	n/a	
	Northern Sierra APCD	n/a	
	Placer County APCD (p)	None specified	40 FR 76230
	Tuolumne County APCD	n/a	
North Central Coast	Monterey Bay Air Resources District	Regulation 7	52 FR 26148
Sacramento Valley	Sacramento Metro AQMD	Regulation 7	65 FR 53602
San Diego	San Diego County APCD	Regulation 8	64 FR 13351 and 47 FR 26619 and 43 FR 38826
San Francisco Bay Area	Bay Area AQMD	Regulation 4	55 FR 31833
San Joaquin Valley	San Joaquin Valley Unified APCD	Regulation 6	71 FR 8461
South Central Coast	San Luis Obispo County APCD	n/a	
Southeast Desert	Antelope Valley AQMD	Regulation 7	68 FR 10966
	Eastern Kern APCD (p)	Regulation 6	47 FR 26619 and 45 FR 37689
	Imperial County APCD	Regulation 6	46 FR 8472
	Mojave Desert AQMD	Regulation 7-(Riverside Co.) and Regulation 7- (San Bern. Co.)	45 FR 37428 and 47 FR 26618 and 45 FR 37428
	South Coast AQMD (p)	Regulation 7	64 FR 14391

<sup>(</sup>p) - portion of district

n/a – pollutant-specific emergency episode plan does not appear on Region 9 EPA website of the California SIP (https://www.epa.gov/air-quality-implementation-plans/approved-air-quality-implementation-plans-region-9?readform&count=100&state=California)

## Future SIP Revisions [CAA Section 110(a)(2)(H)]

This section of the CAA requires states to revise their SIP when an air quality standard is promulgated or revised, new attainment methods become available, or U.S. EPA determines a SIP is either inadequate or does not meet revised CAA requirements.

California has and will continue to submit revisions to its SIP, as mandated by U.S. EPA.

#### Discussion

H&SC Section 39602 designates CARB as the agency responsible for compliance with all purposes set forth in federal law. This includes responsibility for preparing and submitting SIP revisions in response to new or revised federal standards or improved methods for attaining those standards. It also includes responsibility for revising the SIP if U.S EPA finds the SIP inadequate for attaining the federal standards or inadequate with respect to meeting CAA requirements. CARB develops all SIP revisions in consultation with districts and other affected entities. In addition, all revisions are subject to public review and comment before being approved and submitted to U.S. EPA, as required by the CAA.

CARB is submitting this Infrastructure SIP revision for the 0.070 ppm 8-hour ozone standard in compliance with federal law. In the future, CARB will continue to work with local districts to develop approvable SIPs as federal standards change or new standards are implemented, new attainment methods become available, or U.S. EPA determines an existing SIP is inadequate or does not meet revised CAA requirements. CARB maintains a collection of recent SIP documents on its website<sup>17</sup>.

## Consultation with Government Officials, Public Notification, PSD, and Visibility Protection [CAA Section 110(a)(2)(J)]

This section of the CAA requires states to meet requirements of the CAA relating to consultation and public notification and to implement PSD and visibility protection programs for established federal standards.

CARB and local districts comply with all federal regulatory requirements, including requirements for consultation, notification, comment, and adoption. Furthermore, CARB has information available on its website about ambient pollutant concentrations and the health impacts from exposure in the ambient air. As described earlier, in response to CAA Section 110(a)(2)(C), PSD requirements are addressed at the district level. Visibility issues are addressed in California's approved Regional Haze SIP. Visibility issues are addressed in California's publicly reviewed and approved Regional Haze SIP, which includes a chapter<sup>18</sup> on required consultation with other states and Federal Land Managers.

#### Discussion

#### <u>Consultation</u>

CAA Section 121 requires states to provide a satisfactory process for consulting with general purpose local governments, designated organizations of elected local government officials, and any affected federal land manager in carrying out CAA requirements. H&SC Section 39602 designates CARB as the air pollution control

<sup>17</sup> https://www.arb.ca.gov/planning/sip/sip.htm

<sup>&</sup>lt;sup>18</sup> https://www.arb.ca.gov/planning/reghaze/rhplan.htm

agency for all purposes set forth in federal law. This authority extends to the preparation of the SIP and coordination of all district activities necessary to comply with the CAA. Consultation with local districts is a critical part of the SIP development process because districts provide local expertise and knowledge of local conditions. In addition, districts are, in part, responsible for enforcing SIP provisions. The districts are governed by Boards comprised primarily of elected officials, who also play a role in developing SIP provisions.

California's 35 districts come together under the California Air Pollution Control Officers Association (CAPCOA). CAPCOA promotes clean air and provides a forum for sharing knowledge, experience, and information among air quality regulatory agencies throughout the State. To help facilitate air quality progress, CAPCOA has organized a number of working groups that meet on an on-going basis to discuss air quality-related issues. To further coordinate air quality goals, CAPCOA meets regularly with State and federal air quality officials to develop statewide rules and to assure consistent application of rules and regulations. A list of California districts and the county or counties included in each one is provided in Table 11. Additional information about each district and the work CAPCOA facilitates is available through the CAPCOA website 19.

<sup>&</sup>lt;sup>19</sup> http://www.capcoa.org/

TABLE 11: California Districts and Jurisdictional Area

I ABLE 11: California Districts and Jurisdictional Area				
District Name	County/Counties Included in Jurisdictional Area			
Amador County APCD	Amador County			
Antelope Valley AQMD	Northeast Los Angeles County			
Pay Area AOMD	Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa			
Bay Area AQMD	Clara counties; west Solano County; south Sonoma County			
Butte County AQMD	Butte County			
Calaveras County APCD	Calaveras County			
Colusa County APCD	Colusa County			
El Dorado County AQMD	El Dorado County			
Feather River AQMD	Sutter and Yuba counties			
Glenn County APCD	Glenn County			
Great Basin Unified APCD	Alpine, Mono, Inyo counties			
Imperial County APCD	Imperial County			
Eastern Kern APCD	East Kern County			
Lake County AQMD	Lake County			
Lassen County APCD	Lassen County			
Mariposa County APCD	Mariposa County			
Mendocino County AQMD	Mendocino County			
Modoc County APCD	Modoc County			
Mojave Desert AQMD	Northeast San Bernardino County; east Riverside County			
Monterey Bay Air Resources District	Monterey, San Benito, Santa Cruz counties			
North Coast Unified AQMD	Del Norte, Humboldt, Trinity counties			
Northern Sierra AQMD	Nevada, Plumas, Sierra counties			
Northern Sonoma County APCD	North Sonoma County			
Placer County APCD	Placer County			
Sacramento Metro AQMD	Sacramento County			
San Diego County APCD	San Diego County			
San Joaquin Valley APCD	Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare counties; west Kern County			
San Luis Obispo County APCD	San Luis Obispo County			
Santa Barbara County APCD	Santa Barbara County			
Shasta County AQMD	Shasta County			
Siskiyou County APCD	Siskiyou County			
South Coast AQMD	Orange County; southwest Los Angeles County; southwest San Bernardino County; central & west Riverside County			
Tehama County APCD	Tehama County			
Tuolumne County APCD	Tuolumne County			
Ventura County APCD	Ventura County			
Yolo-Solano AQMD	Yolo County; east Solano County			
<u> </u>	· · · · · · · · · · · · · · · · · · ·			

In addition to the districts, CARB has longstanding working relationships with a number of other local, State, and federal stakeholders in developing the SIP. A sampling of the stakeholders consulted during development of the 2007 California SIP revision and the 2009 Regional Haze SIP is shown in Table 12. Collaboration with these other stakeholders strengthens the SIP and ensures continued progress toward attainment of all federal standards.

TABLE 12: Sampling of Stakeholders Consulted During SIP Development Process

Stakeholder Group		
California Metropolitan Planning Organizations*		
California Bureau of Automotive Repair		
California Department of Motor Vehicles		
California Energy Commission		
California Department of Transportation (CalTrans)		
State Water Resources Control Board		
Governor's Office of Planning and Research		
Department of Forestry and Fire Protection		
Federal Highway Administration		
Federal Department of Energy		
National Park Service		
State of Arizona		
State of Colorado		
State of Nevada		
State of Oregon		
Port of Los Angeles		
Port of Long Beach		
South Coast Air Quality Management Plan Advisory Group		
San Joaquin Valley Citizens Advisory Committee		
Central Valley Air Quality Coalition		
U.S. Bureau of Land Management		
U.S. Environmental Protection Agency		
U.S. Fish and Wildlife Service		
U.S. Forest Service		

<sup>\*</sup> A map of California Metropolitan Planning Organizations (MPOs) is shown in Figure 1.

FIGURE 1: California Metropolitan Planning Organizations and Regional Transportation Planning Agencies

## CALIFORNIA Metropolitan Planning Organizations(MPOs)

Regional Transportation Planning Agencies (RTPAs)



After a draft SIP is developed, H&SC Section 41650, et seq., requires CARB to conduct public hearings and to solicit testimony from the public, as well as from districts and other air quality planning agencies, when adopting nonattainment plans for inclusion in the SIP. Additionally, the California Administrative Procedures Act, Government Code Section 11340, et seq., requires notification and provision of comment opportunities to all parties affected by proposed regulations. Similarly, H&SC Section 40725 requires districts to conduct public hearings when adopting, amending, or repealing any rule. CARB will continue the process of collaborating with local, State, and federal entities and officials in developing SIP elements, as required by the CAA, as well as soliciting public input to the process.

Once a SIP is submitted to U.S. EPA for approval, the process of consultation and collaboration is ongoing. An example of this ongoing collaboration is the Clean Air Technology Initiative. CARB, along with U.S. EPA, the South Coast AQMD, the San Joaquin Valley APCD, and the California Environmental Protection Agency, signed a memorandum of agreement (MOA) committing to the development and testing of new technologies, in an effort to accelerate progress in meeting current and future federal standards. The goal of the MOA is to improve air quality by aligning agency research resources, where possible and appropriate, to evaluate innovative technologies that have the potential to reduce emissions of pollutants and pollutant precursors, as well as to develop and assess new monitoring equipment that could improve the measurement of emissions from mobile and stationary sources of pollution. As part of this agreement, the agencies intend to coordinate research efforts with other public and private stakeholders, including other federal departments and agencies and other State and local entities, in order to utilize the resources and capacities of a wide sector of government and the business community in projects to develop, demonstrate, and assess new technologies that can help achieve clean air goals.

The creation of the Clean Air Technology Initiative, through which the partner agencies identify regionally important emission sources contributing to the region's attainment challenges, is a key element of the MOA. Both the South Coast AQMD and San Joaquin Valley APCD selected focus areas that are impacted by a mixture of mobile and stationary sources, especially sources representing major contributors to the SIP inventories and key air toxic exposures in the community. The partner agencies can then coordinate actions to align local, State, and federal resources to accelerate the identification and implementation of advanced clean technologies. Another example of on-going collaboration is CARB's Memorandum of Understanding with Union Pacific and Burlington Northern Santa Fe railroads to significantly reduce diesel emissions in and around rail yards in California.

As required by the Regional Haze Rule, California continues to coordinate and consult with Federal Land Managers during the development of Regional Haze SIPs and Progress Reports via three existing venues: the Interagency Air and Smoke Council (IASC), the Air and Land Managers (ALM), and the Western Regional Air Partnership (WRAP). The Federal Land Management agencies in California, California Department of Forestry and Fire Protection (CDF), CARB, and local air districts meet routinely in

technical and policy forums. Since the 1990's, technical staff meets as charter members of the IASC to discuss measurement, monitoring, regulatory, planning, and outreach issues, among other things related to smoke management. Beginning in 2002, upper management representatives from the same agencies began meeting on a regular basis as the ALM group to resolve policy issues relating to smoke management. Regional haze and visibility protection are regular agenda items for each group. California's membership in the Western States Air Resources Council (WESTAR) and the WRAP enables continuous coordination and consultation with fifteen western states, Tribal representatives, local air agencies, and Federal Land Managers throughout the western United States on visibility protection and other air quality issues.

#### **Public Notification**

In addition to consulting with government officials and other stakeholders, the CAA requires states to provide effective measures for notifying the public of instances or areas in which a federal standard was exceeded during the prior calendar year (CAA § 127). Under H&SC Section 39607, subdivision (a), CARB is required to collect air quality data in each air basin, statewide. CARB maintains these data and provides access to both current and historical data online<sup>20</sup>). In addition, H&SC Section 40718, subdivision (a) requires CARB to publish maps<sup>21</sup> showing areas that violate a federal standard, using the most recently available data. Finally, CARB provides on its website<sup>22</sup>, links to local district websites that provide the public with daily information about local air quality levels using the Air Quality Index.

In addition to reporting air quality data, CAA Section 127 requires states to advise the public about the health hazards associated with air pollution and to enhance public awareness of measures to prevent violation of a standard. To comply with this requirement, CARB maintains webpages that provide relevant information about health impacts<sup>23</sup> and ways of reducing air pollution<sup>24</sup>.

#### **PSD** and Visibility Protection

With respect to PSD requirements, a number of districts in California administer fully SIP-approved or partially delegated PSD programs that comply with federal requirements. PSD programs in the remaining districts are administered by U.S. EPA through a federal stationary source permitting program under enabling authority in 40 CFR Section 52.21. The status of PSD programs in California districts is described in more detail in the previous section titled Programs for Enforcement of Control Measures [CAA Section 110(a)(2)(C)].

<sup>&</sup>lt;sup>20</sup> http://www.arb.ca.gov/aqmis2/aqmis2.php

<sup>&</sup>lt;sup>21</sup> http://www.arb.ca.gov/desig/statedesig.htm#current

<sup>22</sup> http://www.arb.ca.gov/agmis2/MainPgLinks/agi.php

<sup>&</sup>lt;sup>23</sup> http://www.arb.ca.gov/research/health/health.htm

<sup>&</sup>lt;sup>24</sup> http://www.arb.ca.gov/html/cando.htm

Finally, CAA Section 110(a)(2)(J) contains provisions for visibility protection. However, U.S. EPA guidance states that promulgation of a new or revised federal standard does not carry with it any new obligations with respect to visibility protection. Nevertheless, California has in place, an approved Regional Haze SIP (76 FR 34608). Provisions of the State's Regional Haze SIP<sup>25</sup> will reduce the impact of air pollution on visibility, with the long-term goal of improving visibility in Class 1 areas.

#### Air Quality Modeling/Data [CAA Section 110(a)(2)(K)]

This section of the CAA requires states to use air quality models to predict the effect of pollutant and precursor emissions on ambient concentrations and to submit the modeling data to U.S. EPA when requested.

CARB is well versed in the use of air quality models to predict the impact of emissions on air quality. CARB conducts modeling in compliance with U.S. EPA guidance, and CARB works closely with districts that conduct their own modeling to ensure similar compliance. Modeling results are available on request.

#### **Discussion**

The CAA requires states to conduct air quality modeling. For example, under CAA Section 182(C)(2)(a), attainment demonstrations for ozone nonattainment areas classified as serious, severe, or extreme must be based on photochemical grid modeling or another analytical method the Administrator determines to be at least as effective. Under State law, CARB is the agency responsible for complying with all purposes set forth in federal law (H&SC § 39602). Thus, CARB has the authority to conduct air quality modeling as required under the CAA.

To implement the modeling requirements, CARB has established an air quality modeling group which has extensive experience related to modeling both primary and secondary pollutants. CARB's modeling work complies with U.S. EPA guidance on the use of models. In addition, CARB consults with and works closely with districts and other stakeholders that conduct their own air quality modeling, to ensure their work also complies with federal requirements.

CARB utilizes U.S. EPA advised air quality models<sup>26</sup> and guidance<sup>27</sup>. In addition, CARB and districts document their SIP-related modeling protocols and make this information available as part of the SIP review process. Examples of this protocol documentation for ozone and PM<sub>2.5</sub> are available on the San Joaquin Valley APCD website.<sup>28</sup> The purpose of documenting these protocols is to detail and formalize the procedures for

<sup>&</sup>lt;sup>25</sup> http://www.arb.ca.gov/planning/reghaze/reghaze.htm

<sup>&</sup>lt;sup>26</sup> https://www.epa.gov/scram/air-quality-models

<sup>&</sup>lt;sup>27</sup> https://www.epa.gov/scram/state-implementation-plan-sip-attainment-demonstration-guidance

<sup>&</sup>lt;sup>28</sup> Examples of ozone and PM<sub>2.5</sub> air quality modeling protocols: <a href="https://www.valleyair.org/Air Quality Plans/Ozone-Plan-2016/i.pdf">https://www.valleyair.org/Air Quality Plans/Ozone-Plan-2016/i.pdf</a> and <a href="https://www.valleyair.org/Air Quality Plans/docs/PM25-2016/a.pdf">https://www.valleyair.org/Air Quality Plans/docs/PM25-2016/a.pdf</a>.

conducting the photochemical modeling used in developing the SIP and thereby increase public awareness and transparency. Comments generated through the public review process are considered in developing the final plan. As required under the CAA, modeling results are made available to U.S. EPA and other stakeholders on request.

#### Permitting Fees [CAA Section 110(a)(2)(L)]

This section of the CAA requires states to assess stationary source owners or operators fees to cover the cost of reviewing and acting on a permit application. If a permit is granted, states must also assess fees to cover the cost of implementing and enforcing the permit.

Districts are responsible for issuing stationary source permits. Each district has rules requiring fees to cover the cost of processing, implementing, and enforcing permits.

#### Discussion

U.S. EPA's Infrastructure SIP Guidance indicates that if a state's Title V program fees cover all CAA permitting, implementation, and enforcement for new and modified major sources, as well as for existing major sources, the Title V program satisfies the requirements of CAA Section 110(a)(2)(L). As described in the previous section titled Programs for Enforcement of Control Measures [CAA Section110(a)(2)(C)], responsibility for issuing stationary source permits in California rests with the districts, and each local district has adopted rules requiring an additional fee for facilities subject to Title V requirements. Furthermore, U.S. EPA has fully approved Title V programs for all 35 California districts (40 CFR Part 70, Appendix A).

California H&SC Section 42311 authorizes local districts to adopt a schedule of fees for the evaluation, issuance, and renewal of permits to cover the cost of district programs related to permitted stationary sources. The mechanism for assessing these fees begins when an applicant applies for an Authority to Construct. Each applicant is assessed a fee for the district to process the application. Additional fees are assessed for some applications that may be more complex. Districts also assess fees when the facility applies for a Permit to Operate. Fee schedules are specific to each individual district. Some districts base their fees on allowable emissions, while others base fees on the type and quantity of facility equipment. Districts also collect fees during the annual renewal of the permit and may impose fees for observing sources test, as applicable. Districts review their fees on a regular basis and determine if any fee increases are needed to cover the cost of running the permitting program.

A general overview of the Title V requirements is available on CARB's website<sup>29</sup>. CARB's website also provides information to help facility owners/operators navigate the permitting process.<sup>30</sup> In addition, CARB maintains various email notification lists that

<sup>&</sup>lt;sup>29</sup> <u>http://www.arb.ca.gov/fcaa/tv/tvinfo/overview.htm</u>

<sup>&</sup>lt;sup>30</sup> The following web links provide information to help facility owners/operators navigate the permitting process: <a href="http://www.arb.ca.gov/permits/airdisop.htm">http://www.arb.ca.gov/permits/airdisop.htm</a> and <a href="http://www.arb.ca.gov/permits/permits.htm">http://www.arb.ca.gov/permits/permits.htm</a>.

provide subscribers with current, on-going email notification about updates and changes to permit-related programs. Information about subscribing to these lists is also available on the CARB website<sup>31</sup>.

Table 13 provides a summary of the district rules that implement the federal Title V requirements. The rules cited represent the district's primary implementation rule, and in some cases, there may be other district rules that are also relevant to the Title V process. The information in Table 13 is provided for information only, as Title V rules are not required to be part of an approved SIP.

TABLE 13: California District Title V Rules and Permit Fee Information

	visual fille v Rules and Fernill Fee information
District	District Implementing Rule
Amador County APCD	Rule 500 (Issuing Permits to Operate for Title V Sources)
Antelope Valley AQMD	Regulation XXX (Title V Permits)
Bay Area Air AQMD	Rule 2-6 (Major Facility Review)
Butte County AQMD	Rule 1101 (Title V – Federal Operating Permits)
Calaveras County APCD	Regulation X (Issuing Permits to Operate for Title V Sources)
Colusa County APCD	Rule 3.17 (Permits to Operate for Title V Sources)
Eastern Kern APCD	Rule 201.1 (Permits to Operate for Title V Sources)
El Dorado County AQMD	Rule 522 (Title V - Federal Operating Permit Program)
Feather River AQMD	Rule 10.3 (Federal Operating Permits)
Glenn County APCD	Article VIII (Issuing Permits to Operate for Title V Sources)
Great Basin Unified APCD	Rule 217 (Issuing Permits to Operate for Title V Sources)
Imperial County APCD	Rule 900 (Issuing Permits to Operate for Title V Sources)
Lake County AQMD	Chapter XII (Issuing Permits to Title V Sources)
Lassen County APCD	Regulation VII (Permits to Operate for Title V Sources)
Mariposa County APCD	Regulation X (Issuing Permits to Operate for Title V Sources)
Mendocino County AQMD	Regulation 5 (Issuing Permits to Operate for Title V Sources)
Modoc County APCD	Rule 2.13 (Issuing Permits to Operate for Title V Sources)
Mojave Desert AQMD	Regulation XII (Federal Operating Permits)
Monterey Bay Air Resources District	Rule 218 (Title V: Federal Operating Permits)
North Coast Unified AQMD	Regulation V (Issuing Permits to Operate for Title V Sources)
Northern Sierra AQMD	Rule 522 (Title V Federal Operating Permits)
Northern Sonoma County APCD	Regulation V (Issuing Permits to Operate for Title V Sources)
Placer County APCD	Rule 507 (Federal Operating Permit Program)
Sacramento Metro AQMD	Rule 207 (Title V – Federal Operating Permit Program)
San Diego County APCD	Regulation XIV (Title V Operating Permits)
San Joaquin Valley APCD	Rule 2520 (Federally Mandated Operating Permits)
San Luis Obispo County APCD	Rule 216 (Federal Part 70 Permits)
Santa Barbara County APCD	Regulation XIII (Part 70 Operating Permit Program)
Shasta County AQMD	Rule 5 (Issuing Permits to Operate for Title V Sources)
Siskiyou County APCD	Rule 2.13 (Issuing Permits to Operate for Title V Sources)
South Coast AQMD	Regulation XXX (Title V Permits)
Tehama County APCD	Regulation VII (Federal Operating Permit Program)
Tuolumne County APCD	Rule 500 (Issuing Permits to Operate for Title V Sources)
Ventura County APCD	Rule 33 (Part 70 Permits)
Yolo-Solano AQMD	Rule 3.8 (Federal Operating Permits)

\_

<sup>31</sup> http://www.arb.ca.gov/permits/permits.htm

#### Consultation/Participation by Affected Local Entities [CAA Section 110(a)(2)(M)]

This section of the CAA requires states to consult with and allow local political subdivisions affected by the SIP to participate in the development process.

CARB coordinates on a regular basis with the State's 35 local districts. State law requires CARB to conduct a public hearing and solicit input from affected agencies and the public when developing any SIP document.

#### Discussion

California is divided into 35 local districts, comprising county or regional local government authorities. These districts have responsibility for controlling stationary source emissions. H&SC Section 39602 designates CARB as the air pollution control agency for all purposes set forth in federal law. Furthermore, CARB is designated as the State agency responsible for preparing the SIP and, to this end, shall coordinate the activities with all districts necessary to comply with that act. The structure of California's local districts was described in the previous section titled Consultation with Government Officials, Public Notification, PSD, and Visibility Protection [CAA Section110(a)(2)(J)]. A map of district boundaries<sup>32</sup>, as well as links to local district webpages<sup>33</sup>, is available on CARB's website.

CARB routinely consults and provides liaison with all districts and provides for frequent and regular communication and consultation with management and staff of these districts, particularly as it relates to SIP items. Because district boards are composed of local elected officials, this framework provides for regular consultation with and participation by local government entities (cities and counties) affected by the SIP. Furthermore, H&SC Section 41650, et seq., requires CARB to conduct a public hearing and to solicit testimony from districts, air quality planning agencies, and the public when adopting SIP-related documents. The districts have a similar process for soliciting participation and comment with respect to proposed regulatory actions. Additionally, the California Administrative Procedures Act, Government Code Section 11340, et seq., requires notification and provision for comment opportunities to all parties affected by proposed State regulations. Similarly, H&SC Section 40725 requires districts to conduct public hearings when adopting, amending, or repealing any rule. CARB is committed to continuing the process of collaborating with local entities and officials in developing SIP elements, as well as soliciting public input to the process.

<sup>32</sup> https://www.arb.ca.gov/capcoa/dismap.htm

<sup>33</sup> https://www.arb.ca.gov/capcoa/roster.htm

#### Environmental Analysis

#### **Introduction**

This section provides the basis for CARB's determination that the proposed California Infrastructure SIP is exempt from the requirements of the California Environmental Air Quality Act (CEQA). A brief explanation of this determination is provided below. CARB's regulatory program, which involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans for the protection and enhancement of the State's ambient air quality, has been certified by the California Secretary for Natural Resources under Public Resources Code Section 21080.5 of the CEQA (14 CCR § 15251(d)). Public agencies with certified regulatory programs are exempt from certain CEQA requirements, including but not limited to, preparing environmental impact reports, negative declarations, and initial studies. CARB, as a lead agency, prepares a substitute environmental document (referred to as an "Environmental Analysis" or "EA") as part of the Staff Report prepared for a proposed action to comply with CEQA (17 CCR §§ 60000-60008). If the SIP is finalized, a Notice of Exemption will be filed with the State Clearinghouse for public inspection.

#### <u>Analysis</u>

CARB has determined that the proposed California Infrastructure SIP is exempt from CEQA under the "general rule" or "common sense" exemption (14 CCR § 15061(b)(3)). The common sense exemption states a project is exempt from CEQA if "the activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA." The proposed SIP revision will not result in a significant adverse impact on the environment since it is limited to describing authorities, resources, and programs California has in place to implement, maintain, and enforce the federal NAAQS and does not contain any proposals for emission control measures or other actions that could result in adverse impacts to the environment. Based on CARB's review it can be seen with certainty that there is no possibility that the proposed SIP may result in a significant adverse impact on the environment; therefore, this activity is exempt from CEQA.