

**Proposed 2021 Amendments to Area
Designations for State Ambient Air Quality
Standards
December 2021**



Public Hearing to Consider the Proposed 2021 Amendments to the Area Designations for State Air Quality Standards

Staff Report: Initial Statement of Reasons

Date of Release: December 28, 2021

Scheduled for Consideration: February 24, 2022

**California Air Resources Board
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Sacramento, California 95814**

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Executive Summary

The California Air Resources Board (CARB or Board) has established State ambient air quality standards (State standards or standards) to protect public health and welfare. State law requires CARB to annually assess the air quality in each area of California and determine whether it meets State standards. These area designations are based on established criteria, ensuring they are made in a consistent manner. CARB reviews area designations for all State standards using the most currently available air quality data. Each area of the State is designated as one of four categories:

- Attainment – pollutant concentrations do not violate the State standard;
- Nonattainment – pollutant concentrations violate the State standard;
- Nonattainment-Transitional – pollutant concentrations violate the State standard, but air quality is nearing attainment; and
- Unclassified – insufficient data.

Proposed Changes

This review of the area designations is based on 2018 through 2020 air quality data. Based on these data, staff is proposing amendments to current area designation regulations for nitrogen dioxide (NO₂), suspended particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}). While designation changes from nonattainment to nonattainment-transitional occur by operation of law, other amendments to the designations require formal CARB action. The proposed designation amendments are summarized in Table ES-1.

Additional Information

State law also requires CARB to annually review and publish maps and tables identifying the attainment status of each area of the State with respect to both the State and national ambient air quality standards (national standards). Updated maps and tables are provided in Appendix C to this report. They reflect the proposed amendments to area designations for State standards that are summarized in this staff report, those changes that occurred by operation of law, and the current area designations for the national standards.

TABLE ES-1

Proposed Designation Amendments for State Standards *(Based on 2018-2020 data)*

Pollutant	Designation Area	Current Designation	Proposed Designation
NO ₂	South Coast Air Basin – CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties	Nonattainment	Attainment
PM ₁₀	North Coast Air Basin – Mendocino County	Nonattainment	Attainment
PM _{2.5}	South Central Coast Air Basin- Santa Barbara County	Unclassified	Attainment

I. Introduction and Background

A. Introduction

This chapter provides background information on the differences between the State and national standards, the legal requirements for the State designation criteria and area designation regulations, and the annual data review.

B. State and National Ambient Air Quality Standards

California law requires CARB to establish State standards in consideration of public health, safety, and welfare. These standards define the maximum amount of a pollutant that can be present in the ambient air. Currently, there are State standards for ten pollutants: ozone, PM₁₀, PM_{2.5}, carbon monoxide (CO), NO₂, sulfur dioxide (SO₂), sulfates, lead, hydrogen sulfide, and visibility-reducing particles. In addition to the State standards, the federal Clean Air Act requires the United States Environmental Protection Agency (U.S. EPA) to establish national standards. In some cases, California's State standards are more health-protective than the corresponding national standards. Additionally, CARB has established State standards for pollutants not covered by national standards (sulfates, hydrogen sulfide, and visibility-reducing particles).

Both State and national standards are generally specified as a concentration averaged over a specific period, such as 1-hour, 8-hour, 24-hour, 30 days, or 1 year. The different averaging times and concentrations are meant to protect against different exposure impacts. Some standards are expressed as a concentration that is not to be exceeded, while others are expressed as a concentration that is not to be equaled or exceeded. The national standards are further categorized as primary standards (established to protect public health) and secondary standards (established to protect public welfare). Appendix C contains a table listing the State and national standard levels, averaging times, and analytical measurement methods.

C. General Provisions of the Designation Criteria

The designation criteria describe the procedures CARB must use in determining an area's designation status with respect to the State standards. In summary, the designation criteria specify:

- The requirements for each designation category;
- The data to use in making area designation determinations;
- The procedure for excluding qualifying high concentrations;
- The size of the designated area; and
- The requirement for an annual review of the area designations.

D. Designation Categories

The designation criteria specify four designation categories: nonattainment, nonattainment-transitional, attainment, and unclassified. Determining which category is appropriate for an area is generally based on the number of violations in the area. Therefore, it is essential to understand the difference between an exceedance and a violation. An exceedance is any concentration that is higher than the level of the State standard. In contrast, violations are a subset of exceedances. A violation is an exceedance that is not affected by a highly irregular or infrequent event and therefore cannot be excluded from the area designation process (see the subsection “Highly Irregular or Infrequent Events” below).

1. Nonattainment.

CARB designates an area as nonattainment for a pollutant if air quality data show a State standard for that pollutant was violated one or more times during the previous three calendar years.

2. Nonattainment-Transitional.

The nonattainment-transitional category is a subcategory of nonattainment, with different requirements for ozone than for the other pollutants. For non-ozone pollutants, CARB designates an area as nonattainment-transitional if air quality data show a State standard for that pollutant was violated two or fewer times at each site in the area during the most recent calendar year. In contrast, the nonattainment-transitional requirements for ozone are specified in State law rather than in the designation criteria. Specifically, H&SC section 40925.5 specifies that a nonattainment district is designated as nonattainment-transitional for ozone if air quality data show three or fewer exceedances of the State standard at each site in the area during the most recent calendar year.

There are four key differences in the ozone nonattainment-transitional requirements, compared with those for the other pollutants. First, the designated area is always a district (or portion of a district within an air basin), rather than an air basin, county, or other geographic area. Second, the designation is based on exceedances, which means all air quality measurements are considered—none are excluded. Third, only nonattainment districts may be designated as nonattainment-transitional for ozone. Finally, the ozone nonattainment-transitional designation occurs by operation of law and is non-discretionary. CARB updates the area designation regulations to reflect the change.

3. Attainment.

In contrast to nonattainment and nonattainment-transitional, CARB designates an area as attainment for a pollutant if data show the State standard was not violated during the previous three calendar years. Data used for an attainment designation must be representative of the averaging time of the standard and complete for the time-period evaluated.

4. Unclassified.

Finally, CARB designates an area as unclassified for a pollutant if the available data are insufficient to support any other designation category.

E. Designation Process

The area designations are based on air quality data for record as defined in section 70301 of the designation criteria (Appendix B). The process used to designate an area is generally the same for each pollutant:

- Gather data for the three-year period for each site in the area;
- Evaluate data representativeness and data completeness for each site;
- Identify and exclude exceedances affected by highly irregular or infrequent events;
- Tabulate the number of exceedances and violations by site;
- Determine the designation value for each site;
- Determine the designation value for the area; and
- Determine the appropriate designation category.

F. Designation Value

Determining the designation value is the most critical part of the designation process because the designation value determines the designation category. The designation value is the measured concentration that is used to determine the designation status of a given area. In practice, the designation value is the highest measured concentration in the three-year period that remains after excluding concentrations affected by highly irregular or infrequent events.

A designation value is determined for each monitoring site by pollutant. The highest designation value for any site in the area by pollutant becomes the designation value for the area for the given pollutant. When there is more than one standard for a single pollutant, a designation value is determined for each standard. For example, there is both a 1-hour and an 8-hour State ozone standard. As a result, there is a 1-hour designation value as well as an 8-hour designation value. The final area designation will reflect the designation category with the most violations of the standard for either of the two averaging periods. Using ozone as an example, consider an area with a 1-hour ozone designation value that is lower than the State standard, indicating attainment, and an 8-hour designation value that is higher than the State standard, indicating nonattainment. In this case, the area would be designated as nonattainment for ozone.

G. Size of Designated Area

The size of the area designated for a pollutant varies, depending on the nature of the pollutant, the location of contributing emissions sources, meteorology, and topographic features. An air basin is the area generally designated for pollutants with a regional impact: ozone, NO₂, sulfates, and visibility-reducing particles. A county (or portion of a county

located within an air basin) is generally the area designated for pollutants with a more localized impact: CO, SO₂, lead, and hydrogen sulfide. Depending on the area and the characteristics of the emissions sources, PM₁₀ and PM_{2.5} may be considered to have either regional or localized impacts. In some cases, CARB may designate a smaller area if it finds that the smaller area has distinctly different air quality.

H. Data Requirements

To the extent possible, the area designations are based on the most recent air quality data. These must be data for record, which means they satisfy specific siting and quality assurance procedures established by the U.S. EPA and CARB. Generally, data for record are those data collected by or under the direction of CARB or the districts. Air quality data from other sources may also qualify as data for record, if the same requirements are met. For area designation purposes, air quality measurements and statistics are rounded to the precision of the State standard before being compared with the standard. The rounding convention is summarized in Appendix D.

When adequate and recent air quality data are not available, CARB may use other types of information to determine an appropriate area designation. These other types of information may include historical air quality data, emissions data, meteorological data, topographical data, and data relating to the characteristics of population or emissions.

I. Highly Irregular or Infrequent Events

The designation criteria provide for excluding certain high air quality measurements from the area designation process. More specifically, the criteria provide for excluding exceedances affected by highly irregular or infrequent events, because it is not reasonable to mitigate these exceedances through the regulatory process. Appendix 2 to CCR, title 17, sections 70300 to 70306 to the designation criteria (Appendix B) defines three types of highly irregular or infrequent events: extreme concentration events, exceptional events, and unusual concentration events.

1. Extreme Concentration Event

An extreme concentration is identified using a statistical procedure. This procedure calculates a concentration that is not expected to be exceeded more than once per year, on average. The calculated value is commonly called the Expected Peak Day Concentration or EPDC (described in more detail in Appendix E). In practice, a pollutant-specific EPDC is calculated for each monitoring site, using air quality data measured at the site during at least the most recent three calendar years. The EPDC value is rounded to the precision of the State standard and then compared with air quality measurements for the same site, which are also rounded to the precision of the State standard. Measurements that exceed the State standard and are higher than the rounded EPDC are excluded from the area designation process; these exceedances are not considered violations of the standard. In contrast, measurements that exceed the State standard but are equal to or lower than the rounded EPDC are not excluded from the designation process; these values are considered violations of the State standard.

In cases where data are not complete for the three-year period being evaluated, the EPDC may not be valid for area designation purposes. If the EPDC is not valid, no measurements are excluded as extreme concentration events. Finally, an EPDC is calculated only for standards with an averaging time equal to or less than 24 hours.

2. Exceptional Event

In contrast to an extreme concentration event, an exceptional event is an exceedance of a State standard that is caused by a specific, identifiable event and is beyond reasonable regulatory control. An exceptional event may be caused by an act of nature (for example, a wildfire or severe windstorm) or it may be of human origin (for example, a chemical spill or industrial accident). Air quality measurements identified as exceptional events are not considered violations and are excluded from the designation process.

3. Unusual Concentration Event

An unusual concentration is an unexpected or atypical exceedance of a State standard that cannot be identified as an extreme concentration or an exceptional event. Unusual concentrations are identified only for areas already designated as attainment or unclassified. Generally, unusual concentrations are identified for sites with limited air quality data, and therefore, uncertainty as to the expected concentration levels. In identifying such events, the Executive Officer must make specific findings based on relevant information. An area may retain its attainment or unclassified designation based on the exclusion of unusual concentrations for up to three consecutive years. If an exceedance occurs during the fourth year, the area is redesignated as nonattainment, unless the exceedance can be excluded as an extreme concentration or an exceptional event.

J. Legal Requirements

Health and Safety Code (H&SC) section 39607(e) requires CARB to establish and periodically review criteria for designating areas as attainment or nonattainment for the State standards. The criteria (Appendix B) describe the procedures that CARB must use in determining area designations for State standards (California Code of Regulations (CCR), title 17, sections 70300 through 70306, and appendices 1 through 3). CARB originally adopted the required designation criteria in June 1989 and has updated them several times since, most recently in March 2010.

H&SC section 39608 requires CARB to use the designation criteria to designate areas of California as attainment, nonattainment, or unclassified for the State standards. In addition, H&SC section 40925.5 provides for the redesignation of a nonattainment district as nonattainment-transitional for ozone by operation of law. Finally, H&SC section 39608 requires CARB to conduct an annual review of the area designations and update them, as warranted. The area designations are made for each of the ten pollutants previously listed.

In addition to the designation criteria and area designation requirements, H&SC section 40718 requires CARB to publish maps showing the areas with one or more violations of any State or national standard. The maps and summary tables provided in Appendix C to this report fulfill this requirement by indicating the attainment status of each area of the State.

The maps and tables for the State standards reflect the proposed area designation amendments of this report, as well as those changes that occurred by operation of law. The maps and tables for the national standards reflect the current national area designations, as promulgated by U.S. EPA.

K. Annual Data Review

Each year, CARB monitors air pollutants in California in cooperation with local air pollution control and air quality management districts (districts) and with other agencies. Based on these monitoring data, and in consultation with the districts, CARB is required to annually identify and designate each area which is in attainment and each area which is in nonattainment for each State standard. CARB must make this identification and designation on a pollutant-by-pollutant basis. Where CARB finds that data are not sufficient to determine the attainment or nonattainment status for an area, CARB will identify the area as unclassified.

CARB has completed its annual review of the latest complete monitoring data (2018 to 2020). These data indicate that the previous designations for certain pollutants in certain air basins are no longer applicable. Therefore, the healthfulness of the air quality in these affected air basins is not accurately portrayed to the public and the districts. CARB proposes to update the designations and maps to be consistent with the monitoring data.

II. The Problem that the Proposal is Intended to Address

H&SC section 39608 requires CARB to monitor air quality and to annually designate each air basin as attainment, nonattainment, or unclassified for the State standards based on these data. Likewise, H&SC section 40718 requires CARB to publish maps identifying those cities, counties, or portions thereof which violate any State or national standard. Collectively, the purposes, benefits, and goals of these two statutes, which are identified as references to this rulemaking, are:

- To protect the health, safety, and welfare of the public, including those at risk of adverse effects with exposure to air pollution, such as children, the elderly, and people who are active outdoors;
- To safeguard the quality of the physical environment in which Californians live by an intensive, coordinated State, regional, and local effort to protect and enhance the ambient air quality of the State;
- To encourage a regional approach to meeting State standards throughout the State, whenever possible; and
- To be consistent with the State goal of providing a decent home and suitable living environment for every Californian.

A. Rationale

1. The proposed amendments can serve as guideposts for adopting further regulations.

The Legislature found and declared that the people of the State of California have a primary interest in the quality of the physical environment in which they live. (H&SC section 39000.) Furthermore, this public interest must be safeguarded by an intensive, coordinated State, regional, and local effort to protect and enhance the ambient air quality of the State. (H&SC section 39001.) As stated previously, CARB is required to establish State standards in consideration of public health, safety, and welfare. CARB is charged with coordinating efforts to attain and maintain ambient air quality standards. (H&SC section 39003.) CARB is also required to adopt rules and regulations that will achieve the ambient air quality standards. (H&SC section 39602.5.) Attainment of these health-based standards is necessary to protect public health and welfare, particularly of children, the elderly, and those with respiratory diseases. It is therefore in the public interest that these standards be attained and maintained. Toward this end, the proposed amendments are necessary for determining what, if any, further regulations may be needed to attain and maintain the State standards.

2. The proposed amendments provide the public with information for life decisions.

The annual review and update of the area designations provides the public with an indication of whether the health-based standards are being met. This information allows the public to make more educated decisions regarding personal residency and employment, as well as participation in outdoor activities.

3. The proposed amendments provide business and government with information for worker health and safety decisions.

The annual review and update of the area designations also gives businesses and government an indication of whether the health-based standards are being met. This information allows businesses and government the opportunity to make better-informed decisions regarding worker health and safety.

4. The proposed amendments fulfill statutory requirements.

CARB is required to post on its website information on air quality conditions and trends statewide and on the status and effectiveness of State and local air quality programs. (H&SC section 39604.) Therefore, the proposed amendments are also necessary to provide data to fulfill this requirement.

The proposed amendments are necessary to satisfy the statutory requirement in H&SC section 39608 to annually review and update the area designations based on the most recent, complete, and quality-assured air quality monitoring data, i.e., from 2018 through 2020.

5. The proposed amendments assist the districts in developing plans, if needed.

These designations are used to measure or estimate progress, or lack thereof, in the attainment of State standards. This in turn allows the districts to submit to CARB a plan for attaining and maintaining the State standards to ensure the future health and welfare of the people of the State of California, and the State's environment and economy, are protected. The districts' plans may include the adoption and implementation of regulations to reduce emissions of those pollutants and their precursors that exceed the standards. Therefore, the proposed amendments also serve as the basis, framework, and rationale for future plans to reduce emissions.

As the area designations are labels that describe the healthfulness of the air quality in each area, the proposed amendments do not contain any requirements for action.

III. The Specific Purpose and Rationale of Each Adoption, Amendment, or Repeal

The purpose of the proposed amendments is to update the area designations using the most recent, complete air quality data for each pollutant. Currently, designations are made for ten pollutants: ozone, PM₁₀, PM_{2.5}, CO, NO₂, SO₂, sulfates, lead, hydrogen sulfide, and visibility-reducing particles. The proposed amendments would change the designation of the specified air basin, or portion thereof, as attainment, nonattainment, or unclassified for the State standards based on these data.

The proposed amendments to the area designations would not result in any direct impact on public health or the environment because the regulations do not contain any requirements for action; they are labels identifying the air quality in each area.

As required by H&SC section 39608, CARB staff review and update the area designations each year, based on air quality data from the most recent three calendar years. This year's review considered air quality data collected during 2018 through 2020. Based on these data, staff proposes amendments to area designations for NO₂, PM₁₀, and PM_{2.5}. These changes, listed below, amend the existing CCR, title 17, Chapter 1, Subchapter 1.5, Article 1.5, Sections 60203, 60205, and 60210. The proposed amendments, if adopted by CARB, must be approved by the Office of Administrative Law before they become effective.

A. Section 60203. Table of Area Designations for Nitrogen Dioxide (NO₂)

This section of CCR title 17 identifies the NO₂ designation status for all areas in California. The State NO₂ standards are a 1-hour standard of 0.18 parts per million (ppm) and an annual standard of 0.030 ppm, neither to be exceeded. To be designated attainment, the designation values for all sites in the area must be at or below the level of both standards.

The annual average NO₂ concentration is calculated using a prescribed methodology. The first step is to truncate hourly values to the precision of the standard and then calculate a

quarterly average; these quarterly averages are not rounded nor truncated and data must be complete. These quarterly averages are then averaged together to determine an annual average. The annual average is then rounded to three decimal places, to be consistent with the precision of the annual standard. The highest annual average for the most recent three-year period becomes the designation value. Any site having an annual average concentration greater than 0.030 ppm, and not impacted by a highly irregular or infrequent event, is designated nonattainment.

Staff determined, based on NO₂ air quality data between 2018 and 2020, that the current designation status in one area no longer accurately reflects air quality in that area. Specifically, staff recommend one area designation change for NO₂:

- Redesignate the CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties in South Coast Air Basin as attainment.

The CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties in the South Coast Air Basin is currently designated as nonattainment. During 2018 through 2020, monitoring data are available for 26 sites located throughout the air basin and are representative and complete. The near-road monitoring site along CA 60 in Ontario has a 1-hour NO₂ designation value of 0.09 ppm and an annual NO₂ designation value of 0.030 ppm. These values meet the State 1-hour and annual NO₂ standards and meet the requirements for attainment, as specified in the designation criteria (Appendix B).

Based on these data, staff recommends redesignation of CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties in the South Coast Air Basin as attainment and to amend CCR, title 17, section 60203 to reflect the latest NO₂ air quality data.

B. Section 60205 – Table of Area Designations for Suspended Particulate Matter (PM₁₀)

This section identifies the PM₁₀ designation status for all areas of California. The State PM₁₀ standards are a 24-hour standard of 50 micrograms per cubic meter (µg/m³) and an annual standard of 20 µg/m³, neither to be exceeded. To be designated attainment, the designation values for all sites in the area must be at or below both standards.

Based on PM₁₀ air quality data collected during 2018 through 2020, staff determined that the current designation status in one area no longer accurately reflects its air quality and thus recommend a designation change for the following area:

- Redesignate Mendocino County in the North Coast Air Basin as attainment.

Mendocino County is located in the central southern portion of the North Coast Air Basin (NCAB), and the Mendocino County Air Quality Management District oversees this area. It is bordered on the west by the Pacific Ocean, to the north by Humboldt and Trinity Counties, to the east by Tehama and Glenn Counties in the Sacramento Valley Air Basin and Lake County, and to the south by Sonoma County.

In designating an area smaller than an air basin as attainment for PM₁₀, CARB must find that air quality in the smaller area is distinctly different from the rest of the air basin. Mendocino County is separated from the Sacramento Valley to the east by the California Coast Range and from the more populated San Francisco Bay Area by the mountains of northern Sonoma County, all of which limit pollutant transport from those areas. Predominant annual wind flow is from the northwest, although winter and fall experience more south-southeast flows. PM₁₀ emissions in Mendocino County are due primarily to local influences, particularly those that resuspend dust such as from paved and unpaved roads and construction, as well as residential fuel consumption. Topography indicates that emissions from the eastern and southern areas would have little effect on PM₁₀ concentrations in Mendocino County, and both Lake County (east) and Northern Sonoma (south) areas are in attainment for the PM₁₀ standard.

With the exception of Humboldt County, areas to the north of Mendocino are also currently designated as attainment for the State PM₁₀ standards. Humboldt County data shows concentrations generally below the standard but are not reported according to 17 CCR 70100.1(a) and are therefore not used for State designation purposes. Furthermore, because of the differences in topography and air quality, the five counties in the NCAB are treated as three separate planning areas, overseen by three different air districts: North Coast Unified Air Quality Management District, Mendocino County Air Quality Management District, and Northern Sonoma Air Pollution Control District. The topography and regulatory separation indicate that the PM₁₀ air quality in Mendocino County is distinctly different from the rest of the NCAB.

During 2018 through 2020, monitoring data are available for one site in Mendocino County. The Fort Bragg site has three years of complete data with an annual PM₁₀ designation value of 14 µg/m³ and a 24-hour PM₁₀ designation value of 49 µg/m³.

Wildfires in both 2018 and 2020 heavily influenced concentrations on a number of sampling days. These values were due to exceptional events as determined in Appendix 2 to CCR, title 17, sections 70300 to 70306 (Appendix B) and were not used in calculating the annual average or the 24-hour designation values for State designation purposes.

Based on these data, staff recommends that Mendocino County in the NCAB be redesignated as attainment for PM₁₀ and CCR, title 17, section 60205 amended accordingly in order to reflect the latest PM₁₀ air quality data.

C. Section 60210 – Table of Area Designations for Fine Particulate Matter (PM_{2.5})

This section identifies the PM_{2.5} designation status for all areas of California. The State PM_{2.5} standard is an annual standard of 12 µg/m³, not to be exceeded. To be in attainment, the designation values for sites in the area must be at or below this standard. An area is designated as nonattainment if designation values exceed the level of the standard.

Based on PM_{2.5} air quality data collected during 2018 through 2020, staff determined that the current designation status in one area no longer accurately reflects air quality in that area and recommend the following designation change:

- Redesignate Santa Barbara County in the South Central Coast Air Basin as attainment.

Data completeness criteria, set forth in “Criteria for Determining Data Completeness”, contained in Appendix 3 to CCR, title 17, sections 70300 to 70306, allow for the use of one year of complete data if the maximum pollutant concentration is less than half the applicable State standard, or the use of two years of complete data if the maximum concentration is less than three-quarters of the standard.

During 2018 through 2020, complete monitoring data are available for three of four sites located in Santa Barbara County. These three sites had three years of complete data below the annual standard. The fourth site at Santa Barbara-E Canon, which is also the high site, had two years of complete data with an annual average of exactly three-quarters of the standard. The one invalid year, 2019, had only 67 percent valid data for one month due to a machine malfunction. Review of data at surrounding monitors, as well as substitution for any missing data of the quarterly high values in the 2018 to 2020 three-year period, indicated that concentrations at the Santa Barbara site were well below the State standard, with an estimated annual average of 9 µg/m³. This shows that all sites in Santa Barbara County are below the State standard, with 75 percent of sites meeting the completeness criteria.

Based on these data, staff recommends the Board redesignate Santa Barbara County in the South Central Coast Air Basin as attainment for PM_{2.5} and CCR, title 17, section 60210 amended accordingly in order to reflect the latest PM_{2.5} air quality data.

IV. Benefits Anticipated from the Regulatory Action, Including the Benefits or Goals Provided in the Authorizing Statute

The intent of the proposed regulatory action is to update the air quality designations for each air basin, or portion thereof, to be consistent with the most recent complete monitoring data. Adopting the proposed amendments to the area designations would not result in any direct impact on public health or the environment because the regulations do not contain any requirements for action.

A. Impacts for Local Districts

State law requires districts and CARB to make a coordinated effort to protect and enhance the ambient air quality (H&SC sections 39001 through 39003). As part of this effort, the districts must adopt rules and regulations sufficiently effective to achieve and maintain the State standards (H&SC sections 40001 and 41500). These requirements, if determined to be necessary, would result in improved air quality in communities throughout the State, resulting in lower potential health risks.

B. Purpose, Benefits, and Goals

Protecting the health, safety, and welfare of the public. The designations provide labels indicating the healthfulness of the current air quality throughout the State. These labels allow the public to make better informed decisions regarding their personal health, safety, and welfare.

Safeguarding the quality of the physical environment. This goal is to be accomplished by an intensive, coordinated State, regional, and local effort to protect and enhance the ambient air quality of the State. CARB and the districts have coordinated their efforts in obtaining and reviewing air quality monitoring data, identifying highly irregular or infrequent events, and evaluating meteorological, topographical, and other data relating to the characteristics of population or emissions. This coordinated effort has resulted in the proposed amendments to the area designations in order to accurately reflect the healthfulness of the air quality in each area.

Encouraging a regional approach to meeting the State ambient air quality standards whenever possible. The proposed amendments designate areas as attainment, nonattainment, nonattainment-transitional, or unclassified by pollutant. Where appropriate, these designations are made for each air basin, district, or sub-region based on meteorological, topographical, and other data relating to the characteristics of population or emissions. This allows each district to identify the most cost-effective, efficient, and acceptable approach to achieve the State ambient air quality standards.

Consistency with the State goal of providing a decent home and suitable living environment. As the area designations are labels that describe the healthfulness of the air quality in each area, the proposed amendments do not contain any requirements for action. However, the annual review and update of the area designations provides the public with an indication of whether the health-based standards are being met. This information allows the public to make more educated decisions regarding personal residency.

C. Implications of Area Designations

The State designation criteria specify four designation categories: nonattainment, nonattainment-transitional, attainment, and unclassified. A nonattainment designation indicates one or more violations of the State standard have occurred. A nonattainment-transitional designation is a subcategory of nonattainment that indicates improving air quality, with only occasional violations or exceedances of the State standard. In contrast, an attainment designation indicates no violation of the State standard. Finally, an unclassified designation indicates either no or an incomplete set of air quality data. Although the area designations themselves are labels indicating the healthfulness of air quality and do not contain any requirements for action, there may be other legal requirements, based on an area's designation status, as described below.

1. Areas Designated as Nonattainment

State law requires nonattainment districts to develop plans for attaining the State standards for ozone, CO, NO₂, and SO₂. The nonattainment districts must submit these attainment plans to the Board for approval (H&SC section 40911). Ozone nonattainment districts that are impacted by transport from upwind areas (in other words, ozone violations are caused by emissions transported from upwind areas located outside the district) are required to develop ozone attainment plans to mitigate those violations that occur in the absence of transport (in other words, ozone violations that are caused by locally generated emissions; H&SC sections 39610(b) and 40912). Violations caused by a combination of transported and locally generated emissions must be mitigated by both the upwind and downwind areas. Ozone violations caused by overwhelming transport must be mitigated by the responsible upwind district(s).

A district with an area designated as nonattainment for any of the remaining pollutants is not subject to any specific statutory planning requirements. However, such districts must adopt and enforce rules and regulations to expeditiously attain the State standards for these pollutants (H&SC sections 40001 and 40913). Furthermore, a nonattainment district has the option of developing and implementing an attainment plan or adopting regulations to control the emissions that contribute to these pollutants (H&SC section 40926).

In addition to these requirements, on July 26, 2017, Assembly Bill 617 (C. Garcia, Chapter 136, Statutes of 2017) was signed by Governor Brown. Any facility located in a nonattainment area that emits more than 250 tons per year of a nonattainment pollutant (based on the district boundary, not the nonattainment area boundary) is subject to the uniform emission reporting requirement (H&SC section 39607.1(a)(2)(B)). In addition, each district in a nonattainment area for one or more nonattainment pollutants must adopt an expedited schedule for the implementation of best available retrofit technology by December 31, 2023. The schedule shall apply to each industrial source that, as of January 1, 2017, was subject to a market-based compliance mechanism (H&SC section 40920.6(c)).

Gasoline dispensing facilities in districts that CARB determines are nonattainment for the State ozone standard are required to meet CARB's Enhanced Vapor Recovery performance standards and specifications set forth in sections 3 through 9, inclusive, of CP-201 Certification Procedure for Vapor Recovery Systems at Dispensing Facilities, while such facilities in attainment areas are generally exempted. If exempt facilities become subject to additional standards due to a subsequent reclassification of their district from attainment to nonattainment, the facilities will have four years to comply.

An additional consequence of a nonattainment designation is that the Board collects fees from large, non-vehicular sources located in the nonattainment area (H&SC section 39612; CCR, title 17, sections 90800.8 through 90806). District sources permitted to emit 250 tons per year or more of any nonattainment pollutant or its precursors are subject to these fees (H&SC section 39612(d)). The fees are used to help defray the costs of State programs related to non-vehicular sources.

Areas Designated as Nonattainment Transitional

Nonattainment-transitional is a subcategory of the nonattainment designation. Therefore, a district with a nonattainment area that is redesignated as nonattainment-transitional is still subject to the same requirements as described in the preceding section. However, in contrast to the nonattainment designation, a nonattainment-transitional designation may signal a change in how these requirements are implemented. For example, a district that currently is implementing an approved attainment plan may determine that some of the additional control measures contained in the attainment plan are not needed to reach attainment by the earliest practicable date. As a result, the nonattainment-transitional designation provides the district with a signal that it may be appropriate to review, and perhaps modify, its approved attainment plan. However, district actions in response to a nonattainment-transitional designation must be consistent with State and federal regulations and statutes.

H&SC section 40925.5 specifically allows a district with an area designated as nonattainment-transitional for ozone to shift some stationary source control measures from the rulemaking calendar to the contingency category if the district finds these control measures are no longer necessary to accomplish expeditious attainment of the State ozone standard. These actions do not apply to control measures required to mitigate the effects of pollutant transport. The Board may disapprove any action of the district within 90 days if the Board finds that the action will delay expeditious attainment of the State ozone standard.

2. Areas Designated as Attainment or Unclassified

State law does not impose any specific planning requirements upon districts with areas designated as attainment or unclassified. However, State law does require that the State standards not only be attained but also maintained. State law requires the districts and the Board to make a coordinated effort to protect and enhance the ambient air quality (H&SC sections 39001 through 39003). As part of this effort, the districts must adopt rules and regulations sufficiently effective to achieve and maintain the State standards (H&SC sections 40001 and 41500).

Gasoline dispensing facilities in districts that CARB determines are unclassified for the State ozone standard are required to meet CARB's Enhanced Vapor Recovery performance standards and specifications set forth in sections 3 through 9, inclusive, of CP-201 Certification Procedure for Vapor Recovery Systems at Dispensing Facilities. If exempt facilities become subject to additional standards due to a subsequent reclassification of their district from attainment to nonattainment, the facilities will have four years to comply.

D. Other Impacts and Benefits

The annual review and update of the area designations gives the public, businesses, and government an indication of whether the health-based standards are being met. This information allows the public to make more educated decisions regarding personal health and residency, as well as participation in outdoor activities. This information also allows businesses and government the opportunity to make better-informed decisions regarding worker health and safety.

V. Air Quality

The proposed amendments to the area designations do not contain any requirements for action, and, therefore, would not result in any direct air quality or environmental impacts. However, the area designations do label areas with respect to the healthfulness of their air quality.

VI. Environmental Analysis

This chapter provides the basis for CARB's determination that the proposed regulation is exempt from the requirements of the California Environmental 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 CEQA (CCR, title 14, section 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 (CCR, title 17, sections 60000-60008). If the regulation is finalized, a Notice of Exemption will be filed with the Office of the Secretary for the Natural Resources Agency for public inspection.

CARB has determined that the proposed regulation is exempt from CEQA under the "general rule" or "common sense" exemption (CCR, title 14, section 15061(b)(3)). The common sense exemption states a project is exempt from CEQA if "[t]he activity is covered by the common sense exemption 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 regulation includes the following changes: Proposed Changes to NO₂ Area Designations (CCR, title 17, section 60203), Proposed Changes to PM₁₀ Area Designations (CCR, title 17, section 60205), and Proposed Changes to PM_{2.5} Area Designations (CCR, title 17, section 60210). These changes are to the labels that indicate the healthfulness of the current air quality throughout the State. These proposed changes do not contain any requirements for action, and, therefore, they would not result in any direct air quality or environmental impacts.

Based on CARB's review, there is no possibility that the proposed regulation may result in a significant adverse impact on the environment; therefore, this activity is exempt from CEQA.

VII. Environmental Justice

State law defines environmental justice as the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies (Gov. Code, § 65040.12, subd. (e)(1)). Environmental justice includes, but is not limited to, all of the following: (A) The availability of a healthy environment for all people. (B) The deterrence, reduction, and elimination of pollution burdens for populations and communities experiencing the adverse effects of that pollution, so that the effects of the pollution are not disproportionately borne by those populations and communities. (C) Governmental entities engaging and providing technical assistance to populations and communities most impacted by pollution to promote their meaningful participation in all phases of the environmental and land use decision making process. (D) At a minimum, the meaningful consideration of recommendations from populations and communities most impacted by pollution into environmental and land use decisions (Gov. Code, § 65040.12, subd. (e)(2)). The Board approved its Environmental Justice Policies and Actions (Policies) on December 13, 2001, to establish a framework for incorporating environmental justice into CARB's programs consistent with the directives of State law (CARB 2001). These policies apply to all communities in California but are intended to address the disproportionate environmental exposure burden borne by low-income communities and communities of color. Environmental justice is one of CARB's core values and fundamental to achieving its mission.

Because some communities experience higher exposures to air pollutants, it is a priority of CARB to ensure that full protection is afforded to all Californians. Though the proposed amendments to the area designations do not contain any requirements for action, the area designations are designed to identify areas with unhealthful air quality, based on the most recently available complete data, and can help better inform actions to improve air quality.

VIII. Economic Impacts Assessment

The proposed amendments are not anticipated to impose any costs or savings on businesses and individuals and therefore have no statewide adverse economic impacts, including impacts on California employment, business status, or competitiveness.

A. Legal Requirement

Government Code sections 11346.2(b)(2) and 11346.3(b) require the preparation of an economic impacts assessment (EIA). Specifically, section 11346.3 of the Government Code requires California agencies, in proposing to adopt or amend any administrative regulation, to:

- assess the potential for adverse economic impacts on California business enterprises and individuals, including the ability of California businesses to compete with businesses in other states;
- include the potential impact of the regulation on California jobs, business expansion, and business elimination or creation;

- estimate the costs or savings to any State or local agency and school district in accordance with instructions adopted by the Department of Finance; and
- include any non-discretionary cost or savings to local agencies, and the cost or savings in federal funding to the State.

The proposed regulatory amendments are not projected to exceed either major regulation threshold because they do not have potential costs exceeding ten million dollars in any single year or fifty million dollars in any 12-month period.

B. Potential Impact on Businesses, Business Competitiveness, Employment, and Business Creation, Elimination, or Expansion

The proposed amendments to the area designations do not contain any requirements for action on businesses and individuals. Therefore, these amendments would have no statewide economic impact directly affecting individuals and businesses, including the ability of California businesses to compete with businesses in other states, the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within the State of California, the expansion of businesses currently doing business within the State of California, or on representative private persons. However, the districts may use new area designations in planning for future actions.

Pursuant to CCR, title 1, section 4, the proposed amendments would not affect small businesses because no action is required by them.

Before taking final action on the proposed amendments, CARB must determine that no reasonable alternative considered by the agency, or that has otherwise been identified and brought to the attention of the agency, would be more effective in carrying out the purpose for which the action is proposed, or would be as effective and less burdensome to affected private persons than the proposed action. CARB found no reasonable alternative to the proposed amendments that would be more effective and less burdensome to affected businesses or private persons.

C. Potential Cost to Local and State Agencies

1. Fiscal Effect on Local Government

A change in area designation status can result in a change in reporting requirements for some local air districts, which are local government agencies. The proposed amendments could result in both cost outlays and savings to local government agencies. State law requires nonattainment districts to develop plans for attaining the State standards for ozone, CO, NO₂, and SO₂. The nonattainment districts must submit these attainment plans to the Board for approval (H&SC section 40911). A district with an area designated as nonattainment for any of the remaining pollutants is not subject to any specific statutory planning requirements. However, such districts must adopt and enforce rules and regulations to expeditiously attain the State standards for these pollutants (H&SC sections 40001 and 40913).

a) Fiscal Impact on the South Coast Air Quality Management District

The change in South Coast Air Basin, CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties from Nonattainment to Attainment for NO₂ will remove the reporting requirements under the Health and Safety Code sections 40910-40930. Because the air district will still be reporting based on ozone nonattainment status, there will be no cost change to the South Coast Air Quality Management District which oversees this area¹.

b) Fiscal Impact on Mendocino County Air Quality Management District

The change in Mendocino County from Nonattainment to Attainment for PM₁₀ will not change planning requirements for the Mendocino County Air Quality Management District since they are not subject to any specific statutory planning requirements related to PM (H&SC section 40911). Therefore, there is no fiscal impact.

c) Fiscal Impact on the Santa Barbara County Air Pollution Control District

The change in Santa Barbara County from Unclassified to Attainment for PM_{2.5} will not change planning requirements for the Santa Barbara County Air Pollution Control District since they are not subject to any specific statutory planning requirements related to PM (H&SC section 40911). Therefore, there is no fiscal impact.

d) Summary of Impacts to Local Government

The total lifetime impacts of the proposed amendments amount to approximately \$0 to all affected air districts. The proposed amendments neither require local agencies to undertake a new program nor to provide an increased level of service in an existing program. (See Cal. Govt. Code section 17514).

2. Fiscal Effect on State Government

The South Coast Air Quality Management District will still be reporting based on ozone nonattainment status even after the proposed change in the South Coast Air Basin, CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties from Nonattainment to Attainment for NO₂. With no changes to the South Coast Air Quality Management District reporting there will be no change in CARB staff time, therefore, the impact of these changes on CARB staff time is anticipated to be zero.

IX. Evaluation of Regulatory Alternatives

State law (H&SC section 39607(e)) requires CARB to establish criteria for designating areas as attainment or nonattainment for the State standards. State law (H&SC section 39608(c))

¹ CARB staff spoke with South Coast Air Quality Management District staff on 10/19/2021.

further requires CARB to use the designation criteria in an annual review of the area designations.

The proposed amendments to the area designations are described in Section III of this ISOR. The proposed amendments reflect the application of the designation criteria set forth in CCR, title 17, sections 70300 through 70306 and Appendices 1 through 3 thereof. Each proposed amendment is accompanied by a discussion of its basis and justification.

Government Code section 11346.2(b)(4) requires CARB to consider and evaluate reasonable alternatives to the proposed regulatory action and provide reasons for rejecting those alternatives. This section discusses alternatives evaluated and provides reasons why these alternatives were not included in the proposal. As explained below, no alternative proposed was found to be less burdensome and equally effective in achieving the purposes of the regulation in a manner that ensures full compliance with the authorizing law. The Board has not identified any reasonable alternatives that would lessen any adverse impact on small business.

A. Reasonable Alternatives to the Amendments

Staff considered potential alternatives to the proposed amendments (namely, the no action alternative). Staff find the proposed amendments are more appropriate than the no action alternative, which would be inconsistent with State law and would retain designations based on older, outdated data. In addition, the no action alternative would not inform the public or districts about the healthfulness of air quality, based on the most recent data.

B. Reasonable Alternatives That Would Lessen the Impact on Small Business

Staff also considered the potential alternatives to the proposed amendments that would lessen any adverse impact on small business (namely, the no action alternative). However, as discussed above, the proposed amendments are more appropriate than the no action alternative, which would retain nonattainment for Mendocino County, CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties in the South Coast Air Basin, and unclassified designations for Santa Barbara County. The proposed amendments will not affect small businesses because they contain no requirements for any action. The no action alternative would neither lessen nor increase any impact on small businesses.

C. Performance Standards in Place of Prescriptive Standards

The proposed amendments do not specify the sole means of compliance with a performance standard by specific actions, measurements, or other quantifiable means, therefore prescriptive standards are not present.

X. Justification for Adoption of Regulations Different from Federal Regulations Contained in the Code of Federal Regulations

There are no comparable federal regulations that address area designations for the State standards.

XI. Public Process for Development of the Proposed Action (Pre-Regulatory Information)

To facilitate public comment during the designation review process, staff requested public input in several ways. After staff's initial review of 2018 through 2020 air quality data, staff noted potential changes to the existing area designations for NO₂, PM₁₀, and PM_{2.5}. Staff contacted the affected districts to discuss the results of the review and provide an opportunity for district input. Staff also maintained a web-based subscriber notification process. For those who subscribe, the system provides electronic updates related to area designation issues.

Consistent with Government Code sections 11346, subdivision (b), and 11346.45, subdivision (a), and with the Board's long-standing practice, CARB staff held a public workshop and had other meetings with interested persons during the development of the proposed regulation. These informal pre-rulemaking discussions provided staff with useful information that was considered during development of the regulation that is now being proposed for formal public comment.

On October 7, 2021, staff announced a public workshop scheduled for October 22, 2021. This workshop was held in the form of a webinar. Staff posted the workshop notice on the CARB website and notified the affected districts, as well as subscribers to the designation subscriber notification system. The workshop announcement included a discussion of staff's proposed amendments to the area designations based on 2018 through 2020 air quality data. Approximately 35 stakeholders participated in the workshop.

XII. References

The following is a list of documents, websites, and other resources used in developing the proposed amendments to the area designations for State standards documented in this staff report:

1. Air Quality Data

California Air Resources Board, Aerometric Data Analysis and Management (ADAM) Data

2. Area Designations

California Air Resources Board (2020), Proposed 2020 Amendments to the Area Designations for State Ambient Air Quality Standards.

<https://ww2.arb.ca.gov/rulemaking/2021/sad2020>

3. Expected Peak Day Concentrations (EPDC)

California Air Resources Board (1993). Guidance for Using Air Quality-Related Indicators in Reporting Progress in Attaining the State Ambient Air Quality Standards.

<https://ww3.arb.ca.gov/research/apr/past/93-49.pdf>

XIII. Appendices

Appendix A Proposed 2021 Amendments to the State Area Designations

Appendix B Area Designation Criteria

Appendix C Maps and Tables of Area Designations for State and National Ambient Air Quality Standards

Appendix D Convention for Rounding Ambient Air Quality Data

Appendix E Designations Values and Expected Peak Day Concentrations

Appendix F Data Tables for Pollutants with Nonattainment Areas