PROPOSED AMENDMENTS TO THE CRITERIA FOR DESIGNATING AREAS OF CALIFORNIA AS NONATTAINMENT, ATTAINMENT, OR UNCLASSIFIED AND TO THE AREA DESIGNATIONS FOR STATE AMBIENT AIR QUALITY STANDARDS

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Air Resources Board

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OVERVIEW AND RECOMMENDATION

A. Overview

1. Introduction

The Health and Safety Code section 39607(e) requires the Air Resources Board (ARB or Board) to establish designation criteria. These designation criteria provide the basis for the Board to designate areas as nonattainment, attainment, or unclassified for the State ambient air quality standards, as required by Health and Safety Code section 39608.

The Board is required to periodically review the designation criteria to ensure its continued relevance. As part of this review, the ARB staff has identified two provisions that need to be amended. These amendments are required to maintain consistency among the various provisions of the designation criteria and to account for the effects of an improved emission estimation procedure. The amendments the ARB staff proposes are summarized in subsection 2, below.

In addition to periodically reviewing the designation criteria, the Board is required to review the area designations on an annual basis. Based on the most recently available air quality data, the ARB staff recommends several amendments to the area designations. These amendments are summarized in subsection 3, below.

2. Proposed Amendments to the Designation Criteria

The proposed amendments to the designation criteria (California Code of Regulations (CCR), Title 17, sections 70300 through 70306 and Appendices 1 through 4, thereof) would make the following changes to the regulations:

- Change the requirements for determining complete data--when only one or two years of data are available--to exclude data affected by highly irregular or infrequent events before determining the maximum pollutant concentration used in determining whether the area qualifies as attainment.

- Change the emission screening value for the total annual emissions of oxides of nitrogen in an air basin to reflect an improved procedure for estimating oxides of nitrogen emissions. This screening value is used in determining whether an area that lacks complete air quality data qualifies as attainment for nitrogen dioxide.

3. Proposed Amendments to the Area Designations

The proposed amendments to the area designations (CCR, Title 17, sections 60200 through 60209) would make the following changes to the regulations:

- Redesignate Del Norte, Humboldt, and Trinity Counties in the North Coast Air Basin as attainment for ozone. This three county area currently is designated as unclassified for ozone.

- Redesignate the San Jose Urbanized Area in Santa Clara County in the San Francisco Bay Area Air Basin (SFBAAB) as nonattainment-transitional for carbon monoxide. This area currently is designated as nonattainment for carbon monoxide.

- Redesignate the SFBAAB portion of Solano County as attainment for carbon monoxide. Currently, the Vallejo Urbanized Area is designated as nonattainment-transitional, while the remainder of the SFBAAB portion of Solano County is designated as unclassified for carbon monoxide.

- Redesignate the San Diego Air Basin as attainment for carbon monoxide. Currently, the San Diego County-West portion is designated as nonattainment-transitional, while the remainder of the air basin is designated as unclassified for carbon monoxide.

- Redesignate the Sacramento County portion of the Census Bureau Urbanized Area in the Sacramento Valley Air Basin as nonattainment, and redesignate the remainder of Sacramento County as attainment for carbon monoxide. Currently, the entire County is designated as nonattainment for carbon monoxide.

- Redesignate Humboldt County in the North Coast Air Basin as attainment for sulfur dioxide. This County currently is designated as unclassified for sulfur dioxide.

- Redesignate Humboldt County in the North Coast Air Basin as attainment for sulfates. This County currently is designated as unclassified for sulfates.

- o Redesignate Humboldt County in the North Coast Air Basin as attainment for hydrogen sulfide. This County currently is designated as unclassified for hydrogen sulfide.

- o Redesignate Santa Barbara County in the South Central Coast Air Basin as attainment for hydrogen sulfide. Currently, the Santa Maria Valley-Solomon Hills Area is designated as nonattainment, while the remainder of Santa Barbara County is designated as unclassified for hydrogen sulfide.

B. Recommendation

The ARB staff recommends the Board adopt the proposed amendments to the designation criteria and the proposed amendments to the area designations. The full text of the proposed amendments is given in Attachments A and B to this Staff Report.

CHAPTER I
BACKGROUND

A. Introduction

This chapter gives some background information on the criteria used for making the area designations and also, the area designations themselves. The following sections describe the legal requirements, the criteria used for making the area designations, the implications of being redesignated, and the area designation review process.

B. Legal Requirements

Health and Safety Code (HSC) section 39607(e) requires the Board to establish and periodically review the criteria for designating areas as nonattainment or attainment for the State ambient air quality standards (State standards; refer to Attachment C). The Board originally adopted the required designation criteria in June 1989. The Board subsequently amended the designation criteria in June 1990, May 1992, and December 1992.

HSC section 39608 requires the Board to use the designation criteria in designating areas of California as nonattainment or attainment with respect to the State standards (refer to Attachment C). Areas that cannot be designated as nonattainment or attainment are designated as unclassified. The area designations are made on a pollutant-by-pollutant basis, for all pollutants listed in the CCR, Title 17, section 70200. The nine affected pollutants are ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulate matter or PM10, sulfates, lead, hydrogen sulfide, and visibility reducing particles. The HSC requires the Board to review the area designations each year and update them as new information becomes available.

C. Summary of the Designation Criteria

1. General Provisions

The current designation criteria comprise CCR, Title 17, sections 70300 through 70306, including Appendices 1 through 4, thereof (refer to Attachment D). The designation criteria describe the procedures the Board must use to determine an area's designation status with respect to the State standards. In summary, the designation criteria specify:

- The data the Board will use for making the area designations;
- How the Board will determine the size of the designated areas;
- How the Board will determine whether an area qualifies for designation as nonattainment, attainment, or unclassified; and
- The requirement for an annual review of the area designations by the Board's Executive Officer.

2. Data to Use

To the extent possible, the Board makes area designations for each pollutant based on recent ambient air quality data. The air quality data must be ***data for record***, which are those air quality data that satisfy specified siting and quality assurance procedures established by the federal government. Generally, data for record are those data collected by or under the direction of the Board and the air pollution control or air quality management districts (districts). When adequate recent air quality data are not available, the Board may use other types of information to determine an appropriate area designation. These other types of data may include historical air quality data, emission data, meteorological or topographical data, and data relating to the amounts and distributions of population or emissions.

3. Highly Irregular or Infrequent Events

When area designations are based on ambient air quality data, the designation criteria provide for excluding unusual values. In particular, the designation 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 the designation criteria (refer to Attachment D) defines two types of highly irregular or infrequent events:

1) Exceptional Events, and
2) Extreme Concentration Events.

An ***exceptional event*** is a specific, identifiable event that causes or contributes significantly to an exceedance of a State standard. An exceptional event may be caused by an act of nature (for example, a severe wind storm, volcanic eruption, or stratospheric ozone intrusion) or it may be of human origin (for example, a chemical spill or industrial accident).

In contrast, an ***extreme concentration event*** does not have a specific, identifiable cause but is based on a statistical procedure which calculates the concentration that is not expected to recur more frequently than once per year. This value is often referred to as the 1-in-1 year recurrence rate concentration. Adverse meteorology is

one potential cause of an extreme concentration event. Measured concentrations that are higher than the calculated 1-in-1 year recurrence rate concentration are excluded as extreme concentrations.

The 1-in-1 year recurrence rate concentration is calculated on a site-by-site basis, using data for a three year period. The 1-in-1 year recurrence rate concentrations for ozone, carbon monoxide, nitrogen dioxide, PM10, sulfates, and hydrogen sulfide are listed in Attachment E. The 1-in-1 year recurrence rate concentrations listed in Attachment E are based on air quality data for 1990 through 1992, the most recent three year period for which data are available and the same three year period used in reviewing the area designations discussed in this Staff Report. Note that 1-in-1 year recurrence rate concentrations are not given for sulfur dioxide and lead because all areas in California currently are designated as attainment or unclassified for these two pollutants. Furthermore, 1-in-1 year recurrence rate concentrations also are not given for visibility reducing particles because the available data are not sufficient for calculating the 1-in-1 year recurrence rate concentrations for this pollutant.

4. Size of the Designated Area

The size of the area designated for a pollutant may vary depending on the nature of the pollutant, the location of contributing emission sources, the meteorology, and the topographic features. Normally, an air basin is the area designated for ozone, nitrogen dioxide, PM10, sulfates, and visibility reducing particles. A county (or the portion of a county located within an air basin) normally is the area designated for carbon monoxide, sulfur dioxide, lead, and hydrogen sulfide. In both cases, however, the Board may designate a smaller area if the Board finds that the smaller area has distinctly different air quality, resulting from sources and conditions that do not affect the entire air basin or county. To the extent practical, the designation criteria require the Board to define the designated areas using political boundary lines.

5. Designation Categories

The designation criteria specify three major categories of designation: nonattainment, attainment, and unclassified. The Board will designate an area as **nonattainment** for a pollutant if air quality data show that a State standard for that pollutant was violated at least once during the previous three calendar years.[1]

[1] The terms *exceedance* and *violation* are used throughout this Staff Report. Because the two terms are closely related, they can be confusing. In this report, the term ***exceedance*** refers to a measured pollutant concentration that is higher than the level of a State standard. The term ***violation*** refers to an exceedance that was not significantly affected by a highly irregular or infrequent event (refer to Attachment D). Violations are considered in the area designation process.

Exceedances that are affected by highly irregular or infrequent events are not considered to be violations of a State standard and are not used as a basis for designating areas as nonattainment.

The designation criteria specify a subcategory of nonattainment which is called **nonattainment-transitional.** The Board will designate an area as nonattainment-transitional for a pollutant other than ozone if air quality data show that a State standard for that pollutant was violated two or fewer times at any site in the area during the previous calendar year. In addition, an evaluation of recent air quality trends and meteorological and emission data must show that air quality either has stabilized or improved. Finally, the area must be expected to reach attainment for the pollutant within three years.

The nonattainment-transitional designation can also apply for ozone. Under HSC section 40925.5 (refer to Attachment C), the nonattainment-transitional designations for ozone are made by operation of law. Specifically, an area is designated as nonattainment-transitional for ozone, by operation of law, if air quality data show that the State ozone standard was exceeded three or fewer times at any site in an air basin during the most recent year for which air quality data are available.

The Board will designate an area as **attainment** for a pollutant if the data show ~~that a State standard for that pollutant was not violated during the previous three~~ calendar years. Again, exceedances affected by highly irregular or infrequent events are not considered violations. As a result, an area may have measured concentrations that exceed a State standard and still be designated as attainment. Finally, the Board will designate an area as **unclassified** for a pollutant if the available data do not support a designation of nonattainment or attainment.

D. Implications of the Redesignations

1. Areas Redesignated as Nonattainment

A district that includes an attainment or unclassified area that is redesignated as nonattainment (a nonattainment district) experiences two principal consequences under the law. First, the law requires the nonattainment districts for ozone, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop plans for attaining the State standards for these pollutants. The nonattainment districts must submit these attainment plans to the Board for approval (HSC section 40911). Ozone nonattainment districts that are impacted by overwhelming transport from an upwind area (in other words, all of the ozone violations are caused by emissions transported from an upwind area located outside the district) are not required to develop an ozone attainment plan. In this case, the responsible upwind district(s) would be responsible for mitigating the ozone violations in the downwind nonattainment area.

A district with an area that is redesignated as nonattainment for any of the remaining five pollutants--PM10, sulfates, lead, hydrogen sulfide, or visibility reducing particles--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 five pollutants. Furthermore, the nonattainment district may develop and implement an attainment plan. (HSC section 40001).

The second consequence is that a nonattainment district for ozone, carbon monoxide, nitrogen dioxide, or sulfur dioxide is required to collect fees from large nonvehicular sources located in the nonattainment area (HSC section 39612 and CCR, Title 17, section 90620 et seq.). Only those sources which emit 500 tons per year or more of any of these four nonattainment pollutants or their precursors are subject to the additional permit fees. The additional fees are used to help defray the costs of State programs related to nonvehicular sources and implemented under the California Clean Air Act of 1988 (Stats. 1988, ch. 1568).

2. Areas Redesignated as Nonattainment-Transitional

Nonattainment-transitional is a subcategory of the nonattainment designation. Therefore, a district with an area that is redesignated as nonattainment-transitional is subject to the same legal requirements as a nonattainment district (refer to discussion in subsection 1, above).

However, in contrast to the simple nonattainment designation, nonattainment-transitional status may signal a change in how these legal 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 practical date. As a result, nonattainment-transitional status provides the district with a signal that it may be appropriate to review and perhaps modify its approved attainment plan. HSC 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. District actions in response to nonattainment-transitional status are subject to the Board's review and approval.

3. Areas Redesignated as Attainment

The law does not impose any specific planning requirements upon districts with areas redesignated as attainment. However, the 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. As part of this effort, the districts must adopt rules and regulations sufficiently effective to attain and maintain the State standards (HSC sections 39001, 40001, and 41500).

E. The Area Designation Review Process

Both the HSC (section 39608(c)) and the designation criteria require the Board to review the area designations annually and update them (redesignate areas) as new information becomes available. As part of this review process, the ARB staff distributed two notices. On April 9, 1993, the ARB staff sent a letter to all districts notifying them of the May 1, 1993, deadline for requesting a change in an area designation, submitting information for consideration in the annual review process, or requesting a nonattainment-transitional designation for pollutants other than ozone. (Note that the nonattainment-transitional designations for ozone are made by operation of law, rather than by the Board.) On July 2, 1993, the ARB staff distributed a general announcement for a public consultation meeting held July 20, 1993. This announcement included a list of areas with the proposed redesignations the ARB staff was considering. In addition to the proposed redesignations, the ARB staff discussed at the public consultation meeting, the proposed amendments to the designation criteria.

As required by the designation criteria, the ARB staff has reviewed the air quality data collected during the most recent three calendar years--1990 through 1992. Based on these data, the ARB staff proposes that a number of specific areas be redesignated. All of the proposed redesignations reflect changes toward better air quality, indicating the benefits of the ongoing emission control efforts.

CHAPTER II
PROPOSED AMENDMENTS TO THE DESIGNATION CRITERIA

A. Introduction

This chapter describes two proposed amendments to the designation criteria. The proposed amendments affect Appendix 3: "Criteria for Determining Data Completeness" (the Completeness Criteria) and Appendix 4: "Screening Procedure for Determining Attainment Designations for Areas with Incomplete Air Quality Data" (the Screening Procedure). The provisions of the current designation criteria, the concerns about the current provisions, and the proposed amendments are described in subsections B and C, below.

B. The Criteria for Determining Data Completeness

1. The Current Completeness Criteria

Appendix 3 to CCR, Title 17, sections 70300 through 70306, describes the criteria the Board uses in determining whether data are complete. Complete data are required for making designations of attainment and nonattainment-transitional. In general, the Completeness Criteria assure that the data are complete enough to depict the temporal variations in pollutant concentrations that are expected in a particular area.

In addition to hourly and seasonal requirements, the Completeness Criteria provide that fewer than three years of air quality data will be considered complete if pollutant concentrations are below certain levels. For example, three years of air quality data generally are considered complete and provide the basis for an attainment designation. However, two years of data are considered complete and may provide the basis for an attainment designation if the maximum concentration during the two years is less than three-fourths of the applicable State standard. Similarly, one year of data is considered complete and may provide the basis for an attainment designation if the maximum concentration during the year is less than one-half of the applicable State standard.

2. Concerns About the Current Completeness Criteria

When determining attainment based on three years of air quality data (CCR, Title 17, section 70304), exceedances affected by highly irregular or infrequent events are excluded. In contrast, the Completeness Criteria as currently written, do not exclude any measured concentrations. As a result, the attainment test applied when

there are only one or two years of data is inconsistent with and more stringent than the attainment test applied when there are three years of data.

This inconsistency results from previous amendments to the attainment test in CCR, Title 17, section 70304. The Board originally specified the attainment test as the maximum pollutant concentration in the previous three years after excluding exceptional events. In May 1990, the Board amended the attainment test to exclude highly irregular or infrequent events, which include not only exceptional events but also, extreme concentration events. As a result, the designation criteria allow all exceedances affected by highly irregular or infrequent events to be excluded when an attainment designation is based on three years of data. As described in subsection 1, above, the Completeness Criteria allow less than three years of data to be used for an attainment designation if the maximum pollutant concentration is below a specified level. However, no data are excluded before determining the "maximum pollutant concentration." To maintain consistency with the attainment test in CCR, Title 17, section 70304, data affected by highly irregular or infrequent events also should be excluded when an attainment designation is based on less than three years of data.

3. Staff Recommendation

To resolve the inconsistency in the attainment test applied for three years of data versus less than three years of data, the ARB staff proposes the Completeness Criteria be amended to exclude air quality data affected by highly irregular or infrequent events before assessing the completeness of the data. The ARB staff recommends the Board amend Appendix 3 to CCR, Title 17, sections 70300 through 70306 as shown below (see Attachment A for full text). This proposed amendment would affect the current ozone designation for the North Coast Air Basin.

PROPOSED AMENDMENT TO APPENDIX 3
CRITERIA FOR DETERMINING DATA COMPLETENESS

Required Years

The number of years to be included is:

a) Three; or

b) Two, if during these years the maximum pollutant concentration (not including data found to be affected by a highly irregular or infrequent event under the procedure set forth in Appendix 2) is less than three-fourths the applicable state ambient air quality standard; or

c) One, if during this year the maximum pollutant concentration (not including data found to be affected by a highly irregular or infrequent event under the procedure set forth in Appendix 2) is less than one-half the applicable state ambient air quality standard.

C. The Screening Procedure for Nitrogen Dioxide Attainment Designations

1. The Current Screening Procedure for Nitrogen Dioxide

Appendix 4 to CCR, Title 17, sections 70300 through 70306 comprises a procedure that the Board may use to designate areas as attainment for nitrogen dioxide, sulfur dioxide, sulfates, and lead. The Screening Procedure applies in areas where air quality data for the prior three years are incomplete or do not exist. For those areas with incomplete air quality data, the Screening Procedure applies only if the maximum pollutant concentration did not exceed 75 percent of the State standard.

The Screening Procedure specifies *screening values* for several selected screening parameters which are specific to each pollutant. An area's *local values* for each screening parameter are compared with the screening values. If the area's local values do not exceed the screening values, the Board may designate the area as attainment.

The current Screening Procedure specifies the following screening parameters and screening values for nitrogen dioxide:

SCREENING PARAMETER	SCREENING VALUE
Maximum Concentration if Air Quality Data are Available	<75% of State standard
Air Basin Population	1,000,000 people
Total Annual NOx Emissions in Air Basin	25,000 tons/year
Total Annual Point Source NOx Emissions in County	2,100 tons/year

Based on the Screening Procedure, the Board may designate a qualifying area as attainment for nitrogen dioxide if the population within the air basin does not exceed one million, the total annual oxides of nitrogen (NOx) emissions for the air basin do not exceed 25,000 tons, and the total annual NOx emissions from all point sources in the affected county do not exceed 2,100 tons.

2. Concerns About the Current Screening Procedure for Nitrogen Dioxide

The ARB staff developed the current Screening Procedure for use only in situations where there is a reasonable certainty that if an area passes the Screening Procedure, the State standard is not violated. The Screening Procedure was developed empirically from the relationship between air quality in areas with high concentrations and the population or emissions in the same area. The ARB staff's two major considerations in developing the Screening Procedure were:

1) The procedure be conservative, making incorrect designations of an area as attainment highly unlikely, and
2) The procedure be relatively easy to develop and apply.

The ARB staff made the Screening Procedure conservative by using a safety factor and by requiring that for a specific pollutant, an area's local values for each screening parameter not equal or exceed any of the specified screening values. The ARB staff used screening parameters related to population and emissions because data for these parameters are readily available and, therefore, the Screening Procedure could be easily applied in all areas of the State.

Since the ARB staff developed the screening values for nitrogen dioxide, the ~~procedure for estimating NOx emissions has been improved. As a result of this~~ improvement, the NOx emission estimates used in developing the original screening values have increased. The major impact of the improved estimation procedure is to increase the estimate of the NOx emissions from motor vehicles. (The estimate of the NOx emissions from point sources remains essentially unchanged.) As a result, it is appropriate to update the screening value for the parameter of total NOx emissions in the air basin (refer to Attachment F for a discussion of the methodology).

3. Staff Recommendation

Based on the improved procedure for estimating NOx emissions, the ARB staff recommends that the screening value for total NOx emissions in the air basin be increased from the current 25,000 tons per year to 40,000 tons per year. This proposed amendment includes a necessary safety factor to ensure that areas designated as attainment for nitrogen dioxide based on the Screening Procedure do not violate the State nitrogen dioxide standard. The ARB staff recommends the Board amend Appendix 4 to CCR, Title 17, sections 70300 through 70306, accordingly. The full text of the proposed amendment is found in Attachment A. This proposed amendment does not affect any of the current area designations. However, if the proposed amendment is not approved, two areas (the North Coast Air Basin and the Mountain Counties Air Basin) would no longer qualify as attainment for nitrogen dioxide, based on the Screening Procedure (refer to Attachment F). As a result, these two areas would need to be redesignated as unclassified for nitrogen dioxide.

CHAPTER III
PROPOSED AMENDMENTS TO THE AREA DESIGNATIONS

A. Introduction

This chapter describes and explains the proposed amendments to the area designations. The proposed redesignations are consistent with the designation criteria established in CCR, Title 17, sections 70300 through 70306, as they are proposed to be amended in Chapter II of this Staff Report.

The proposed redesignations are based on air quality *data for record* as defined in CCR, Title 17, section 70301 (refer to Attachment D). The air quality data used for redesignating an area as nonattainment must be representative of the averaging time specified in the State standard. The air quality data used for redesignating an area as attainment or nonattainment-transitional also must be representative and, in addition, the data must be complete. The specific requirements for evaluating data representativeness and data completeness are given in Appendices 1 and 3, respectively, of the designation criteria (refer to Attachments A and D).

As required by the designation criteria, the ARB staff has reviewed the air quality data collected during the three year period of 1990 through 1992. Based on these data, redesignations are appropriate only for five of the nine pollutants for which the Board makes area designations. The affected pollutants are: ozone, carbon monoxide, sulfur dioxide, sulfates, and hydrogen sulfide. Based on the 1990 through 1992 data, no action is proposed for the remaining four pollutants: nitrogen dioxide, PM10, lead, and visibility reducing particles. Therefore, the current area designations for these four pollutants would remain unchanged.

B. Proposed Area Redesignation for Ozone

The State standard for ozone is a one-hour concentration of 0.09 parts per million (ppm), *not to be exceeded.* Based on air quality data for 1990 through 1992, one area qualifies for redesignation for ozone.

The North Coast Unified Air Quality Management District (North Coast District) submitted a letter, dated October 13, 1992, requesting that the portion of the North Coast Air Basin which includes Del Norte, Humboldt, and Trinity Counties be redesignated as attainment for ozone (refer to Attachment G, Item 1A). This three county area currently is designated as unclassified for ozone. The North Coast District submitted a second request for redesignation dated June 15, 1993, which contained additional information to support their initial request (refer to Attachment G, Item 1B).

During 1990 through 1992, the North Coast District conducted ozone monitoring at two sites in Humboldt County, and the Board contracted for ozone monitoring at one site in Del Norte County. None of the three monitors measured any concentrations above the level of the State ozone standard. The highest measured concentration was 0.07 ppm at the Gasquet-Airport site in Del Norte County. With respect to the three county area, the ARB staff considers this site to be representative of the highest expected ozone concentrations. Two years of complete data are available for the Gasquet-Airport site during 1990 through 1992. After excluding data affected by highly irregular or infrequent events, the remaining maximum ozone concentration at Gasquet-Airport is 0.06 ppm, which is less than three-fourths of the State ozone standard.

Based on the ozone data collected at Gasquet-Airport, the ARB staff proposes that the Board redesignate that portion of the North Coast Air Basin which comprises Del Norte, Humboldt, and Trinity Counties as a single attainment area for ozone. This proposed redesignation is based on the provisions in CCR, Title 17, section 70304(a) and would affect CCR, Title 17, section 60201. This proposed redesignation is dependent on the Board's and the Office of Administrative Law's approval of the proposed amendment to Appendix 3 (refer to Chapter II, subsection B). If the proposed amendment is not approved, Del Norte, Humboldt, and Trinity Counties will remain designated as unclassified for ozone.

C. Proposed Area Redesignations for Carbon Monoxide

There are three State standards for carbon monoxide (CO). A one-hour average standard and two eight-hour average standards. The one-hour average standard of 20 ppm applies statewide. An eight-hour average standard of 9.0 ppm applies in all areas of California except the Lake Tahoe Air Basin. Both of these State CO standards are *not to be exceeded.* In the Lake Tahoe Air Basin, a more stringent eight-hour average standard of 6 ppm, is *not to be equalled or exceeded.*

Based on data from 1990 through 1992, four areas qualify for redesignation for CO. These areas include Santa Clara County in the San Francisco Bay Area Air Basin (SFBAAB), the portion of Solano County located in the SFBAAB, the San Diego Air Basin, and Sacramento County in the Sacramento Valley Air Basin.

1. San Francisco Bay Area Air Basin

a. Santa Clara County

With a letter dated April 30, 1993, the Bay Area Air Quality Management District (BAAQMD) requested that the San Jose Urbanized Area be redesignated as

nonattainment-transitional for CO (refer to Attachment G, Item 2A). This area currently is designated as nonattainment for CO.

During 1990, there were five exceedances of the applicable eight-hour State CO standard in this area, and four of these exceedances were violations. During 1991, there were four exceedances of the applicable eight-hour State CO standard, and all four of these exceedances were violations. No measured concentrations exceeded the applicable eight-hour State CO standard during 1992. Hourly measured concentrations were below the one-hour State CO standard during all three years.

An area may be redesignated as nonattainment-transitional (for a pollutant other than ozone) if the following three conditions are satisfied:

1) There were two or fewer days at any site during the previous calendar year with violations of the State standard (excluding data found to be affected by highly irregular or infrequent events);
2) An evaluation of multiple years of data shows that the air quality has stabilized or is improving, and the area is expected to reach attainment within three years; and
3) The geographic extent of the area is consistent with the criteria in CCR, Title 17, section 70302.

The air quality data for the San Jose Urbanized Area show that the applicable State CO standards were not violated during 1992. Furthermore, an analysis completed by the BAAQMD staff shows that the San Jose Urbanized Area is expected to reach attainment by 1995 (within three years). The details of this analysis are given in Attachment G, Item 2B).

Based on the measured air quality data and the results of the BAAQMD staff's analysis, the ARB staff recommends that the Board redesignate the San Jose Urbanized Area in Santa Clara County as nonattainment-transitional for CO. This proposed redesignation is based on the provisions in CCR, Title 17, section 70303(c) and affects CCR, Title 17, section 60202. The remainder of Santa Clara County would remain designated as attainment for CO.

b. Solano County

The SFBAAB includes a portion of Solano County which generally is that portion of the County located west of Vacaville. The Vallejo Urbanized Area in the SFBAAB portion of Solano County currently is designated as nonattainment-transitional

for CO. The remainder of the SFBAAB portion of Solano County currently is designated as unclassified for CO.

During 1990 through 1992, there was one exceedance of the applicable State eight-hour CO standard in the Vallejo Urbanized Area. This exceedance, 9.6 ppm, is higher than the calculated 1-in-1 year recurrence rate concentration of 9.4 ppm and, therefore, is excluded as an extreme concentration event. This exceedance is not considered a violation. Vallejo is the largest urbanized area within the SFBAAB portion of Solano County, and the ARB staff expects it reflects an area of expected high concentrations. The ARB staff expects that other urbanized areas within the SFBAAB portion of Solano County (for example, Fairfield and Benicia) would have lower overall CO concentrations than Vallejo, because of their smaller size.

Based on the CO data collected at Vallejo, the ARB staff recommends the Board redesignate the entire SFBAAB portion of Solano County as a single attainment area for CO. This proposed redesignation is based on the provisions in CCR, Title 17, section 70304(a) and affects CCR, Title 17, section 60202.

2. San Diego Air Basin

The San Diego Air Basin currently comprises two separately designated areas with respect to the State CO standard. San Diego County-West is designated as nonattainment-transitional while the remainder of San Diego County is designated as unclassified for CO.

During 1990 through 1992, there was one exceedance of the applicable eight-hour State CO standard in the San Diego County-West portion of the air basin. This exceedance, 9.1 ppm, is higher than the calculated 1-in-1 year recurrence rate concentration of 7.7 ppm and, therefore, is excluded as an extreme concentration event. This exceedance is not considered a violation. Based on an analysis of the population and emissions in the San Diego Air Basin, the ARB staff concludes that concentrations in the western portion of the air basin reflect the highest concentrations expected in the County.

Based on the CO data collected in the San Diego Air Basin, the ARB staff recommends the Board redesignate the San Diego Air Basin as a single attainment area for CO. This proposed redesignation is based on the provisions in CCR, Title 17, section 70304(a) and affects CCR, Title 17, section 60202. In addition, since the "San Diego County-West" area would no longer be included as a designated area in the area designation regulations, the ARB staff recommends deleting the definition of this area from CCR, Title 17, section 60200(c).

3. Sacramento Valley Air Basin

Sacramento County in the Sacramento Valley Air Basin currently is designated as nonattainment for CO. With a letter dated May 10, 1993, the Sacramento Metropolitan Air Quality Management District (SMAQMD) requested that the CO nonattainment area be limited to that portion of the Census Bureau Urbanized Area located within Sacramento County (refer to Attachment G, Item 3). The SMAQMD contends that changing the boundary of the nonattainment area would more accurately define the nature of the CO problem in Sacramento County. Furthermore, limiting the CO nonattainment area to the Census Bureau Urbanized Area is consistent with the Federal CO nonattainment area and is more consistent with the approach taken in most other areas of the State with respect to the State CO standard. Outside of the South Coast Air Basin, all of the current State CO nonattainment areas are defined as only the urbanized area. For example, the Chico, Fresno, and Stockton Urbanized Areas are defined as the State CO nonattainment areas in Butte, Fresno, and San Joaquin Counties.

The ARB staff's analysis of data for 1990 through 1992 indicate that all violations of the applicable eight-hour State CO standard in Sacramento County have occurred within the boundaries of the Census Bureau Urbanized Area. These violations are consistent with the nature of CO formation--the problem areas tend to be relatively small and localized in their occurrence.

In addition to the monitoring sites located within the Census Bureau Urbanized Area, one monitoring site, Sacramento-Earhart, is located outside the urbanized area and near the Sacramento Metropolitan Airport. During 1990 through 1992, the Sacramento-Earhart site did not measure any exceedances of the applicable State CO standards. Furthermore, the ARB staff concludes that outside of the Census Bureau Urbanized Area, the Sacramento-Earhart site represents the area of the highest expected concentrations.

Based on these data, the ARB staff recommends that the current Sacramento County CO nonattainment area be changed to include only the Sacramento County portion of the Census Bureau Urbanized Area. The proposed nonattainment area (the Sacramento County portion of the Census Bureau Urbanized Area) is the same as the Federal CO nonattainment area which is based on the 1980 Census data. This proposed redesignation is based on the provisions in CCR, Title 17, section 70303(a). In addition, the ARB staff recommends that the remainder of Sacramento County be redesignated as attainment for CO. This proposed redesignation is based on the provisions in CCR, Title 17, section 70304(a). Both of these proposed actions would affect CCR, Title 17, section 60202.

D. Proposed Area Redesignations for Sulfur Dioxide and Sulfates

There are two State standards for sulfur dioxide and one State standard for sulfates. The one-hour State standard for sulfur dioxide is 0.25 ppm, while the 24-hour State standard for this pollutant is 0.04 ppm. Both State sulfur dioxide standards are *not to be exceeded.* The State standard for sulfates is a 24-hour average of 25 micrograms per cubic meter, *not to be equalled or exceeded.*

In a letter dated April 29, 1993, the North Coast District requested that Humboldt County be redesignated as attainment for both sulfur dioxide and sulfates (refer to Attachment G, Item 4). The County currently is designated as unclassified for both pollutants.

The justifications for both of these redesignations are similar and are based on Appendix 4 to CCR, Title 17, sections 70300 through 70306. Appendix 4: "Screening Procedure for Determining Attainment Designations for Areas with Incomplete Air Quality Data," specifies pollutant-specific screening parameters and associated screening values that may be used for designating areas as attainment when air quality data are limited or do not exist. The screening parameters and screening values for sulfur dioxide and sulfates are listed in Table 1, below. Only the first two parameters listed in Table 1 (Total Annual Point Source SOx (oxides of sulfur) Emissions in County and Maximum Annual SOx Emissions from Single Facility in County) apply to sulfur dioxide, while all three of the screening parameters in Table 1 apply to sulfates.

TABLE 1
SCREENING PARAMETERS AND SCREENING VALUES FOR SULFUR DIOXIDE AND SULFATES

SCREENING PARAMETER	SCREENING VALUE
Total Annual Point Source SOx Emissions in County	1,700 tons/year
Maximum Annual SOx Emissions from Single Facility in County	900 tons/year
Total Annual SOx Emissions in Air Basin	19,000 tons/year

Under Appendix 4, an area may be designated as attainment for sulfur dioxide or sulfates if the area's local values for the applicable screening parameters do not exceed the specified screening values. The current SOx emission values for Humboldt County satisfy the screening parameters in Appendix 4. Table 2 shows the local values to be compared with the screening values in Table 1. Table 2 includes emission data for three separate years: 1989, 1990, and 1991. As seen in Table 2, the total annual point source SOx emissions in Humboldt County during 1989 are estimated as 2,154 tons, which exceeds the screening value of 1,700 tons per year. Furthermore, the maximum annual SOx emissions from a single facility in the County are estimated as 1,633 tons in 1989, which exceeds the screening value of 900 tons per year (refer to Table 1). The local values for these two screening parameters originally kept Humboldt County from qualifying for attainment under Appendix 4.

TABLE 2
LOCAL SCREENING VALUES FOR HUMBOLDT COUNTY FOR VARIOUS YEARS

SCREENING PARAMETER	LOCAL VALUES* 1989	1990	1991
Total Annual Point Source SOx emissions in County	2,154 t/y**	1,563 t/y	209 t/y
Maximum Annual SOx Emissions from Single Facility in County	1,633 t/y	1,021 t/y	102 t/y
Total Annual SOx Emission in Air Basin	2,592 t/y	1,778 t/y	434 t/y

* 1989 estimates are from the Board's "Emission Inventory 1989" (1991).
1990 estimates are from the Board's 1990 Draft Base Year Inventory.
1991 estimates are from the Board's 1991 Draft Base Year Inventory.

** t/y = tons per year.

The particular point source that contributed the majority of the SOx emissions in Humboldt County during 1989 and 1990 subsequently switched from oil to natural gas fuel. This change in fuels greatly reduced this source's contribution to the SOx emissions. The point source permanently ceased operating in February 1993. The SOx emissions from the next largest point source in Humboldt County are estimated as 302 tons per year in 1990 and 97 tons per year in 1991. These emission values

are well below the 900 tons per year SOx emissions from a single point source in the county as specified as the screening value for this parameter for both sulfur dioxide and sulfates (refer to Table 1).

The total SOx emissions in the North Coast Air Basin are estimated as 2,592 tons per year during 1989. The majority of these emissions were contributed by sources in Humboldt County. The total SOx emissions in the air basin during 1990 and 1991, are estimated as 1,778 tons per year and 434 tons per year, respectively. Again, the majority of these SOx emissions were contributed by sources in Humboldt County. These values are well below the 19,000 tons per year SOx emissions in the air basin specified as a screening value for sulfates (refer to Table 1). Because all of the SOx screening parameters for sulfur dioxide and for sulfates are now satisfied in Humboldt County, the ARB staff is confident that the State standards for both these pollutants are not violated.

Based on the SOx emission data for 1991, the ARB staff recommends the Board redesignate Humboldt County in the North Coast Air Basin as attainment for both sulfur dioxide and sulfates. These proposed redesignations are based on the provisions in CCR, Title 17, section 70304(c) and affect CCR, Title 17, sections 60204 and 60206, respectively. Because the remaining counties in the North Coast Air Basin (Del Norte, Mendocino, Trinity, and the North Coast Air Basin portion of Sonoma Counties) already are designated as attainment for sulfur dioxide and sulfates, these proposed actions would make the North Coast Air Basin a single contiguous attainment area for both pollutants.

E. Proposed Area Redesignations for Hydrogen Sulfide

The State standard for hydrogen sulfide is a one-hour average standard of 0.03 ppm, *not to be equalled or exceeded.* Based on air quality data collected during 1990 through 1992, two areas qualify for redesignation for hydrogen sulfide. These areas are Humboldt County in the North Coast Air Basin and the Santa Maria Valley-Solomon Hills Area in the South Central Coast Air Basin.

1. Humboldt County

With a letter dated April 29, 1993, the North Coast District requested that Humboldt County be redesignated as attainment for hydrogen sulfide (refer to Attachment G, Item 4). The County currently is designated as unclassified for hydrogen sulfide.

Hydrogen sulfide concentrations are not monitored in Humboldt County. However, data for total reduced sulfur are collected at one monitoring site in the County. The ambient measurements of total reduced sulfur reflect all sulfur compounds, including hydrogen sulfide. During 1990 through 1992, there was only one measurement of the total reduced sulfur compounds that exceeded the State standard for hydrogen sulfide. This exceedance was associated with a plant upset condition. The North Coast District submitted an analysis showing that a very small amount of the total emissions from the plant upset condition could have been hydrogen sulfide, and therefore, the associated hydrogen sulfide concentration would have been below the level of the State hydrogen sulfide standard (the North Coast District staff estimated the hydrogen sulfide concentration as approximately 0.003 ppm; refer to Attachment G, Item 5). The staff from the ARB's Compliance Division reviewed this analysis and concurred with the North Coast District's conclusions.

Based on the measurements of total reduced sulfur compounds and the North Coast District staff's analysis of the exceedance data, the ARB staff recommends the Board redesignate Humboldt County in the North Coast Air Basin as attainment for hydrogen sulfide. This proposed redesignation is based on the provisions in CCR, Title 17, section 70304(a) and affects CCR, Title 17, section 60208.

2. Santa Maria Valley-Solomon Hills Area

The Santa Maria Valley-Solomon Hills Area is located in Santa Barbara County in the South Central Coast Air Basin. This portion of Santa Barbara County currently is designated as nonattainment for hydrogen sulfide. The remainder of Santa Barbara County is designated as unclassified for this pollutant.

With a letter dated April 25, 1993, the Santa Barbara County Air Pollution Control District (SBCAPCD) requested that the Santa Maria Valley-Solomon Hills Area be redesignated as nonattainment-transitional for hydrogen sulfide (refer to Attachment G, Item 6). However, based on the ambient air quality data, the ARB staff proposes the area be redesignated as attainment for hydrogen sulfide.

During 1990 through 1992, there was one exceedance of the State hydrogen sulfide standard. This exceedance, 0.03 ppm, was measured in 1990 at the Battles-Betteravia monitoring site. The exceedance is higher than the calculated 1-in-1 year recurrence rate concentration and, therefore, is excluded as an extreme concentration event. The exceedance is not considered a violation. The second highest hydrogen sulfide concentration measured in Santa Barbara County during 1990 through 1992 was 0.02 ppm, a value that is lower than State hydrogen sulfide standard.

The SBCAPCD contends and the ARB staff agrees that the Battles-Betteravia monitoring site is located in an area where the highest hydrogen sulfide concentrations are expected to occur. During previous years, the location of the expected maximum concentrations was at the Santa Maria-Glacier monitoring site. However, this monitoring site was closed shortly after the gas field it was intended to monitor ceased operations. The permit for the gas field stipulates that monitoring be reinstated if the field is reopened.

Based on the Battles-Betteravia monitoring data for 1990 through 1992, the ARB staff recommends the Board redesignate the Santa Maria Valley-Solomon Hills Area and the remainder of Santa Barbara County in the South Central Coast Air Basin as a single attainment area for hydrogen sulfide. This proposed redesignation is based on the provisions in CCR, Title 17, section 70304(a) and affects CCR, Title 17, section 60208. In addition, since the "Santa Maria Valley-Solomon Hills Area" no longer would be included as a designated area in the area designation regulations, the ARB staff recommends deleting the definition of this area from CCR, Title 17, section 60200(b).

CHAPTER IV
ALTERNATIVES TO THE PROPOSED AMENDMENTS

State law (HSC section 39607(e)) requires the Board to establish and periodically review criteria for designating areas as nonattainment, attainment, or unclassified for the State standards. The proposed amendments to Appendices 3 and 4 to CCR, Title 17, sections 70300 through 70306 are consistent with the legal requirement. Chapter II of this Staff Report describes the proposed amendments, along with a discussion of the need and justification for each proposal. The ARB staff has considered alternatives to the proposed amendments, but has found none more suitable than those proposed.

The requirement for annually reviewing the area designations also is specified in State law (HSC section 39608). The proposed amendments to the area designations that are described in Chapter III of this Staff Report, reflect the application of the designation criteria set forth in CCR, Title 17, sections 70300 through 70306, with the proposed amendments described in Chapter II of this Staff Report. Each proposed area redesignation is accompanied by a discussion of its basis and justification. The ARB staff has considered the potential alternatives to the proposed amendments to the area designations--namely, the no action alternative. However, based on the available data, the ARB staff finds the proposed amendments are more appropriate than the no action alternative.

CHAPTER V
IMPACTS OF THE PROPOSED AMENDMENTS

A. Environmental Impacts

The adoption of the proposed amendments to the designation criteria are necessary to provide consistency throughout the designation criteria and to conform with current emission estimation methods. These proposed amendments will not result in any adverse environmental impacts.

The adoption of the proposed amendments to the area designations also is not expected in and of itself to result in any adverse environmental impacts. With the exception of the proposed redesignation of a smaller carbon monoxide nonattainment area in Sacramento County, all of the proposed redesignations involve redesignating areas as either nonattainment-transitional or as attainment. Redesignating an area as nonattainment-transitional for a particular pollutant potentially may have some very minor environmental impact if the affected district modifies its attainment plan to delay the adoption of rules considered unnecessary for expeditious attainment of a State standard. However, any potential adverse environmental impacts identified with respect to a modified attainment plan will be reviewed during the development and consideration of such modification in order to protect air quality. Redesignating an area as attainment will have no adverse environmental impacts since a district is obligated not only to attain, but also maintain, the State standards. Changing the size of the nonattainment area in Sacramento County will not have any adverse environmental impacts because the district still is obligated to implement its attainment plan in the designated nonattainment area.

B. Economic Impacts

The Board's Executive Officer has determined that the proposed amendments to the regulations will not create costs or savings, as defined in Government Code section 11346.5(a)(6), to any State agency or in federal funding to the State, costs or mandate to any local agency or school district whether or not reimbursable by the State pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code, or other nondiscretionary savings to local agencies.

The Executive Officer also has determined that adoption of the proposed regulatory action will not have a significant economic impact on businesses. The redesignation of eight areas as attainment and one area as nonattainment-transitional

will not trigger any attainment plan implementation, rulemaking, or increased permit fees, which would have an impact on business.

Finally, the Executive Officer has determined that there will be no, or an insignificant, potential cost impact, as defined in Government Code section 11346.53(e), on private persons or businesses directly affected as a result of the proposed action.

In addition, before taking final action on the proposed regulatory action, the Board must determine that no other alternative considered by the agency would be more effective in carrying out the purposes for which the amendments to the regulations are proposed or would be as effective or less burdensome to the affected private persons than the proposed action.

ATTACHMENT A

TEXT OF THE PROPOSED AMENDMENTS TO THE DESIGNATION CRITERIA

Text of the Proposed Amendments to Appendices 3 and 4 to California Code of Regulations, Title 17, Sections 70300 through 70306

(Proposed additions are shown as *underlined italics* and proposed deletions are shown as ~~strikeout~~)

APPENDIX 3
CRITERIA FOR DETERMINING DATA COMPLETENESS

This Appendix describes the criteria to be used in determining data completeness for the purpose of designating areas as attainment or nonattainment-transitional as described in Article 3, Subchapter 1.5, Chapter 1, Part III, Title 17 (commencing with Section 70300), California Code of Regulations. The purpose of these data completeness criteria is to specify the minimum data deemed necessary to assure that sampling occurred at times when a violation is most likely to occur.

Complete Data

Data for a site will be deemed complete if there are representative data (as determined in accordance with the Representativeness Criteria in Appendix 1) during the required hours (see below) of the day during the required months (see below) for the required years (see below).

Required Hours

The hours of potentially high concentration must be included. Unless a detailed evaluation determines different hours to be appropriate for a specific site, these hours are:

Pollutant	Hours (PST)
Ozone	9 am - 5 pm
Carbon Monoxide	3 pm - 9 am (next day)
Nitrogen Dioxide	8 am - 8 pm
Visibility Reducing Particles	10 am - 6 pm
Other Pollutants	Throughout day

Required Months

The months of potentially high concentrations must be included. Unless a detailed evaluation determines different months to be appropriate for a specific site, these months are:

Pollutant	Months
Ozone	July - September
Carbon Monoxide	January, November - December
Nitrogen Dioxide	October - December
Sulfur Dioxide	September - December
Sulfates	January, June - December
Lead (Particulate)	January, November - December
Other Pollutants	January - December

Required Years

The number of years to be included is:

a) ~~Three; or~~
b) ~~Two, if during these years the maximum pollutant concentration~~ *(not including data found to be affected by a highly irregular or infrequent event under the procedure set forth in Appendix 2)* is less than three-fourths the applicable state ambient air quality standard; or
c) One, if during this year the maximum pollutant concentration *(not including data found to be affected by a highly irregular or infrequent event under the procedure set forth in Appendix 2)* is less than one-half the applicable state ambient air quality standard.

APPENDIX 4
SCREENING PROCEDURE FOR DETERMINING ATTAINMENT DESIGNATIONS FOR AREAS WITH INCOMPLETE AIR QUALITY DATA

This Appendix describes the screening procedure that will serve as the basis for making a pollutant-specific finding under Section 70304(c) that the state ambient air quality standard is being attained for areas with no or an incomplete air quality data record. The procedure is applicable only for nitrogen dioxide, sulfur dioxide, sulfates, and lead (particulate). For those areas with some air quality data for the prior three years, the screening procedure will be applied for a pollutant only if the maximum concentrations of that pollutant in the area did not exceed 75 percent of the state standard(s).

Pollutant	Screening Parameters	Screening Values
Nitrogen Dioxide	a) Basin Population	1,000,000 people
	b) Total Annual NO_x Emissions in Air Basin	~~25,000 tons/yr~~ *40,000 tons/yr*
	c) Total Annual Point Source NO_x Emissions in County	2,100 tons/yr
Sulfur Dioxide	a) Total Annual Point Source ~~SO_x Emissions in County~~	1,700 tons/yr
	b) Maximum Annual SO_x Emissions from Single Facility in County	900 tons/yr
Sulfates	a) Total Annual SO_x Emissions in Air Basin	19,000 tons/yr
	b) Total Annual Point Source SO_x Emissions in County	1,700 tons/yr
	c) Maximum Annual SO_x Emissions from Single Facility in County	900 tons/yr
Lead	a) County Population	600,000 people
	b) Maximum Annual Lead Emissions from Single Facility in County	0.5 tons/yr

For an area to which these values are applied, the local values of the applicable screening parameters will be compared to the respective screening values. The area will be presumed to be attainment if none of the applicable screening parameters for a pollutant exceed the associated screening values.

ATTACHMENT B

TEXT OF THE PROPOSED AMENDMENTS TO THE AREA DESIGNATIONS

Text of the Proposed Amendments to California Code of Regulations, Title 17, Sections 60200 through 60209

(Proposed additions are shown as *underlined-italics*
and proposed deletions are shown as ~~strikeout~~)

60200. Description of Non-County Areas.

(a) [Reserved]

(b) *[Reserved]* ~~That portion of Santa Barbara County, referred to as Santa Maria Valley-Solomon Hills, is described as follows:~~

~~Beginning at the point of intersection of State Highway 1 (SH-1) and the Santa Barbara-San Luis Obispo County line; thence south and southeast along SH-1 to the intersection of SH-1 and SH-135; thence south and east along SH-135 to the intersection with U.S. Highway 101 (US-101); thence southeast along US-101 to the intersection with Alisos Canyon Road; thence north-northeast along Alisos Canyon Road to the intersection with Foxen Canyon Road; thence northwest, north, and northwest along Foxen Canyon Road to the intersection with Tepusquet Road; thence northeast along Tepusquet Road to the intersection with Santa Maria Mesa Road; thence northwest to the intersection with the Sisquoc River; thence northwest along the west bank of the Sisquoc River to its confluence with the Santa Maria River; then north to the intersection of the Santa Maria River with the Santa Barbara-San Luis Obispo County line; thence northwest and west along the Santa Barbara-San Luis Obispo County line to the intersection with SH-1, the point of beginning.~~

(c) *[Reserved]* ~~That portion of San Diego County, referred to as San Diego County-West, is described as follows:~~

~~That portion which lies west of a line beginning at the northwest of T. 9 S., R. 1 W., San Bernardino Base and Meridian; thence running south along the west line of said township to the south line thereof; thence east along said south line to the range line between R. 1 W. and~~

~~R. 1 E.; thence south along said range line to the township line between T. 11 S. and T. 12 S.; thence east along said township line to the range line between R. 1 E. and R. 2 E.; thence south along said range line to the International boundary between the United States of America and Mexico.~~

(d) That portion of Lake County and portion of Sonoma County, referred to as the Geysers Geothermal Area, is described as follows:

Beginning at the northwest corner of T. 12 N, R. 9 W, Mount Diablo Base and Meridian; thence south along the range line common to R. 9 W and R. 10 W to the point of intersection with the Mendocino-Lake County border; thence east and south along the Mendocino-Lake ~~County border to the point of intersection with the border of Sonoma County; thence west~~ along the Mendocino-Sonoma County border to the point of intersection with the range line common to R. 10 W and R. 9 W; thence south along the range line common to R. 10 W and R. 9 W to the point of intersection with Big Sulfur Creek; thence southwest along Big Sulfur Creek to its confluence with Little Sulfur Creek; thence southeast, east, and northeast along

Little Sulfur Creek to the point of intersection with the township line common to T. 10 N and T. 11 N; thence east along the township line common to T. 10 N and T. 11 N to the northeast corner of T. 10 N, R. 9 W; thence south along the range line common to R. 9 W and R. 8 W to the southwest corner of T. 10 N, R. 8 W; thence east along the township line common to T. 9 N and T. 10 N to the point of intersection with the Sonoma-Napa County border; thence northwest along the Sonoma-Napa County border to the point of intersection with the Lake-Napa County border; thence northeast along the Lake-Napa County border to the point of intersection with State Highway 29 (SH-29); thence north and west along SH-29 to the point of intersection with the township line common to T. 12 N and T. 13 N; thence west along the township line common to T. 12 N and T. 13 N to the northwest corner of T. 12 N, R. 9 W, the point of beginning.

Note: Authority cited: Sections 39600, 39601 and 39608, Health and Safety Code.
Reference: Section 39608, Health and Safety Code.

60201. Table of Area Designations for Ozone

Area	Designation
North Coast Air Basin	
Mendocino County	Attainment
Del Norte, Humboldt, and Trinity Counties	~~Unclassified~~ *Attainment*
Sonoma County	Unclassified
San Francisco Bay Area Air Basin	Nonattainment
North Central Coast Air Basin	Nonattainment
South Central Coast Air Basin	Nonattainment
South Coast Air Basin	Nonattainment
San Diego Air Basin	Nonattainment
Northeast Plateau Air Basin	Attainment
Sacramento Valley Air Basin	Nonattainment
San Joaquin Valley Air Basin	Nonattainment
Great Basin Valleys Air Basin	
Alpine County	Unclassified
Inyo County	Unclassified
Mono County	Nonattainment
Southeast Desert Air Basin	Nonattainment
Mountain Counties Air Basin	
Amador, Calaveras, El Dorado, Nevada Placer, Mariposa, and Tuolumne Counties	Nonattainment
Plumas and Sierra Counties	Unclassified
Lake County Air Basin	Attainment
Lake Tahoe Air Basin	Attainment

Note: Authority cited: Sections 39600, 39601 and 39608, Health and Safety Code.
Reference: Section 39608, Health and Safety Code.

60202. Table of Area Designations for Carbon Monoxide

Area	Designation
North Coast Air Basin	
Del Norte County	Unclassified
Humboldt County	Attainment
Mendocino County	Attainment
Sonoma County	Unclassified
Trinity County	Unclassified
San Francisco Bay Area Air Basin	
Alameda County	Attainment
Contra Costa County	Attainment
Marin County	Attainment
Napa County	Attainment
San Francisco County	Attainment
San Mateo County	Attainment
Santa Clara County	
San Jose Urbanized Area[1]	~~Nonattainment~~ *Nonattainment-Transitional*
Remainder of County	Attainment
~~Solano County~~	*Attainment*
~~Vallejo-Urbanized Area[1]~~	~~Nonattainment-Transitional~~
~~Remainder of County within SFBAAB~~	~~Unclassified~~
Sonoma County	Attainment
North Central Coast Air Basin	
Monterey County	Attainment
San Benito County	Unclassified
Santa Cruz County	Unclassified
South Central Coast Air Basin	
San Luis Obispo County	Attainment
Santa Barbara County	Attainment
Ventura County	Attainment
South Coast Air Basin	
Los Angeles County	Nonattainment
Orange County	Nonattainment
Riverside County	Attainment
San Bernardino County	Attainment
San Diego Air Basin	*Attainment*
~~San Diego County-West[4]~~	~~Nonattainment-Transitional~~
~~Remainder of County~~	~~Unclassified~~

60202. Table of Area Designations for Carbon Monoxide (continued)

Area	Designation
Northeast Plateau Air Basin	
Lassen County	Unclassified
Modoc County	Unclassified
Siskiyou County	Unclassified
Sacramento Valley Air Basin	
Butte County	
Chico Urbanized Area[2]	Nonattainment
Remainder of County	Unclassified
Colusa County	Unclassified
Glenn County	Unclassified
Placer County	Unclassified
Sacramento County	~~Nonattainment~~
County Portion of Census Bureau Urbanized Area[4]	*Nonattainment*
Remainder of County	*Attainment*
Shasta County	Unclassified
Solano County	Attainment
Sutter County	Unclassified
Tehama County	Unclassified
Yolo County	Attainment
Yuba County	Unclassified
San Joaquin Valley Air Basin	
Fresno County	
Fresno Urbanized Area[3]	Nonattainment
Remainder of County	Attainment
Kern County	Attainment
Kings County	Unclassified
Madera County	Unclassified
Merced County	Unclassified
San Joaquin County	
Stockton Urbanized Area[2]	Nonattainment
Remainder of County	Unclassified
Stanislaus County	
Modesto Urbanized Area[1]	Nonattainment
Remainder of County	Unclassified
~~Tulare County~~	~~Attainment~~
Great Basin Valleys Air Basin	
Alpine County	Unclassified
Inyo County	Unclassified
Mono County	Attainment

60202. Table of Area Designations for Carbon Monoxide (continued)

Area	Designation
Southeast Desert Air Basin	
Imperial County	Unclassified
Kern County	Unclassified
Los Angeles County	Attainment
Riverside County	Attainment
San Bernardino County	Attainment
Mountain Counties Air Basin	
Amador County	Unclassified
Calaveras County	Unclassified
El Dorado County	Unclassified
Mariposa County	Unclassified
Nevada County	Unclassified
Placer County	Unclassified
Plumas County	Attainment
Sierra County	Unclassified
Tuolumne County	Unclassified
Lake County Air Basin	
~~Lake County~~	~~Attainment~~
Lake Tahoe Air Basin	
El Dorado County	Nonattainment
Placer County	Unclassified

1. 50 Fed.Reg. 12542 (March 29, 1985); U.S. Department of Commerce, Bureau of the Census, *Number of Inhabitants Report for California*, 1980 U.S. Census 1982, pages 6-58 (Modesto), 6-74 and 75 (Vallejo), and 6-78 (San Jose).
2. 49 Fed.Reg. 20652 (May 16, 1984); U.S. Department of Commerce, Bureau of the Census, *Number of Inhabitants Report for California*, 1980 U.S. Census 1982, pages 6-56 (Chico) and 6-80 (Stockton).
3. 50 Fed.Reg. 47735 (November 20, 1985); 45 Fed.Reg. 53149 (August 11, 1980); City of Fresno Department of Planning and Inspection, 1974 *General Plan Report of the FCMA*, page 4.
~~4. Section 60200(c).~~
4. 56 Fed. Reg. 56724 (November 6, 1991); U.S. Department of Commerce, Bureau of the Census, Number of Inhabitants Report for California, 1980 U.S. Census 1982, page 6-72.

Note: Authority cited: Sections 39600, 39601 and 39608, Health and Safety Code.
Reference: Section 39608, Health and Safety Code.

60203. Table of Area Designations for Nitrogen Dioxide

Area	Designation
North Coast Air Basin	Attainment
San Francisco Bay Area Air Basin	Attainment
North Central Coast Air Basin	Attainment
South Central Coast Air Basin	Attainment
South Coast Air Basin	Nonattainment
San Diego Air Basin	Attainment
Northeast Plateau Air Basin	Attainment
Sacramento Valley Air Basin	Attainment
San Joaquin Valley Air Basin	Attainment
Great Basin Valleys Air Basin	Attainment
Southeast Desert Air Basin	Attainment
Mountain Counties Air Basin	Attainment
Lake County Air Basin	Attainment
Lake Tahoe Air Basin	Attainment

Note: Authority cited: Sections 39600, 39601 and 39608, Health and Safety Code.
Reference: Section 39608, Health and Safety Code.

60204. Table of Area Designations for Sulfur Dioxide

Area	Designation
North Coast Air Basin	*Attainment*
~~Del Norte County~~	~~Attainment~~
~~Humboldt County~~	~~Unclassified~~
~~Mendocino County~~	~~Attainment~~
~~Sonoma County~~	~~Attainment~~
~~Trinity County~~	~~Attainment~~
San Francisco Bay Area Air Basin	
Alameda County	Attainment
Contra Costa County	Attainment
Marin County	Attainment
Napa County	Attainment
San Francisco County	Attainment
San Mateo County	Attainment
Santa Clara County	Attainment
Solano County	Attainment
Sonoma County	Attainment
North Central Coast Air Basin	
~~Monterey County~~	~~Attainment~~
San Benito County	Attainment
Santa Cruz County	Attainment
South Central Coast Air Basin	
San Luis Obispo County	Attainment
Santa Barbara County	Attainment
Ventura County	Attainment
South Coast Air Basin	
Los Angeles County	Attainment
Orange County	Attainment
Riverside County	Attainment
San Bernardino County	Attainment
San Diego Air Basin	
San Diego County	Attainment
Northeast Plateau Air Basin	
Lassen County	Attainment
Modoc County	Attainment
Siskiyou County	Attainment

60204. Table of Area Designations for Sulfur Dioxide (continued)

Area	Designation
Sacramento Valley Air Basin	
Butte County	Attainment
Colusa County	Attainment
Glenn County	Attainment
Placer County	Attainment
Sacramento County	Attainment
Shasta County	Attainment
Solano County	Attainment
Sutter County	Attainment
Tehama County	Attainment
Yolo County	Attainment
Yuba County	Attainment
San Joaquin Valley Air Basin	
Fresno County	Attainment
Kern County	Attainment
Kings County	Attainment
Madera County	Attainment
Merced County	Attainment
San Joaquin County	Attainment
Stanislaus County	Attainment
Tulare County	Attainment
Great Basin Valleys Air Basin	
Alpine County	Attainment
Inyo County	Attainment
Mono County	Attainment
Southeast Desert Air Basin	
Imperial County	Attainment
Kern County	Unclassified
Los Angeles County	Attainment
Riverside County	Attainment
San Bernardino County	Attainment

60204. Table of Area Designations for Sulfur Dioxide (continued)

Area	Designation
Mountain Counties Air Basin	
Amador County	Attainment
Calaveras County	Attainment
El Dorado County	Attainment
Mariposa County	Attainment
Nevada County	Attainment
Placer County	Attainment
Plumas County	Attainment
Sierra County	Attainment
Tuolumne County	Attainment
Lake County Air Basin	
Lake County	Attainment
Lake Tahoe Air Basin	
El Dorado County	Attainment
Placer County	Attainment

Note: Authority cited: Sections 39600, 39601 and 39608, Health and Safety Code.
Reference: Section 39608, Health and Safety Code.

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

Area	Designation
North Coast Air Basin	Nonattainment
San Francisco Bay Area Air Basin	Nonattainment
North Central Coast Air Basin	Nonattainment
South Central Coast Air Basin	Nonattainment
South Coast Air Basin	Nonattainment
San Diego Air Basin	Nonattainment
Northeast Plateau Air Basin	
Modoc and Siskiyou Counties	Nonattainment
Lassen County	Unclassified
Sacramento Valley Air Basin	Nonattainment
San Joaquin Valley Air Basin	Nonattainment
Great Basin Valleys Air Basin	Nonattainment
Southeast Desert Air Basin	Nonattainment
Mountain Counties Air Basin	
Amador, Calaveras, Remainder of Mariposa, and Tuolumne Counties	Unclassified
Mariposa County Portion of Yosemite National Park	Nonattainment
El Dorado, Nevada, Placer, Plumas, and Sierra Counties	Nonattainment
Lake County Air Basin	Attainment
Lake Tahoe Air Basin	Nonattainment

Note: Authority cited: Sections 39600, 39601 and 39608, Health and Safety Code.
Reference: Section 39608, Health and Safety Code.

60206. Table of Area Designations for Sulfates

Area	Designation
North Coast Air Basin	*Attainment*
~~Del Norte County~~	~~Attainment~~
~~Mendocino, Trinity, and Sonoma Counties~~	~~Attainment~~
~~Humboldt County~~	~~Unclassified~~
San Francisco Bay Area Air Basin	Attainment
North Central Coast Air Basin	Attainment
South Central Coast Air Basin	Attainment
South Coast Air Basin	Nonattainment
San Diego Air Basin	Attainment
Northeast Plateau Air Basin	Attainment
Sacramento Valley Air Basin	Attainment
San Joaquin Valley Air Basin	Unclassified
Great Basin Valleys Air Basin	Attainment
Southeast Desert Air Basin	
San Bernardino County Portion of Searles Valley Planning Area[1]	Nonattainment
Remainder of the Air Basin	Attainment
~~Mountain Counties Air Basin~~	~~Attainment~~
Lake County Air Basin	Attainment
Lake Tahoe Air Basin	Attainment

1. 52 Fed.Reg. 29384 (August 7, 1987); U.S. Geological Survey 1974, *Hydrologic Unit Map-State of California*, Hydrological Unit #18090205.

Note: Authority cited: Sections 39600, 39601 and 39608, Health and Safety Code.
Reference: Section 39608, Health and Safety Code.

60207. Table of Area Designations for Lead (Particulate)

Area	Designation
North Coast Air Basin	
Del Norte County	Attainment
Humboldt County	Attainment
Mendocino County	Attainment
Sonoma County	Attainment
Trinity County	Attainment
San Francisco Bay Area Air Basin	
Alameda County	Attainment
Contra Costa County	Attainment
Marin County	Attainment
Napa County	Attainment
San Francisco County	Attainment
San Mateo County	Attainment
Santa Clara County	Attainment
Solano County	Attainment
Sonoma County	Attainment
North Central Coast Air Basin	
Monterey County	Attainment
San Benito County	Attainment
Santa Cruz County	Attainment
South Central Coast Air Basin	
San Luis Obispo County	Attainment
Santa Barbara County	Attainment
Ventura County	Attainment
South Coast Air Basin	
Los Angeles County	Attainment
Orange County	Attainment
Riverside County	Attainment
San Bernardino County	Attainment
San Diego Air Basin	
San Diego County	Attainment
Northeast Plateau Air Basin	
Lassen County	Attainment
Modoc County	Attainment
Siskiyou County	Attainment

60207. Table of Area Designations for Lead (Particulate) (continued)

Area	Designation
Sacramento Valley Air Basin	
Butte County	Attainment
Colusa County	Attainment
Glenn County	Attainment
Placer County	Attainment
Sacramento County	Attainment
Shasta County	Attainment
Solano County	Attainment
Sutter County	Attainment
Tehama County	Attainment
Yolo County	Attainment
Yuba County	Attainment
San Joaquin Valley Air Basin	
Fresno County	Attainment
Kern County	Attainment
Kings County	Attainment
Madera County	Attainment
Merced County	Attainment
San Joaquin County	Attainment
Stanislaus County	Attainment
Tulare County	Attainment
Great Basin Valleys Air Basin	
Alpine County	Attainment
Inyo County	Attainment
Mono County	Attainment
Southeast Desert Air Basin	
Imperial County	Attainment
Kern County	Attainment
Los Angeles County	Attainment
Riverside County	Attainment
San Bernardino County	Attainment

60207. Table of Area Designations for Lead (Particulate) (continued)

Area	Designation
Mountain Counties Air Basin	
Amador County	Attainment
Calaveras County	Attainment
El Dorado County	Attainment
Mariposa County	Attainment
Nevada County	Attainment
Placer County	Attainment
Plumas County	Attainment
Sierra County	Attainment
Tuolumne County	Attainment
Lake County Air Basin	
Lake County	Attainment
Lake Tahoe Air Basin	
El Dorado County	Attainment
Placer County	Attainment

Note: Authority cited: Sections 39600, 39601 and 39608, Health and Safety Code.
Reference: Section 39608, Health and Safety Code.

60208. Table of Area Designations for Hydrogen Sulfide

Area	Designation
North Coast Air Basin	
Del Norte County	Unclassified
Humboldt County	~~Unclassified~~ *Attainment*
Mendocino County	Unclassified
Sonoma County	
Geyser Geothermal Area[3] [2]	Attainment
Remainder of Sonoma County	Unclassified
Trinity County	Unclassified
San Francisco Bay Area Air Basin	
Alameda County	Unclassified
Contra Costa County	Unclassified
Marin County	Unclassified
Napa County	Unclassified
San Francisco County	Unclassified
San Mateo County	Unclassified
Santa Clara County	Unclassified
~~Solano County~~	~~Unclassified~~
Sonoma County	Unclassified
North Central Coast Air Basin	
Monterey County	Unclassified
San Benito County	Unclassified
Santa Cruz County	Unclassified
South Central Coast Air Basin	
San Luis Obispo County	Attainment
Santa Barbara County	*Attainment*
~~Santa Maria Valley-Solomon Hills Area[1]~~	~~Nonattainment~~
~~Remainder of County~~	~~Unclassified~~
Ventura County	Unclassified
South Coast Air Basin	
Los Angeles County	Unclassified
Orange County	Unclassified
Riverside County	Unclassified
San Bernardino County	Unclassified
San Diego Air Basin	
San Diego County	Unclassified

60208. Table of Area Designations for Hydrogen Sulfide (continued)

Area	Designation
Northeast Plateau Air Basin	
Lassen County	Unclassified
Modoc County	Unclassified
Siskiyou County	Unclassified
Sacramento Valley Air Basin	
Butte County	Unclassified
Colusa County	Unclassified
Glenn County	Unclassified
Placer County	Unclassified
Sacramento County	Unclassified
Shasta County	Unclassified
Solano County	Unclassified
Sutter County	Unclassified
Tehama County	Unclassified
Yolo County	Unclassified
Yuba County	Unclassified
San Joaquin Valley Air Basin	
Fresno County	Unclassified
Kern County	Unclassified
Kings County	Unclassified
Madera County	Unclassified
Merced County	Unclassified
San Joaquin County	Unclassified
Stanislaus County	Unclassified
Tulare County	Unclassified
Great Basin Valleys Air Basin	
Alpine County	Unclassified
Inyo County	Attainment
Mono County	Attainment
Southeast Desert Air Basin	
Imperial County	Unclassified
Kern County	Unclassified
Los Angeles County	Unclassified
Riverside County	Unclassified
San Bernardino County	
County portion of Searles Valley Planning Area[2] [1]	Nonattainment
Remainder of County	Unclassified

60208. Table of Area Designations for Hydrogen Sulfide (continued)

Area	Designation
Mountain Counties Air Basin	
Amador County	
City of Sutter Creek	Nonattainment
Remainder of County	Unclassified
Calaveras County	Unclassified
El Dorado County	Unclassified
Mariposa County	Unclassified
Nevada County	Unclassified
Placer County	Unclassified
Plumas County	Unclassified
Sierra County	Unclassified
Tuolumne County	Unclassified
Lake County Air Basin	
Lake County	Attainment
Lake Tahoe Air Basin	
El Dorado County	Unclassified
Placer County	Unclassified

~~1. Section 60200(b).~~

~~2.~~ *1.* 52 Fed.Reg. 29384 (August 7, 1987); U.S. Geological Survey 1974, *Hydrologic Unit Map-State of California*, Hydrological Unit #18090205.

~~3.~~ *2.* Section 60200(d).

Note: Authority cited: Sections 39600, 39601 and 39608, Health and Safety Code.
Reference: Section 39608, Health and Safety Code

60209. Table of Area Designations for Visibility Reducing Particles

Area	Designation
North Coast Air Basin	Unclassified
San Francisco Bay Area Air Basin	Unclassified
North Central Coast Air Basin	Unclassified
South Central Coast Air Basin	Unclassified
South Coast Air Basin	Unclassified
San Diego Air Basin	Unclassified
Northeast Plateau Air Basin	Unclassified
Sacramento Valley Air Basin	Unclassified
San Joaquin Valley Air Basin	Unclassified
Great Basin Valleys Air Basin	Unclassified
Southeast Desert Air Basin	Unclassified
Mountain Counties Air Basin	Unclassified
Lake County Air Basin	Attainment
Lake Tahoe Air Basin	Unclassified

Note: Authority cited: Sections 39600, 39601 and 39608, Health and Safety Code.
Reference: Section 39608, Health and Safety Code.

ATTACHMENT C

RELEVANT SECTIONS OF THE HEALTH AND SAFETY CODE

Relevant Sections of the Health and Safety Code

Section 39607(e):

Establish and periodically review criteria for designating an air basin attainment or nonattainment for any state ambient air quality standard set forth in Section 70200 of Title 17 of the California Code of Regulations. In developing and reviewing these criteria, the state board shall consider instances where there is poor or limited ambient air quality data, and shall consider highly irregular or infrequent violations. The state board shall provide an opportunity for public comment on the proposed criteria, and shall adopt the criteria after a public hearing.

Section 39608:

(a) The state board, in consultation with the districts, shall identify, pursuant to subdivision (e) of Section 39607, and classify each air basin which is in attainment and each air basin which is in nonattainment for any state ambient air quality standard. This identification and classification shall be made on a pollutant-by-pollutant basis. Where the state board finds that data is not sufficient to determine the attainment or nonattainment status for an air basin, the state board shall identify the air basin as unclassified.

(b) The state board may assign an attainment, nonattainment, or unclassified designation to one or more areas within any air basin unless the state board finds and determines that the pollutant for which the designation applies affects the entire region or is produced by emission sources throughout the region.

(c) Designations made by the state board shall be reviewed annually and updated as new information becomes available.

Section 40925.5(a):

A district which is nonattainment for the state ozone standard shall be designated "nonattainment-transitional" by operation of law if, during a single calendar year, the state standard is not exceeded more than three times at any monitoring location within the air basin.

ATTACHMENT D

TEXT OF THE CURRENT DESIGNATION CRITERIA

Text of the California Code of Regulations, Title 17, Sections 70300 through 70306, and Appendices 1 through 4, Thereof

70300. General Statement of Purpose

The objective of these criteria is to guide the state board in making designations of air basins as attainment, nonattainment, or unclassified for each of the pollutants for which state ambient air quality standards have been established in Section 70200.

NOTE: Authority Cited: Sections 39600, 39601, 39607, and 39608, Health and Safety Code. Reference: Sections 39607 and 39608, Health and Safety Code.

70301. Air Quality Data Used for Designations

(a) Except as otherwise provided in this article, designations shall be based on data for record. "Data for record" are those data collected by or under the auspices of the state board or the districts for the purpose of measuring ambient air quality, and which the executive officer has determined comply with the siting and quality assurance procedures established in Part 58, Title 40, Code of Federal Regulations, as they existed on July 1, 1987, or other equivalent procedures. The executive officer shall also determine within 90 days of submittal of complete supporting documentation whether any other data which are provided by a district or by any other person comply with the siting and quality assurance procedures and shall be data for record. If the executive officer finds there is good cause that 90 days is insufficient time to make a determination, he/she may after notification of the person requesting the data review extend the deadline for completion of the data review.

(b) Except as otherwise provided in this article, designations and reviews of designations shall be based on data for record for the three calendar years prior to the year in which the designation is made or the annual review of the designation is conducted.

NOTE: Authority Cited: Sections 39600, 39601, 39607, and 39608, Health and Safety Code. Reference: Sections 39607 and 39608, Health and Safety Code.

70302. Geographic Extent of Designations

(a) An air basin shall be the area designated for ozone, nitrogen dioxide, suspended particulate matter (PM10), sulfates, and visibility reducing particles. Provided, however, if the state board finds (based on air quality data, meteorology, topography, or the distribution of population and emissions) that there are areas within an air basin with distinctly different air quality deriving from sources and conditions not affecting the entire air basin, the state board may designate an area smaller than an air basin using political boundary lines to the extent practicable. In designating an area smaller than an air basin as nonattainment, the state board shall include within the area those sources whose emissions contribute to a violation of a standard for that pollutant. Contiguous areas which would have the same designation within an air basin shall be one designated area.

(b) A county or the portion of a county which is located within an air basin shall be the area designated for carbon monoxide, sulfur dioxide, lead (particulate), and hydrogen sulfide. Provided, however, if the state board finds (based on air quality data, meteorology, topography, or the distribution of population and emissions) that there are areas within the county with distinctly different air quality, it may designate a smaller area. In designating an area smaller than a county as nonattainment, the state board shall include within the area those sources whose emissions contribute to a violation of a standard for that pollutant.

NOTE: Authority Cited: Sections 39600, 39601, 39607, and 39608, Health and Safety Code. Reference: Sections 39607 and 38608, Health and Safety Code.

70303. Criteria for Designating an Area as Nonattainment

(a) The state board shall designate an area as nonattainment for a pollutant if:

(1) Data for record meet the representativeness criteria set forth in "Criteria for Determining Data Representativeness" contained in Appendix 1 to this article and show at least one violation of a state standard for that pollutant in the area; or

(2) Limited or no air quality data were collected in the area, but the state board finds, based on meteorology, topography, and air quality data for an adjacent nonattainment area, that there has been at least one violation of a state standard for that pollutant in the area being designated.

(b) An area shall not be designated as nonattainment if the only recorded violation(s) of that standard were based solely on data for record determined to be affected by a highly irregular or infrequent event. Data affected by a highly irregular or infrequent event will be identified as such by the executive officer in accordance with the "Air Resources Board Procedure for Reviewing Air Quality Data Possibly Affected by a Highly Irregular or Infrequent Event," set forth in Appendix 2 to this article.

(c) The state board shall, if requested by the district no later than July 15, 1990 or no later than May 1 of each year thereafter pursuant to section 70306, identify that portion of a designated area within the district as nonattainment-transitional for a pollutant other than ozone with a standard averaging time less than or equal to 24 hours and continuous sampling (continuous sampling means that samples are routinely collected every day) if it finds that:

(1) Data for record for the previous calendar year are consistent with the criteria established in section 70304(a)(2) and show two or fewer days at all sites in the area with violations of a state standard for that pollutant (not including violations found to be affected by a highly irregular or infrequent event under the procedure set forth in Appendix 2);

(2) Evaluation of multi-year air quality, meteorological, and emission data indicates that ambient air quality either has stabilized or is improving and the area is expected to reach attainment within three years; and

~~(3) The geographic extent of the area is consistent with the criteria established in section 70302.~~

(d) An area designated as nonattainment-transitional for a pollutant is close to attaining the standard(s) for that pollutant. The nonattainment-transitional designation provides an opportunity for a district to review and potentially to modify its attainment plan. Any modification to an attainment plan must be consistent with state and federal regulations and statutes.

NOTE: Authority Cited: Sections 39600, 39601, 39607, 39608, and 40925.5, Health and Safety Code. Reference: Sections 39607, 39608, and 40925.5, Health and Safety Code.

70303.5. Requirements for Ozone Nonattainment-Transitional

In evaluating whether a district meets the requirements of HSC 40925.5, the board shall use the following guidelines:

(1) Data for record for the previous calendar year must be consistent with the criteria established in section 70304(a)(2) to ensure that no more than three exceedances have occurred;

(2) All data collected during the previous calendar year will be considered in the evaluation, including data possibly affected by a highly irregular or infrequent event under the procedure set forth in Appendix 2;

(3) Each day with concentration(s) that exceed the state ozone standard will be counted as one exceedance day; and

(4) No monitoring location may have more than three exceedance days during the previous calendar year.

NOTE: Authority Cited: Sections 39600, 39601, 39607, and 40925.5, Health and Safety Code. Reference: Sections 39607 and 40925.5, Health and Safety Code.

70304. Criteria for Designating an Area as Attainment

(a) The state board shall designate an area as attainment for a pollutant if:

(1) Data for record show that no state standard for that pollutant was violated at any site in the area; and

(2) Data for record meet representativeness and completeness criteria for a location at which the pollutant concentrations are expected to be high based on the spatial distribution of emission sources in the area and the relationship of emissions to air quality. Data representativeness criteria are set forth in "Criteria for Determining Data Representativeness" contained in Appendix 1 to this article. Data completeness criteria are set forth in "Criteria for Determining Data Completeness" contained in Appendix 3 to this article.

(b) Where there are limited or no air quality data for an area, the state board shall designate the area as attainment for a pollutant if it finds that no state standard for that pollutant has been violated in that area based on:

(1) Air quality data collected in the area during the most recent period since 1980 which meet the conditions in (a) above;

(2) Emissions of that pollutant or its precursors in the area have not increased since that period to a level at which the standard might be exceeded; and

(3) Air quality data collected in the area since the time period in (1) above do not show a violation of the state standard.

(c) Where an area has limited or no air quality data for nitrogen dioxide, sulfur dioxide, sulfates, and lead (particulate), the state board shall designate that area attainment for a pollutant if it finds that no state standard for that pollutant has been violated in that area based on the state board's "Screening Procedure for Determining Attainment Designations for Areas With Incomplete Air Quality Data" set forth in Appendix 4 to this article.

(d) A nonattainment area shall not be redesignated as attainment for a pollutant if:

(1) Data for record for the monitoring site showing the greatest violation of a state standard for that pollutant no longer are available; and

(2) No other site has been identified as equivalent by the executive officer.

NOTE: Authority Cited: Sections 39600, 39601, 39607, and 39608, Health and Safety Code. Reference: Sections 39607 and 39608, Health and Safety Code.

70305. Criteria for Designating an Area as Unclassified

The state board shall designate an area as unclassified for a pollutant if it finds that, except as otherwise provided in this article, the data do not support a designation of attainment or nonattainment.

NOTE: Authority Cited: Sections 39600, 39601, 39607, and 39608, Health and Safety Code. Reference: Sections 39607 and 39608, Health and Safety Code.

70306. Annual Review of Designations

(a) The executive officer shall conduct annual reviews of all designations and shall propose revisions to the designations as necessary to the state board. The executive officer shall complete the annual reviews by November 15.

(b) Any request for a change in a designation and any submittal of information for purposes of the executive officer's consideration in the annual review of a designation shall be provided in writing to the executive officer no later than May 1 of each year commencing with May 1, 1990.

NOTE: Authority Cited: Sections 39600, 39601, 39607, and 39608, Health and Safety Code. Reference: Sections 39607 and 39608, Health and Safety Code.

APPENDIX 1

CRITERIA FOR DETERMINING DATA REPRESENTATIVENESS

This Appendix describes the criteria to be used in determining data representativeness for the purpose of designating areas as described in Article 3, Subchapter 1.5, Chapter 1, Part III, Title 17 (commencing with Section 70300), California Code of Regulations. Representativeness, as used here, is only related to whether or not the amount of data reported is deemed sufficiently complete to characterize reliably air quality during the respective time period. No other kind of representativeness is implied. The criteria for representativeness are summarized in the accompanying table and discussed further below.

Air quality statistics are usually computed from short term observed values. For example, an annual arithmetic mean is computed from all available hourly samples. If all the short term values for the statistical time period are available, the calculated statistic is representative. However, because all the short term values for a given period often are not available, a minimum number of observations are needed to provide reasonable assurance that the calculated value is a reliable estimate. In general, statistics are considered representative if 75 percent of the possible short term values are included and are distributed throughout the entire statistical time period.

To ensure that seasonal variations are accounted for, representative annual statistics are required to have four representative calendar quarters of data. For example, if an annual mean is based on 24-hour samples, such as that computed for suspended particulate matter (PM10) samples, three representative months are required for each calendar quarter. A 24-hour particulate sample is collected once every six days or a total of five samples per 31-day month. Therefore, three or fewer samples (less than or equal to 60 percent data recovery) do not meet the criterion for a reliable estimate of the monthly mean concentration. The lack of representativeness of the monthly mean concentrations precludes a reliable estimate of a representative calendar quarter, which in turn precludes the representativeness of an annual statistic. Each level of criteria--hour, day, month, quarter, and year--must be met in order to make a representative annual statistic.

For observations made at less than 24-hour intervals, for example, hourly samples, representativeness depends on whether all the individual values are to be used or only a single daily value is to be used. In general, for representative statistics computed from all of the individual values, such as the mean of all hours, 75 percent of the values in the respective period are required. For representative statistics computed from daily values, such as the monthly mean of daily maximum hours, data from 75 percent of the days in the month are required and the data within those days must meet the relevant representativeness criteria.

CRITERIA FOR REPRESENTATIVENESS OF AIR QUALITY MEASUREMENTS AND STATISTICS

Representative Calendar Statistic	Sampling Time Period	Basis of Statistic or Requirement	Number of Representative Periods Required
Year	Any		4 representative calendar quarters
Quarter	24-hour	Based on a daily sample	3 representative months
	<24-hours	Based on a daily statistic; or	69 or more representative calendar days
		Based on hourly samples	1,643 or more hours
Month	24-hour	Based on daily sample	4 or more 24-hour samples
	<24-hours	Based on a daily statistic; or	23 or more representative calendar days
		Based on all hourly samples; or	548 or more hours
		Based on all 2-hour samples; or	274 or more 2-hour samples
		Based on all 3-hour samples	183 or more 3-hour samples
Day	1-hour		6 or more hours in each 1/3 day (hours 0 thru 7, 8 thru 15, 16 thru 23), and missing no more than 2 consecutive hourly samples
	2-hour	Based on all 2-hour samples	9 or more samples
	3-hour	Based on all 3-hour samples	6 or more samples
	24-hour	Based on daily sample	22 but not more than 26 hours of sampling

	N	Number of Samples Needed
Mean of N Hour Period	24	18 or more hourly samples
	8	6 or more hourly samples
	6	5 or more hourly samples
	4	3 hourly samples
	3	3 hourly samples
	2	2 hourly samples
	1	30 minutes or more of sampling

APPENDIX 2

AIR RESOURCES BOARD PROCEDURE FOR REVIEWING AIR QUALITY DATA POSSIBLY AFFECTED BY A HIGHLY IRREGULAR OR INFREQUENT EVENT

This Appendix describes the procedures that the Air Resources Board (state board) will use for reviewing air quality data possibly affected by a highly irregular or infrequent event with regard to the state ambient air quality standards. All decisions regarding the identification of data as being affected by a highly irregular or infrequent event will be made by the executive officer.

The state board will review air quality data for possible identification as affected by a highly irregular or infrequent event if the data are the only violations of an air quality standard in the area or if such identification would otherwise affect the designation of the area.

Two types of highly irregular or infrequent events may be identified:

1. Exceptional Event.
2. Extreme Concentration Event.

An exceptional event is an event beyond reasonable regulatory control which causes an exceedance of a state standard. An exceptional event must be linked to a specific cause such as an act of nature or unusual human activity. As guidance to the states for determining exceptional events, the federal Environmental Protection Agency (EPA) has published Guideline on the Identification and Use of Air Quality Data Affected by Exceptional Events, (EPA-450/4-86-007), July 1986 (the EPA Guideline). The EPA Guideline provides an overall criterion for determining whether an event is exceptional with regard to the national standards. The ~~state board will use the EPA Guideline on a general basis for reviewing ambient data, but will not be bound~~ by the specific definitions in the EPA Guideline for the various types of exceptional events because those definitions are made on a national basis. In addition, since what may be exceptional in one part of the state may be common in another, each possible event will be evaluated on a case-by-case basis.

An extreme concentration event is an event beyond reasonable regulatory control which causes an exceedance of a state standard but which does not qualify as an exceptional event. The causes of an extreme concentration event include but are not limited to unusual meteorology.

The steps for identifying an exceptional event are:

1. A district (or the state board) identifies questionable data.
2. If a known exceptional event has occurred, the district gathers relevant data to document the occurrence.
3. If an exceptional event is only suspected, the district investigates available data for the possible event.
4. The district submits to the executive officer a request for identifying the data as affected by an exceptional event and also provides supporting documentation.
5. If the executive officer concurs with the district, he/she will identify the data as affected by an exceptional event.
6. If the district's request for identifying data as affected by an exceptional event cannot be supported, the district will be notified of the reasons. The executive officer will consider any additional data to support the request, but in the absence of any new evidence, will disapprove the request.

The steps for identifying an extreme concentration event are:

1. A district (or the state board) identifies questionable data.
2. If the event is not an exceptional event, with an identifiable cause, the state board will evaluate the data as affected by an extreme concentration event.
3. In evaluating a possible extreme concentration event, the state board shall use the data for the site at which the event is suspected to determine a limit for concentrations expected to recur no more frequently than once in one year. The limit shall be determined using the "exponential tail method" which is incorporated by reference herein and described in Part I Section B.1. of the "Supplement to the Technical Support Document for Proposed Amendments to the Criteria for Designating Areas of California as Nonattainment, Attainment, or Unclassified for State Ambient Air Quality Standards" (May 1992). Using conventional rounding procedures, the limit shall be rounded to be consistent with the level of precision in which the standard is expressed. If the possible extreme concentration exceeds the estimated concentration, the executive officer will consult with the district in identifying the data as affected by an extreme concentration event.
4. When an extreme concentration event is identified, the state board shall review other information, including but not limited to meteorological data, to determine whether air quality data for other sites in the area were affected by the extreme concentration event.

APPENDIX 3

CRITERIA FOR DETERMINING DATA COMPLETENESS

This Appendix describes the criteria to be used in determining data completeness for the purpose of designating areas as attainment or nonattainment as described in Article 3, Subchapter 1.5, Chapter 1, Part III, Title 17 (commencing with Section 70300), California Code of Regulations. The purpose of these data completeness criteria is to specify the minimum data deemed necessary to assure that sampling occurred at times when a violation is most likely to occur.

Complete Data

Data for a site will be deemed complete if there are representative data (as determined in accordance with the Representativeness Criteria in Appendix 1) during the required hours (see below) of the day during the required months (see below) for the required years (see below).

Required Hours

The hours of potentially high concentration must be included. Unless a detailed evaluation determines different hours to be appropriate for a specific site, these hours are:

Pollutant	Hours (PST)
Ozone	9 am - 5 pm
Carbon Monoxide	3 pm - 9 am (next day)
Nitrogen Dioxide	8 am - 8 pm
Visibility Reducing Particles	10 am - 6 pm
Other Pollutants	Throughout day

Required Months

The months of potentially high concentrations must be included. Unless a detailed evaluation determines different months to be appropriate for a specific site, these months are:

Pollutant	Months
Ozone	July - September
Carbon Monoxide	January, November - December
Nitrogen Dioxide	October - December
Sulfur Dioxide	September - December
Sulfates	January, June - December
Lead (Particulate)	January, November - December
Other Pollutants	January - December

Required Years

The number of years to be included is:

a) Three; or
b) Two, if during these years the maximum pollutant concentration is less than three-fourths the applicable state ambient air quality standard; or
c) One, if during this year the maximum pollutant concentration is less than one-half the applicable state ambient air quality standard.

APPENDIX 4

SCREENING PROCEDURE FOR DETERMINING ATTAINMENT DESIGNATIONS FOR AREAS WITH INCOMPLETE AIR QUALITY DATA

This Appendix describes the screening procedure that will serve as the basis for making a pollutant-specific finding under Section 70304(c) that the state ambient air quality standard is being attained for areas with no or an incomplete air quality data record. The procedure is applicable only for nitrogen dioxide, sulfur dioxide, sulfates, and lead (particulate). For those areas with some air quality data for the prior three years, the screening procedure will be applied for a pollutant only if the maximum concentrations of that pollutant in the area did not exceed 75 percent of the state standard(s).

Pollutant	Screening Parameters	Screening Values
Nitrogen Dioxide	a) Basin Population	1,000,000 people
	b) Total Annual NO_x Emissions in Air Basin	25,000 tons/yr
	c) Total Annual Point Source NO_x Emissions in County	2,100 tons/yr
Sulfur Dioxide	a) Total Annual Point Source SO_x Emissions in County	1,700 tons/yr
	b) Maximum Annual SO_x Emissions from Single Facility in County	900 tons/yr
Sulfates	a) Total Annual SO_x Emissions in Air Basin	19,000 tons/yr
	b) Total Annual Point Source SO_x Emissions in County	1,700 tons/yr
	c) Maximum Annual SO_x Emissions from Single Facility in County	900 tons/yr
Lead	a) County Population	600,000 people
	b) Maximum Annual Lead Emissions from Single Facility in County	0.5 tons/yr

For an area to which these values are applied, the local values of the applicable screening parameters will be compared to the respective screening values. The area will be presumed to be attainment if none of the applicable screening parameters for a pollutant exceed the associated screening values.

ATTACHMENT E

1-IN-1 YEAR RECURRENCE RATE CONCENTRATIONS

1-in-1 Year Recurrence Rate Concentrations

This Attachment contains the 1-in-1 year recurrence rate concentrations for various pollutants. The 1-in-1 year recurrence rate concentration represents the concentration that is statistically estimated to recur once per year. In the area designation process, measured concentrations that are higher than the calculated 1-in-1 year recurrence rate concentration are identified as extreme concentrations and are excluded from consideration. In other words, measured concentrations that are higher than the calculated 1-in-1 year recurrence rate concentration are not considered violations of a State standard.

The 1-in-1 year recurrence rate concentrations listed in this Attachment are based on air quality data collected during 1990 through 1992. This is the most recent three year period for which air quality data are available and is the same three year period used in reviewing the area designations described in the accompanying Staff Report. The 1-in-1 year recurrence rate concentrations are listed for each site in the State with appropriate data. Concentrations are listed for ozone, carbon monoxide, nitrogen dioxide, suspended particulate matter or PM10, sulfates, and hydrogen sulfide in Tables E-1 through E-6, respectively. No concentrations are listed for sulfur dioxide and lead because all areas of the State currently are designated as attainment or uncalssified for these two pollutants. In addition, no concentrations are listed for visibility reducing particles because suitable data are not available for making the calculations.

The 1-in-1 year recurrence rate concentrations listed here are based on all available data. However, in some cases, the data may not be complete or representative. Therefore, the resulting 1-in-1 year recurrence rate concentrations also may not be representative. Individuals using the information presented in this Attachment are encouraged to contact the Air Resources Board Technical Support Division to determine whether the data of concern indeed are complete and representative.

Finally, it is important to note that the 1-in-1 Year Recurrence Rate Concentration is the same as the Expected Peak Day Concentration which the Air Resources Board endorsed for the districts to use as an indicator in reporting their progress toward attainment of the State standards, as required by the Health and Safety Code subsections 40924(b) and (c). The use of the Expected Peak Day Concentration is described more fully in the document titled: *"Guidance for Using Air Quality-Related Indicators in Reporting Progress in Attaining the State Ambient Air Quality Standards"* (Air Resources Board, September 1993).

TABLE E-1
OZONE EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(1-hour average concentrations in parts per hundred million (pphm))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
NORTH COAST AIR BASIN				
DEL NORTE	0800654 GASQUET-AIRPORT	6.22	6	855
HUMBOLDT	1200513 EUREKA-FORT HUMBOLDT	4.91	5	639
MENDOCINO	2300769 UKIAH-E GOBBI ST	6.04	6	61
SONOMA	4900899 HEALDSBURG-MUNICIPAL AP	8.42	8	275
SAN FRANCISCO BAY AREA AIR BASIN				
ALAMEDA	6000336 FREMONT-CHAPEL WAY	10.72	11	1096
	6000337 HAYWARD-LA MESA	8.69	9	1006
	6000339 OAKLAND-ALICE	5.98	6	1006
	6000340 LIVERMORE-OLD FIRST ST	12.98	13	1096
	6000343 SAN LEANDRO-CO HOSPITAL	9.46	9	881
CONTRA COSTA	0700430 PITTSBURG	9.82	10	1096
	0700433 RICHMOND-13TH ST	5.95	6	1096
	0700440 CONCORD-2975 TREAT BLVD	10.46	10	1096
	0700442 BETHEL ISLAND RD	11.15	11	1096
MARIN	2100451 SAN RAFAEL	6.51	7	1096
NAPA	2800783 NAPA-JEFFERSON ST	9.21	9	1096
SAN FRANCISCO	9000306 SAN FRANCISCO-10 ARKANSAS	5.75	6	1095
SAN MATEO	4100541 REDWOOD CITY	7.04	7	1096
SANTA CLARA	4300380 LOS GATOS	11.38	11	1096
	4300382 SAN JOSE-4TH ST	10.92	11	1096
	4300387 MOUNTAIN VIEW-CUESTA	9.45	9	1037
	4300389 GILROY-9TH ST	11.56	12	1037
	4300390 SAN JOSE-W SAN CARLOS ST	9.92	10	1096
	4300392 SAN JOSE-PIEDMONT ST	12.38	11	153
SOLANO	4800875 FAIRFIELD-BAAPCD	9.92	10	1037
	4800879 VALLEJO-TUOLUMNE	9.03	9	1096
SONOMA	4900887 SONOMA-1ST ST	9.35	9	808
	4900893 SANTA ROSA-837 FIFTH ST	7.43	7	1096
NORTH CENTRAL COAST AIR BASIN				
MONTEREY	2700544 SALINAS II	6.57	7	1065
	2700550 CARMEL VALLEY-35 FORD RD	8.54	9	1065
	2700551 KING CITY-750 METZ RD	9.18	9	885
	2700552 MONTEREY-SILVER CLOUD CT	6.69	6	122
SAN BENITO	3500823 HOLLISTER-1979 FAIRVIEW	10.03	10	1096
SANTA CRUZ	4400850 SANTA CRUZ-966 BOSTWICK	8.12	8	1094
	4400851 DAVENPORT	7.14	7	1097
	4400852 WATSONVILLE-444 AIRPORT	7.86	8	153
	4400853 SCOTTS VALLEY-VINE HILL	8.68	9	153

TABLE E-1 (continued)
OZONE EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(1-hour average concentrations in parts per hundred million (pphm))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
SOUTH CENTRAL COAST AIR BASIN (continued)				
SAN LUIS OBISPO	4000832 PASO ROBLES	8.51	8	273
	4000833 MORRO BAY	7.66	8	1095
	4000834 NIPOMO	8.59	9	1095
	4000835 SAN LUIS OBISPO-MARSH	7.74	8	1089
	4000844 GROVER CITY-LESAGE DRIVE	7.57	8	1095
	4000847 ATASCADERO-LEWIS AVENUE	9.89	10	1064
	4000848 NIPOMO-1230 EUCALYPTUS RD	7.80	8	516
	4000849 NIPOMO-1300 GUADALUPE RD	7.98	8	580
	4000850 PASO ROBLES-235 SANTA FE	10.02	9	488
SANTA BARBARA	4200363 GOLETA	10.84	11	1096
	4200369 SANTA YNEZ AIRPORT	9.82	10	1096
	4200370 EL CAPITAN BEACH	9.98	10	1096
	4200381 LOMPOC-128 SOUTH H ST	8.15	8	1096
	4200387 SANTA MARIA-BROADWAY	6.31	6	1050
	4200388 SANTA BARBARA-3 W CARRILLO	11.13	11	1096
	4200389 BATTLES-BETTERAVIA RD	8.68	9	1035
	4200390 VANDENBERG-STS POWER PLANT	9.48	9	1035
	4200391 VANDENBERG-PT ARGUELLO	9.36	9	1035
	4200392 JALAMA BEACH COUNTY PARK	8.84	9	915
	4200393 POINT CONCEPTION	9.20	9	915
	4200394 LOMPOC-HS & P	9.24	9	1035
	4200395 LOS PADRES NF-PARADISE RD	11.64	12	1035
	4200396 GAVIOTA-WEST (CHEVRON)	11.06	11	1035
	4200397 GAVIOTA-EAST (CHEVRON)	10.78	11	1035
	4200398 GAVIOTA TC-SITE A	10.81	11	851
	4200399 GAVIOTA TC-SITE B NOJOQUI	11.34	11	1004
	4200400 GAVIOTA TC-SITE C	11.33	11	851
	4200401 SANTA BARBARA-UC W CAMPUS	10.41	10	1035
	4200402 CARPINTERIA-GOBERNADOR RD	11.65	12	1035
VENTURA	5600415 THOUSAND OAKS-WINDSOR	12.34	12	790
	5600419 EL RIO-RIO MESA SCHOOL	11.67	12	790
	5600427 PIRU-2SW	12.84	13	1096
	5600428 ANACAPA ISLAND-LIGHTHOUSE	9.93	10	883
	5600429 VENTURA CO-W CASITAS PASS	14.15	14	1066
	5600430 OJAI-1768 MARICOPA HWY	13.31	13	1096
	5600433 VENTURA-EMMA WOOD ST. BEACH	11.42	11	1065
	5600434 SIMI VALLEY-5400 COCHRAN	15.84	16	1096
	5600435 THOUSAND OAKS-MOORPARK RD	13.00	13	306
	5600436 EL RIO-RIO MESA SCHOOL #2	13.49	13	306

TABLE E-1 (continued)
OZONE EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(1-hour average concentrations in parts per hundred million (pphm))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
SOUTH COAST AIR BASIN				
LOS ANGELES	7000060 AZUSA	25.22	25	1096
	7000069 BURBANK	21.88	22	1096
	7000072 NORTH LONG BEACH	13.29	13	1096
	7000074 RESEDA	18.51	19	1096
	7000075 POMONA	24.54	24	1096
	7000080 WHITTIER	20.63	19	1096
	7000084 LYNWOOD	14.16	14	1096
	7000085 PICO RIVERA	22.77	23	1096
	7000087 LOS ANGELES-NORTH MAIN	18.39	18	1096
	7000088 PASADENA-WILSON	24.13	24	1096
	7000089 SANTA CLARITA-SAN FERNANDO	22.65	23	1096
	7000091 WEST LOS ANGELES-VA HOSP	16.51	17	1096
	7000094 HAWTHORNE	12.25	12	1096
	7000097 AVALON-301 CRESCENT AVE	10.05	10	153
	7000591 GLENDORA-LAUREL	28.73	29	1096
ORANGE	3000176 ANAHEIM	19.31	19	1096
	3000177 LA HABRA	20.46	20	1096
	3000186 EL TORO	18.09	18	1096
	3000190 LOS ALAMITOS-ORANGEWOOD	16.15	16	1096
	3000195 COSTA MESA-MESA VERDE DR	14.28	14	1037
RIVERSIDE	3300141 HEMET-STATE ST	17.42	17	1096
	3300144 RIVERSIDE-RUBIDOUX	24.97	25	1096
	3300149 PERRIS	19.18	19	1096
	3300155 NORCO-NORCONIAN	21.19	21	1096
	3300159 LAKE ELSINORE	18.63	19	1065
	3300160 TEMECULA-30250 RANCHO CA	12.77	13	428
SAN BERNARDINO	3600175 UPLAND-ARB	24.66	25	1096
	3600181 LAKE GREGORY	26.44	25	1096
	3600197 FONTANA-ARROW HWY	25.73	26	1096
	3600203 SAN BERNARDINO-FOURTH ST	24.04	24	1096
	3600204 REDLANDS-DEARBORN	24.99	25	1096
SAN DIEGO AIR BASIN				
SAN DIEGO	8000114 CHULA VISTA	13.78	14	1096
	8000115 ESCONDIDO-VALLEY PKWY	15.13	15	1096
	8000123 SAN DIEGO-OVERLAND	16.10	16	1096
	8000128 ALPINE-VICTORIA	15.69	16	1096
	8000131 EL CAJON-REDWOOD AVE	14.28	14	1096
	8000133 DEL MAR-MIRACOSTA COLLEGE	14.60	15	1095
	8000134 OCEANSIDE-1701 MISSION AVE	13.62	13	1096
	8000138 SAN DIEGO-330A 12TH AVE	14.54	15	1096
	8000139 OTAY MESA-1100 PASEO INTL	13.05	13	731

TABLE E-1 (continued)
OZONE EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(1-hour average concentrations in parts per hundred million (pphm))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
NORTHEAST PLATEAU AIR BASIN				
SISKIYOU	4700861 YREKA	7.97	8	674
SACRAMENTO VALLEY AIR BASIN				
BUTTE	0400628 CHICO-MANZANITA	9.27	9	1096
COLUSA	0600643 COLUSA-FAIRGROUNDS	10.53	11	458
GLENN	1100673 WILLOWS-VILLA AVE	10.06	10	824
PLACER	3100810 ROCKLIN-SIERRA COLLEGE	13.83	13	455
	3100813 AUBURN-DEWITT-C AVE	14.38	14	731
	3100820 ROCKLIN-5000 ROCKLIN RD	14.08	13	611
SACRAMENTO	3400286 SACRAMENTO-MEADOWVIEW	12.30	12	742
	3400287 FOLSOM	15.50	16	1096
	3400293 CITRUS HTS-SUNRISE BLVD	13.50	13	1096
	3400294 NORTH HIGHLANDS-BLACKFOOT	11.74	12	868
	3400295 SACRAMENTO-DEL PASO MANOR	14.03	13	1006
	3400305 SACRAMENTO-1309 T ST	11.28	11	1082
	3400307 SACRAMENTO-EARHART DR	12.19	12	1096
SHASTA	4500555 REDDING-H.D. ROOF	11.63	12	632
	4500556 BURNEY	7.70	8	428
	4500564 REDDING-1615 CONTINENTAL	7.00	6	30
SOLANO	4800881 VACAVILLE-MERCHANT	10.30	9	213
SUTTER	5100897 PLEASANT GROVE-4SW	10.73	11	986
	5100898 YUBA CITY-ALMOND ST	10.96	11	1039
TEHAMA	5200909 RED BLUFF-1760 WALNUT ST	11.23	11	780
YOLO	5700569 WOODLAND-W MAIN ST	10.95	11	458
	5700577 DAVIS-UCD CAMPUS	10.41	10	915
	5700578 BRODERICK	11.79	12	395
	5700579 WOODLAND-40 SUTTER ST	11.05	11	275
SAN JOAQUIN VALLEY AIR BASIN				
FRESNO	1000230 PARLIER	14.81	15	1096
	1000234 FRESNO-OLIVE	3.85	3	30
	1000244 FRESNO-4706 E DRUMMOND	14.78	15	1096
	1000245 FRESNO-SIERRA SKYPARK #2	13.09	13	856
	1000246 FRESNO-3425 FIRST ST	16.26	16	999
	1000248 CLOVIS-908 N VILLA AVE	14.71	15	853
KERN	1500203 BAKERSFIELD-CHESTER ST	12.26	12	1096
	1500242 EDISON	15.07	15	1095
	1500243 OILDALE-3311 MANOR	12.11	12	1096
	1500246 MARICOPA SCHOOL-STANISLAUS	11.93	12	1095
	1500247 ARVIN	15.89	16	1033
	1500248 SHAFTER	11.06	11	1096
KINGS	1600701 HANFORD	10.52	11	1096
MADERA	2000003 MADERA-HEALTH DEPT	11.31	11	1036

TABLE E-1 (continued)
OZONE EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(1-hour average concentrations in parts per hundred million (pphm))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
SAN JOAQUIN VALLEY AIR BASIN (continued)				
SAN JOAQUIN	3900252 STOCKTON-HAZELTON ST	11.15	11	1096
	3900267 STOCKTON-13521 E MARIPOSA	11.82	12	1068
STANISLAUS	5000562 TURLOCK-MONTE VISTA	12.04	12	673
	5000568 MODESTO-814 14TH ST	11.80	12	1096
	5000571 CROWS LANDING-DAVIS RD	12.27	12	485
	5000572 WESTLEY-TRUCK STOP	11.31	11	395
	5000573 TURLOCK-900 S MINARET	11.34	11	245
TULARE	5400568 VISALIA-CHURCH ST	12.31	12	1089
GREAT BASIN VALLEYS AIR BASIN				
INYO	1400723 BISHOP-157 SHORT ST	9.24	8	366
MONO	2600785 MAMMOTH LAKES-GATEWAY HC	10.86	10	794
SOUTHEAST DESERT AIR BASIN				
IMPERIAL	1300694 EL CENTRO-150 9TH ST	10.94	11	1094
	1300695 CALEXICO-900 GRANT ST	15.96	15	450
LOS ANGELES	7000082 LANCASTER	5.27	4	59
	7000096 LANCASTER-W PONDERA ST	15.28	15	1065
RIVERSIDE	3300137 PALM SPRINGS-FIRE STATION	16.75	17	1096
	3300150 BANNING-ALLESANDRO	19.98	20	1096
	3300157 INDIO-JACKSON	15.45	14	1096
	3300161 BLYTHE-449 W MURPHY ST	9.05	9	458
SAN BERNARDINO	3600155 BARSTOW	12.46	12	1019
	3600188 TRONA-MARKET ST	10.16	10	1096
	3600190 VICTORVILLE-FAIRGROUNDS	15.61	16	319
	3600191 TWENTYNINE PALMS-ADOBE	12.42	12	1096
	3600201 HESPERIA-17288 OLIVE ST	20.33	20	1096
	3600202 VICTORVILLE-CIVIC DR	13.94	12	157
	3600207 PHELAN	21.77	22	1096
	3600209 VICTORVILLE-ARMAGOSA	17.77	17	593
MOUNTAIN COUNTIES AIR BASIN				
AMADOR	0300614 JACKSON-201 CLINTON RD	11.66	12	245
EL DORADO	0900690 PLACERVILLE-GOLD NUGGET	12.54	12	255
MARIPOSA	2200746 YOSEMITE-TURTLEBACK DOME	10.92	11	488
NEVADA	2900794 TRUCKEE-FIRE STATION	4.90	5	61
	2900797 NEVADA CITY-WILLOW VALLEY	10.93	11	823
PLACER	3100817 COLFAX-CHURCH ST	13.87	13	304
	3100818 COLFAX-CITY HALL	11.83	12	214
PLUMAS	3200821 QUINCY-267 N CHURCH ST	5.53	5	61
TUOLUMNE	5500930 SONORA-251 S BARRETTA ST	9.77	10	152

TABLE E-1 (continued)
OZONE EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(1-hour average concentrations in parts per hundred million (pphm))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
LAKE COUNTY AIR BASIN				
LAKE	1700713 LAKEPORT-LAKEPORT BLVD	7.58	8	1092
LAKE TAHOE AIR BASIN				
EL DORADO	0900684 LAKE TAHOE-3377 TAHOE BLVD	8.84	9	1051
	0900691 SOUTH LAKE TAHOE-3337 SANDY	5.56	5	31

[1] EPDC = Expected Peak Day Concentration. The EPDC is equal to the calculated 1-in-1 year recurrence rate concentration.

[2] DV = Designation Value. The DV is the highest measured concentration that is equal to or less than the EPDC, after the EPDC is rounded to the precision of the relevant ambient air quality standard. For example, an EPDC of 10.72 pphm would be rounded to 11 pphm and the highest measured concentration equal to or less than 11 pphm would be considered for the designation value.

[3] #OBS = Number of Observations in the 1990-1992 period.

TABLE E-2
CARBON MONOXIDE EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(8-hour average concentrations in parts per million (ppm))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
NORTH COAST AIR BASIN				
HUMBOLDT	1200506 EUREKA-HIGHWAY DEPT	4.23	3.8	151
MENDOCINO	2300769 UKIAH-E GOBBI ST	0.69	0.4	61
SAN FRANCISCO BAY AREA AIR BASIN				
ALAMEDA	6000336 FREMONT-CHAPEL WAY	5.37	5.4	1096
	6000339 OAKLAND-ALICE	6.38	6.1	1096
	6000340 LIVERMORE-OLD FIRST ST	4.43	4.3	1096
CONTRA COSTA	0700430 PITTSBURG	5.00	4.6	1096
	0700433 RICHMOND-13TH ST	4.02	4.0	1096
	0700440 CONCORD-2975 TREAT BLVD	5.69	5.5	1096
	0700442 BETHEL ISLAND RD	2.51	2.3	1096
MARIN	2100451 SAN RAFAEL	5.10	5.0	1096
NAPA	2800783 NAPA-JEFFERSON ST	6.15	5.8	1095
SAN FRANCISCO	9000303 SAN FRANCISCO-ELLIS ST	6.71	6.6	1096
	9000306 SAN FRANCISCO-10 ARKANSAS	6.07	6.1	1091
SAN MATEO	4100541 REDWOOD CITY	5.78	5.8	1096
SANTA CLARA	4300382 SAN JOSE-4TH ST	11.06	11.1	1096
	4300389 GILROY-9TH ST	3.39	3.4	1096
	4300390 SAN JOSE-W SAN CARLOS ST	8.72	8.6	1096
SOLANO	4800875 FAIRFIELD-BAAPCD	3.58	3.6	181
	4800879 VALLEJO-TUOLUMNE	9.43	9.0	1096
SONOMA	4900893 SANTA ROSA-837 FIFTH ST	4.40	4.3	1096
NORTH CENTRAL COAST AIR BASIN				
MONTEREY	2700544 SALINAS II	2.70	2.5	1035
	2700551 KING CITY-750 METZ RD	1.57	1.3	915
SANTA CRUZ	4400851 DAVENPORT	1.35	1.2	976
SOUTH CENTRAL COAST AIR BASIN				
SAN LUIS OBISPO	4000835 SAN LUIS OBISPO-MARSH	4.30	4.1	1096
SANTA BARBARA	4200363 GOLETA	2.30	2.1	1096
	4200381 LOMPOC-128 SOUTH H ST	2.38	2.4	1096
	4200388 SANTA BARBARA-3 W CARRILLO	6.40	6.4	953
	4200390 VANDENBERG-STS POWER PLANT	1.73	1.1	1004
	4200393 POINT CONCEPTION	0.01	0.0	276
VENTURA	5600419 EL RIO-RIO MESA SCHOOL	2.14	2.1	730
	5600434 SIMI VALLEY-5400 COCHRAN	4.40	4.4	1065
	5600436 EL RIO-RIO MESA SCHOOL #2	1.46	1.3	184

TABLE E-2 (continued)
CARBON MONOXIDE EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(8-hour average concentrations in parts per million (ppm))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
SOUTH COAST AIR BASIN				
LOS ANGELES	7000060 AZUSA	5.38	5.3	1096
	7000069 BURBANK	12.36	11.6	1096
	7000072 NORTH LONG BEACH	8.97	8.9	1096
	7000074 RESEDA	12.47	12.3	1096
	7000075 POMONA	7.37	7.1	1096
	7000080 WHITTIER	7.84	7.7	1096
	7000084 LYNWOOD	17.74	17.4	1096
	7000085 PICO RIVERA	9.38	9.4	1096
	7000087 LOS ANGELES-NORTH MAIN	9.43	9.0	1096
	7000088 PASADENA-WILSON	9.25	8.6	1096
	7000089 SANTA CLARITA-SAN FERNANDO	4.72	4.6	1096
	7000091 WEST LOS ANGELES-VA HOSP	6.62	6.6	1096
	7000094 HAWTHORNE	12.47	12.3	1096
	7000095 SANTA CLARITA-HONBY ST	3.16	2.6	31
	7000097 AVALON-301 CRESCENT AVE	1.95	1.1	153
ORANGE	3000176 ANAHEIM	9.60	9.4	1096
	3000177 LA HABRA	9.31	9.1	1096
	3000186 EL TORO	5.18	5.1	1096
	3000195 COSTA MESA-MESA VERDE DR	9.61	9.4	1037
RIVERSIDE	3300144 RIVERSIDE-RUBIDOUX	6.04	6.0	1096
	3300146 RIVERSIDE-MAGNOLIA	6.96	6.9	1096
	3300160 TEMECULA-30250 RANCHO CA	3.76	3.6	458
SAN BERNARDINO	3600175 UPLAND-ARB	4.91	4.9	577
	3600197 FONTANA-ARROW HWY	4.76	4.4	546
	3600203 SAN BERNARDINO-FOURTH ST	6.59	6.5	1096
SAN DIEGO AIR BASIN				
SAN DIEGO	8000114 CHULA VISTA	4.05	3.9	1096
	8000115 ESCONDIDO-VALLEY PKWY	8.58	7.9	1096
	8000123 SAN DIEGO-OVERLAND	4.15	4.1	1096
	8000130 SAN DIEGO-1133 UNION ST	8.00	7.9	1096
	8000131 EL CAJON-REDWOOD AVE	5.96	5.8	1095
	8000134 OCEANSIDE-1701 MISSION AVE	3.99	4.0	1096
	8000138 SAN DIEGO-330A 12TH AVE	7.66	7.5	1096
	8000139 OTAY MESA-1100 PASEO INTL	4.71	4.7	731

TABLE E-2 (continued)
CARBON MONOXIDE EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(8-hour average concentrations in parts per million (ppm))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
SACRAMENTO VALLEY AIR BASIN				
BUTTE	0400628 CHICO-MANZANITA	4.98	4.9	1096
	0400633 CHICO-SALEM ST	9.41	9.2	911
PLACER	3100820 ROCKLIN-5000 ROCKLIN RD	3.01	2.3	397
SACRAMENTO	3400289 SACRAMENTO-EL CAMINO/WATT	12.76	12.6	1096
	3400293 CITRUS HTS-SUNRISE BLVD	6.43	6.1	1096
	3400294 NORTH HIGHLANDS-BLACKFOOT	5.46	5.3	1096
	3400295 SACRAMENTO-DEL PASO MANOR	9.72	9.7	1096
	3400305 SACRAMENTO-1309 T ST	10.56	10.6	1095
	3400307 SACRAMENTO-EARHART DR	6.22	6.0	974
SHASTA	4500555 REDDING-H.D. ROOF	1.81	1.6	92
	4500556 BURNEY	2.52	2.3	484
SUTTER	5100898 YUBA CITY-ALMOND ST	7.91	6.9	518
YOLO	5700569 WOODLAND-W MAIN ST	4.87	4.9	458
	5700579 WOODLAND-40 SUTTER ST	3.70	3.3	275
SAN JOAQUIN VALLEY AIR BASIN				
FRESNO	1000230 PARLIER	2.45	2.4	1096
	1000234 FRESNO-OLIVE	12.86	10.2	31
	1000244 FRESNO-4706 E DRUMMOND	7.06	7.0	1096
	1000245 FRESNO-SIERRA SKYPARK #2	3.52	3.4	1096
	1000246 FRESNO-3425 FIRST ST	10.03	9.9	1096
	1000248 CLOVIS-908 N VILLA AVE	5.21	5.1	853
KERN	1500203 BAKERSFIELD-CHESTER ST	8.30	8.1	1096
	1500242 EDISON	1.57	1.6	1064
	1500243 OILDALE-3311 MANOR	2.22	2.1	1096
MERCED	2400529 MERCED-415 W 18TH ST	6.03	5.4	91
SAN JOAQUIN	3900252 STOCKTON-HAZELTON ST	9.26	8.4	1096
	3900266 STOCKTON-4310 CLAREMONT	11.21	11.0	1092
STANISLAUS	5000568 MODESTO-814 14TH ST	10.34	9.4	1096
	5000571 CROWS LANDING-DAVIS RD	1.63	1.3	485
	5000572 WESTLEY-TRUCK STOP	0.97	1.0	394
	5000573 TURLOCK-900 S MINARET	4.37	4.1	245
TULARE	5400568 VISALIA-CHURCH ST	5.96	6.0	1095
GREAT BASIN VALLEYS AIR BASIN				
INYO	1400723 BISHOP-157 SHORT ST	3.96	3.8	458
MONO	2600785 MAMMOTH LAKES-GATEWAY HC	4.74	4.4	887

TABLE E-2 (continued)
CARBON MONOXIDE EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(8-hour average concentrations in parts per million (ppm))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
SOUTHEAST DESERT AIR BASIN				
LOS ANGELES	7000082 LANCASTER	6.08	6.1	59
	7000096 LANCASTER-W PONDERA ST	7.17	7.1	1065
RIVERSIDE	3300137 PALM SPRINGS-FIRE STATION	2.20	2.1	1066
SAN BERNARDINO	3600155 BARSTOW	4.23	3.9	1001
	3600201 HESPERIA-17288 OLIVE ST	3.79	3.7	1089
	3600207 PHELAN	2.77	2.6	1096
MOUNTAIN COUNTIES AIR BASIN				
AMADOR	0300614 JACKSON-201 CLINTON RD	2.33	2.1	245
EL DORADO	0900689 PONDEROSA HIGH SCHOOL	3.77	3.5	123
	0900690 PLACERVILLE-GOLD NUGGET	3.58	2.4	255
NEVADA	2900797 NEVADA CITY-WILLOW VALLEY	0.47	0.1	336
TUOLUMNE	5500930 SONORA-251 S BARRETTA ST	2.99	2.7	153
LAKE COUNTY AIR BASIN				
LAKE	1700713 LAKEPORT-LAKEPORT BLVD	2.86	2.8	609
LAKE TAHOE AIR BASIN				
EL DORADO	0900683 SOUTH LAKE TAHOE-STATELINE	9.93	9.9	1057
	0900684 LAKE TAHOE-3377 TAHOE BLVD	4.20	3.9	1036

[1] EPDC = Expected Peak Day Concentration. The EPDC is equal to the calculated 1-in-1 year recurrence rate concentration.

[2] DV = Designation Value. The DV is the highest measured concentration that is equal to or less than the EPDC, after the EPDC is rounded to the precision of the relevant ambient air quality standard. For example, an EPDC of 5.37 ppm would be rounded to 5.4 ppm and the highest measured concentration equal to or less than 5.4 ppm would be considered for the designation value.

[3] #OBS = Number of Observations in the 1990-1992 period.

TABLE E-3
NITROGEN DIOXIDE EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(1-hour average concentrations in parts per hundred million (pphm))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
NORTH COAST AIR BASIN				
MENDOCINO	2300769 UKIAH-E GOBBI ST	7.10	5	61
SAN FRANCISCO BAY AREA AIR BASIN				
ALAMEDA	6000336 FREMONT-CHAPEL WAY	11.90	12	1096
	6000340 LIVERMORE-OLD FIRST ST	10.25	10	1096
CONTRA COSTA	0700430 PITTSBURG	8.73	8	1095
	0700433 RICHMOND-13TH ST	8.28	8	1096
	0700440 CONCORD-2975 TREAT BLVD	9.52	10	1094
	0700442 BETHEL ISLAND RD	6.86	7	1096
MARIN	2100451 SAN RAFAEL	8.30	8	1096
NAPA	2800783 NAPA-JEFFERSON ST	8.03	8	1096
SAN FRANCISCO	9000306 SAN FRANCISCO-10 ARKANSAS	10.45	10	728
SAN MATEO	4100541 REDWOOD CITY	11.52	12	1096
SANTA CLARA	4300382 SAN JOSE-4TH ST	15.38	15	1096
	4300390 SAN JOSE-W SAN CARLOS ST	14.75	14	1096
SOLANO	4800879 VALLEJO-TUOLUMNE	8.87	9	1096
SONOMA	4900893 SANTA ROSA-837 FIFTH ST	8.30	8	1096
NORTH CENTRAL COAST AIR BASIN				
MONTEREY	2700544 SALINAS II	6.15	6	1096
	2700551 KING CITY-750 METZ RD	3.74	4	866
SANTA CRUZ	4400851 DAVENPORT	4.85	5	1019
SOUTH CENTRAL COAST AIR BASIN				
SAN LUIS OBISPO	4000834 NIPOMO	5.38	5	1095
	4000835 SAN LUIS OBISPO-MARSH	6.96	7	1035
	4000844 GROVER CITY-LESAGE DR	5.92	6	1095
	4000845 SAN LUIS OBISPO-7020 LEWIS	3.95	4	901
	4000847 ATASCADERO-LEWIS AVE	7.34	7	862
SANTA BARBARA	4200363 GOLETA	7.71	8	1096
	4200370 EL CAPITAN BEACH	6.89	7	1096
	4200381 LOMPOC-128 SOUTH H ST	5.49	5	1096
	4200388 SANTA BARBARA-3 W CARRILLO	10.46	10	1056
	4200389 BATTLES-BETTERAVIA RD	5.80	6	1035
	4200390 VANDENBERG-STS POWER PLANT	2.24	2	1035
	4200391 VANDENBERG-PT ARGUELLO	2.84	3	1035
	4200392 JALAMA BEACH COUNTY PARK	2.57	3	915
	4200393 POINT CONCEPTION	3.46	3	915
	4200394 LOMPOC-HS & P	2.20	2	1035
	4200395 LOS PADRES NF-PARADISE RD	2.16	2	1035
	4200396 GAVIOTA-WEST (CHEVRON)	4.83	5	1035
	4200397 GAVIOTA-EAST (CHEVRON)	5.03	5	1035

TABLE E-3 (continued)
NITROGEN DIOXIDE EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(1-hour average concentrations in parts per hundred million (pphm))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
SOUTH CENTRAL COAST AIR BASIN (continued)				
SANTA BARBARA (continued)	4200398 GAVIOTA TC-SITE A	7.30	7	851
	4200399 GAVIOTA TC-SITE B NOJOQUI	5.23	5	1004
	4200400 GAVIOTA TC-SITE C	4.75	5	851
	4200401 SANTA BARBARA-UC W CAMPUS	7.06	7	1035
	4200402 CARPINTERIA-GOBERNADOR RD	5.61	6	1035
VENTURA	5600419 EL RIO-RIO MESA SCHOOL	8.62	9	730
	5600428 ANACAPA ISLAND-LIGHTHOUSE	6.69	7	794
	5600429 VENTURA CO-W CASITAS PASS	4.30	4	1066
	5600430 OJAI-1768 MARICOPA HWY	5.67	6	1096
	5600433 VENTURA-EMMA WOOD ST. BEACH	8.21	8	1003
	5600434 SIMI VALLEY-5400 COCHRAN	11.22	11	1095
	5600435 THOUSAND OAKS-MOORPARK RD	9.31	8	214
	5600436 EL RIO-RIO MESA SCHOOL #2	6.03	6	306
SOUTH COAST AIR BASIN				
LOS ANGELES	7000060 AZUSA	20.71	21	1096
	7000069 BURBANK	22.66	23	1096
	7000072 NORTH LONG BEACH	24.04	22	1096
	7000074 RESEDA	16.88	17	1096
	7000075 POMONA	21.25	21	1096
	7000080 WHITTIER	24.24	23	1096
	7000084 LYNWOOD	25.12	25	1096
	7000085 PICO RIVERA	25.86	26	1096
	7000087 LOS ANGELES-NORTH MAIN	30.90	28	1096
	7000088 PASADENA-WILSON	24.68	24	1096
	7000089 SANTA CLARITA-SAN FERNANDO	13.74	14	1095
	7000091 WEST LOS ANGELES-VA HOSP	19.82	20	1096
	7000094 HAWTHORNE	21.96	22	1096
	7000095 SANTA CLARITA-HONBY ST	12.01	10	31
	7000097 AVALON-301 CRESCENT AVE	8.85	8	153
	7000591 GLENDORA-LAUREL	19.44	19	1096
ORANGE	3000176 ANAHEIM	22.00	21	1096
	3000177 LA HABRA	20.21	20	1096
	3000195 COSTA MESA-MESA VERDE DR	18.89	19	1037
RIVERSIDE	3300144 RIVERSIDE-RUBIDOUX	16.66	16	1096
	3300149 PERRIS	12.46	11	181
	3300160 TEMECULA-30250 RANCHO CA	12.55	12	428
SAN BERNARDINO	3600175 UPLAND-ARB	17.24	17	1096
	3600197 FONTANA-ARROW HWY	16.36	16	1096
	3600203 SAN BERNARDINO-FOURTH ST	15.68	16	1096

TABLE E-3 (continued)
NITROGEN DIOXIDE EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(1-hour average concentrations in parts per hundred million (pphm))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
SAN DIEGO AIR BASIN				
SAN DIEGO	8000114 CHULA VISTA	13.23	13	1096
	8000115 ESCONDIDO-VALLEY PKWY	14.24	14	1095
	8000123 SAN DIEGO-OVERLAND	14.02	14	1096
	8000128 ALPINE-VICTORIA	8.33	8	1096
	8000131 EL CAJON-REDWOOD AVE	14.29	14	1096
	8000133 DEL MAR-MIRACOSTA COLLEGE	11.60	10	35
	8000134 OCEANSIDE-1701 MISSION AVE	16.38	16	1096
	8000138 SAN DIEGO-330A 12TH AVE	15.46	14	731
	8000139 OTAY MESA-1100 PASEO INTL	11.92	12	698
SACRAMENTO VALLEY AIR BASIN				
BUTTE	0400628 CHICO-MANZANITA	7.99	8	730
PLACER	3100820 ROCKLIN-5000 ROCKLIN RD	8.81	8	397
SACRAMENTO	3400287 FOLSOM	11.57	11	1089
	3400293 CITRUS HTS-SUNRISE BLVD	11.33	11	1064
	3400294 NORTH HIGHLANDS-BLACKFOOT	11.07	11	868
	3400295 SACRAMENTO-DEL PASO MANOR	13.25	13	856
	3400305 SACRAMENTO-1309 T ST	11.67	12	1096
	3400307 SACRAMENTO-EARHART DR	9.88	10	914
SHASTA	4500555 REDDING-H.D. ROOF	6.46	6	913
	4500564 REDDING-1615 CONTINENTAL	6.26	5	120
SUTTER	5100898 YUBA CITY-ALMOND ST	9.37	9	520
SAN JOAQUIN VALLEY AIR BASIN				
FRESNO	1000234 FRESNO-OLIVE	21.43	16	28
	1000244 FRESNO-4706 E DRUMMOND	12.22	12	1096
	1000245 FRESNO-SIERRA SKYPARK #2	9.26	9	1096
	1000246 FRESNO-3425 FIRST ST	11.80	12	1005
	1000248 CLOVIS-908 N VILLA AVE	11.36	11	853
KERN	1500203 BAKERSFIELD-CHESTER ST	11.91	11	1081
	1500242 EDISON	7.79	8	1095
	1500243 OILDALE-3311 MANOR	8.86	9	1034
	1500247 ARVIN	5.93	6	1028
	1500248 SHAFTER	8.11	8	1096
MERCED	2400528 MERCED-385 S COFFEE AVE	9.04	9	428
SAN JOAQUIN	3900252 STOCKTON-HAZELTON ST	13.00	12	1096
STANISLAUS	5000568 MODESTO-814 14TH ST	10.72	11	1096
	5000571 CROWS LANDING-DAVIS RD	5.61	6	485
	5000572 WESTLEY-TRUCK STOP	5.44	5	395
	5000573 TURLOCK-900 S MINARET	10.06	9	245
TULARE	5400568 VISALIA-CHURCH ST	10.87	10	1096

TABLE E-3 (continued)
NITROGEN DIOXIDE EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(1-hour average concentrations in parts per hundred million (pphm))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
SOUTHEAST DESERT AIR BASIN				
LOS ANGELES	7000082 LANCASTER	5.58	5	59
	7000096 LANCASTER-W PONDERA ST	9.55	10	1065
RIVERSIDE	3300137 PALM SPRINGS-FIRE STATION	8.65	9	1066
SAN BERNARDINO	3600155 BARSTOW	10.39	10	1034
	3600188 TRONA-MARKET ST	23.52	24	976
	3600190 VICTORVILLE-FAIRGROUNDS	8.19	8	288
	3600191 TWENTYNINE PALMS-ADOBE	5.49	5	184
	3600201 HESPERIA-17288 OLIVE ST	7.58	8	1036
	3600207 PHELAN	4.82	5	975
	3600209 VICTORVILLE-ARMAGOSA	10.84	11	580
LAKE TAHOE AIR BASIN				
EL DORADO	0900684 LAKE TAHOE-3377 TAHOE BLVD	7.31	7	1035

[1] EPDC = Expected Peak Day Concentration. The EPDC is equal to the calculated 1-in-1 year recurrence rate concentration.

[2] DV = Designation Value. The DV is the highest measured concentration that is equal to or less than the EPDC, after the EPDC is rounded to the precision of the relevant ambient air quality standard. For example, an EPDC of 11.90 pphm would be rounded to 12 pphm and the highest measured concentration equal to or less than 12 pphm would be considered for the designation value.

[3] #OBS = Number of Observations in the 1990-1992 period.

TABLE E-4
PM10 EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES

(24-hour average concentrations in micrograms per cubic meter (ug/m^3))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
NORTH COAST AIR BASIN				
HUMBOLDT	1200503 EUREKA-H.D. 6TH AND I ST	94.53	88	172
MENDOCINO	2300753 WILLITS-FIREHOUSE	78.36	74	180
	2300764 UKIAH-COUNTY LIBRARY	63.84	57	162
SONOMA	4900886 CLOVERDALE	119.15	78	195
	4900895 GUERNEVILLE-CHURCH & 1ST	82.46	73	164
	4900898 HEALDSBURG-133 MATHESON	71.47	68	192
SAN FRANCISCO BAY AREA AIR BASIN				
ALAMEDA	6000336 FREMONT-CHAPEL WAY	123.96	92	181
	6000340 LIVERMORE-OLD FIRST ST	141.87	137	182
	6000343 SAN LEANDRO-CO HOSPITAL	114.25	99	147
CONTRA COSTA	0700433 RICHMOND-13TH ST	101.85	97	181
	0700440 CONCORD-2975 TREAT BLVD	130.16	118	183
	0700442 BETHEL ISLAND RD	132.96	123	182
MARIN	2100451 SAN RAFAEL	109.09	85	182
NAPA	2800783 NAPA-JEFFERSON ST	117.17	117	182
SAN FRANCISCO	9000306 SAN FRANCISCO-10 ARKANSAS	113.81	109	179
SAN MATEO	4100541 REDWOOD CITY	117.18	93	182
SANTA CLARA	4300377 SAN JOSE-MOORPARK	141.02	127	182
	4300382 SAN JOSE-4TH ST	156.16	153	409
	4300390 SAN JOSE-W SAN CARLOS ST	145.53	134	181
	4300391 SAN JOSE-528 TULLY RD	159.37	124	181
NORTH CENTRAL COAST AIR BASIN				
MONTEREY	2700544 SALINAS II	58.53	56	178
	2700550 CARMEL VALLEY-35 FORD RD	43.59	37	43
	2700551 KING CITY-750 METZ RD	64.11	57	133
SAN BENITO	3500823 HOLLISTER-1979 FAIRVIEW	60.04	55	170
SANTA CRUZ	4400850 SANTA CRUZ-966 BOSTWICK	54.38	49	172
	4400851 DAVENPORT	96.61	79	44
	4400852 WATSONVILLE-444 AIRPORT	45.28	36	23
SOUTH CENTRAL COAST AIR BASIN				
SAN LUIS OBISPO	4000832 PASO ROBLES	45.19	41	29
	4000833 MORRO BAY	48.92	41	132
	4000834 NIPOMO	64.34	64	172
	4000835 SAN LUIS OBISPO-MARSH	49.80	43	175
	4000847 ATASCADERO-LEWIS AVE	72.49	62	164
	4000848 NIPOMO-1230 EUCALYPTUS RD	146.03	119	81
	4000849 NIPOMO-1300 GUADALUPE RD	130.15	114	93
	4000850 PASO ROBLES-235 SANTA FE	79.69	67	70
SANTA BARBARA	4200356 SANTA MARIA-LIBRARY	68.32	65	154
	4200370 EL CAPITAN BEACH	58.31	45	85
	4200388 SANTA BARBARA-3 W CARRILLO	94.67	82	173

TABLE E-4 (continued)
PM10 EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES

(24-hour average concentrations in micrograms per cubic meter (ug/m^3))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
SOUTH CENTRAL COAST AIR BASIN (continued)				
VENTURA	5600419 EL RIO-RIO MESA SCHOOL	91.39	62	131
	5600421 VENTURA-MAIN ST	77.39	73	156
	5600427 PIRU-2SW	98.76	79	160
	5600430 OJAI-1768 MARICOPA HWY	66.67	66	155
	5600434 SIMI VALLEY-5400 COCHRAN	99.71	90	176
	5600435 THOUSAND OAKS-MOORPARK RD	97.73	67	30
	5600436 EL RIO-RIO MESA SCHOOL #2	64.27	55	47
SOUTH COAST AIR BASIN				
LOS ANGELES	7000060 AZUSA	150.28	137	178
	7000069 BURBANK	191.25	176	178
	7000072 NORTH LONG BEACH	119.44	119	154
	7000087 LOS ANGELES-NORTH MAIN	165.84	152	178
	7000089 SANTA CLARITA-SAN FERNANDO	97.90	93	174
	7000094 HAWTHORNE	100.98	79	174
	7000097 AVALON-301 CRESCENT AVE	73.57	53	19
ORANGE	3000176 ANAHEIM	152.11	146	174
	3000186 EL TORO	99.61	94	172
	3000196 NEWPORT BEACH-2300 UNIV	96.49	89	89
RIVERSIDE	3300144 RIVERSIDE-RUBIDOUX	205.86	196	183
	3300149 PERRIS	189.06	180	179
	3300160 TEMECULA-30250 RANCHO CA	79.23	65	86
SAN BERNARDINO	3600171 ONTARIO AIRPORT	296.04	185	176
	3600181 LAKE GREGORY	114.48	105	133
	3600197 FONTANA-ARROW HWY	240.66	189	166
	3600203 SAN BERNARDINO-FOURTH ST	196.68	167	180
SAN DIEGO AIR BASIN				
SAN DIEGO	8000114 CHULA VISTA	81.59	73	182
	8000131 EL CAJON-REDWOOD AVE	85.10	74	177
	8000134 OCEANSIDE-1701 MISSION AVE	97.87	81	178
NORTHEAST PLATEAU AIR BASIN				
MODOC	2500764 ALTURAS-600 S MAIN ST	122.86	101	57
SISKIYOU	4700861 YREKA	79.52	74	166

TABLE E-4 (continued)
PM10 EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES

(24-hour average concentrations in micrograms per cubic meter (ug/m^3))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
SACRAMENTO VALLEY AIR BASIN				
BUTTE	0400628 CHICO-MANZANITA	112.84	83	40
COLUSA	0600646 COLUSA-100 SUNRISE BLVD	112.29	102	204
GLENN	1100673 WILLOWS-VILLA AVE	92.52	81	214
PLACER	3100810 ROCKLIN-SIERRA COLLEGE	76.34	68	78
	3100813 AUBURN-DEWITT-C AVE	60.56	51	137
	3100816 LINCOLN	104.95	95	134
SACRAMENTO	3400277 SACTO-H.D. STOCKTON BLVD	113.65	98	117
	3400283 SACTO-BRANCH CENTER RD	121.44	113	170
	3400293 CITRUS HTS-SUNRISE BLVD	138.97	116	187
	3400294 NORTH HIGHLANDS-BLACKFOOT	113.43	96	145
	3400295 SACRAMENTO-DEL PASO MANOR	173.07	135	149
	3400305 SACRAMENTO-1309 T ST	161.04	140	166
	3400307 SACRAMENTO-EARHART DR	86.60	76	74
SHASTA	4500555 REDDING-H.D. ROOF	83.72	83	165
	4500556 BURNEY	92.88	86	146
SOLANO	4800881 VACAVILLE-MERCHANT	121.67	98	142
SUTTER	5100898 YUBA CITY-ALMOND ST	107.26	96	211
TEHAMA	5200901 RED BLUFF	84.82	85	181
YOLO	5700569 WOODLAND-W MAIN ST	121.78	102	85
	5700570 WEST SACRAMENTO-15TH ST	162.50	147	121
	5700579 WOODLAND-40 SUTTER ST	116.79	103	42
SAN JOAQUIN VALLEY AIR BASIN				
FRESNO	1000229 FIVE POINTS	299.15	297	93
	1000241 FRESNO-CAL STATE #2	302.88	163	12
	1000244 FRESNO-4706 E DRUMMOND	214.46	192	167
	1000246 FRESNO-3425 FIRST ST	257.52	238	158
	1000248 CLOVIS-908 N VILLA AVE	128.37	123	99
KERN	1500203 BAKERSFIELD-CHESTER ST	253.86	197	162
	1500205 KERN REFUGE	154.41	152	149
	1500243 OILDALE-3311 MANOR	220.26	189	182
	1500250 TAFT COLLEGE	174.10	170	142
	1500251 BAKERSFIELD-CALIFORNIA ST	158.42	93	44
KINGS	1600701 HANFORD	227.26	164	166
	1600714 KETTLEMAN CITY-CAL TRANS	290.42	279	169
	1600715 CORCORAN-VAN DORSTEN AVE	224.19	218	163
MADERA	2000002 MADERA-LIBRARY	162.06	141	171
MERCED	2400521 MERCED	182.96	153	176
	2400522 LOS BANOS	151.12	150	172
SAN JOAQUIN	3900252 STOCKTON-HAZELTON ST	198.07	145	169
STANISLAUS	5000558 MODESTO-OAKDALE RD	176.40	125	18
	5000567 MODESTO-1100 I ST	186.09	171	183
	5000571 CROWS LANDING-DAVIS RD	177.52	124	81
	5000572 WESTLEY-TRUCK STOP	145.80	133	66

TABLE E-4 (continued)
PM10 EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(24-hour average concentrations in micrograms per cubic meter (ug/m^3))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
SAN JOAQUIN VALLEY AIR BASIN (continued)				
TULARE	5400568 VISALIA-CHURCH ST	242.04	207	157
	5400579 PORTERVILLE-COURTHOUSE	206.40	141	80
GREAT BASIN VALLEYS AIR BASIN				
INYO	1400696 COSO JUNCTION	259.84	93	152
	1400697 KEELER	647.86	526	118
	1400699 LONE PINE-501 E LOCUST	81.40	68	175
	1400700 INDEPENDENCE-1 NNE PUMP#7	61.07	58	85
	1400710 OLANCHA-POST OFFICE	259.78	200	164
	1400717 BISHOP-156 N MAIN ST	103.68	100	85
	1400718 COSO JCT-10 MI EAST	102.44	94	86
MONO	2600779 LEE VINING-SMS	44.71	41	179
	2600782 MONO LAKE-SIMUS RESIDENCE	112.80	77	184
	2600785 MAMMOTH LAKES-GATEWAY HC	181.27	161	166
	2600788 BODIE-11 MILES SE	34.54	35	38
SOUTHEAST DESERT AIR BASIN				
IMPERIAL	1300693 BRAWLEY-401 MAIN ST	220.84	212	175
	1300694 EL CENTRO-150 9TH ST	154.13	135	178
KERN	1500211 CHINA LAKE	324.25	166	145
	1500249 MOJAVE-AIRPORT	193.58	103	149
LOS ANGELES	7000096 LANCASTER-W PONDERA ST	404.69	342	166
RIVERSIDE	3300137 PALM SPRINGS-FIRE STATION	156.00	124	175
	3300150 BANNING-ALLESANDRO	97.64	89	157
	3300157 INDIO-JACKSON	361.18	340	177
	3300161 BLYTHE-449 W MURPHY ST	212.20	112	51
SAN BERNARDINO	3600155 BARSTOW	182.76	85	162
	3600188 TRONA-MARKET ST	200.08	147	173
	3600191 TWENTYNINE PALMS-ADOBE	249.35	139	158
	3600201 HESPERIA-17288 OLIVE ST	129.21	99	116
	3600208 LUCERNE VALLEY-MIDDLE SCH	260.87	195	131
	3600209 VICTORVILLE-ARMAGOSA	99.12	88	93
MOUNTAIN COUNTIES AIR BASIN				
MARIPOSA	2200742 YOSEMITE VILLAGE	278.12	210	178
NEVADA	2900794 TRUCKEE-FIRE STATION	126.97	110	129
	2900796 GRASS VALLEY-HENDERSON	56.99	52	186
	2900797 NEVADA CITY-WILLOW VALLEY	45.29	41	46
	2900798 GRASS VALLEY-16607 ANNIE	52.74	44	69
	2900799 GLENSHIRE-FIRE STATION	98.85	80	34
PLACER	3100818 COLFAX-CITY HALL	68.26	61	106

TABLE E-4 (continued)
PM10 EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(24-hour average concentrations in micrograms per cubic meter (ug/m^3))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
MOUNTAIN COUNTIES AIR BASIN (continued)				
PLUMAS	3200821 QUINCY-267 N CHURCH ST	162.28	162	165
	3200822 GRAEAGLE	55.32	42	135
SIERRA	4600854 LOYALTON-309 W 3RD ST	90.04	85	114
LAKE COUNTY AIR BASIN				
LAKE	1700713 LAKEPORT-LAKEPORT BLVD	32.72	31	170
	1700720 ANDERSON SPRINGS	43.93	42	54
	1700728 GLENBROOK-HIGH VALLEY RD	34.82	20	46
LAKE TAHOE AIR BASIN				
EL DORADO	900684 LAKE TAHOE-3377 TAHOE BLVD	97.47	85	169

[1] EPDC = Expected Peak Day Concentration. The EPDC is equal to the calculated 1-in-1 year recurrence rate concentration.

[2] DV = Designation Value. The DV is the highest measured concentration that is equal to or less than the EPDC, after the EPDC is rounded to the precision of the relevant ambient air quality standard. For example, an EPDC of 117.17 ug/m^3 would be rounded to 117 ug/m^3 and the highest measured concentration equal to or less than 117 ug/m^3 would be considered for the designation value.

[3] #OBS = Number of Observations in the 1990-1992 period.

TABLE E-5
SULFATES EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(24-hour average concentrations in micrograms per cubic meter (ug/m^3))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
NORTH COAST AIR BASIN				
HUMBOLDT	1200503 EUREKA-H.D. 6TH AND I ST	9.08	7	27
SAN FRANCISCO BAY AREA AIR BASIN				
ALAMEDA	6000336 FREMONT-CHAPEL WAY	7.82	7	181
	6000340 LIVERMORE-OLD FIRST ST	7.60	8	174
CONTRA COSTA	0700430 PITTSBURG	12.65	12	182
	0700433 RICHMOND-13TH ST	11.66	11	182
	0700440 CONCORD-2975 TREAT BLVD	10.76	10	182
	0700442 BETHEL ISLAND RD	10.81	10	182
MARIN	2100451 SAN RAFAEL	13.33	12	179
NAPA	2800783 NAPA-JEFFERSON ST	8.86	8	182
SAN FRANCISCO	9000306 SAN FRANCISCO-10 ARKANSAS	10.71	10	174
SAN MATEO	4100541 REDWOOD CITY	8.85	7	182
SANTA CLARA	4300377 SAN JOSE-MOORPARK	8.64	8	182
	4300382 SAN JOSE-4TH ST	8.54	8	184
	4300390 SAN JOSE-W SAN CARLOS ST	10.10	9	182
SOLANO	4800879 VALLEJO-TUOLUMNE	8.09	8	181
SONOMA	4900893 SANTA ROSA-837 FIFTH ST	6.58	7	182
SOUTH CENTRAL COAST AIR BASIN				
SANTA BARBARA	4200365 LOMPOC-JALAMA RD	18.44	16	54
	4200366 SANTA MARIA-BRIARWOOD DR	12.84	11	61
	4200381 LOMPOC-128 SOUTH H ST	9.27	9	42
SOUTH COAST AIR BASIN				
LOS ANGELES	7000060 AZUSA	20.70	19	181
	7000069 BURBANK	21.36	19	176
	7000072 NORTH LONG BEACH	23.61	23	181
	7000084 LYNWOOD	26.59	22	178
	7000085 PICO RIVERA	24.94	22	174
	7000087 LOS ANGELES-NORTH MAIN	27.00	25	177
	7000088 PASADENA-WILSON	24.24	21	174
	7000091 WEST LOS ANGELES-VA HOSP	22.26	21	172
	7000094 HAWTHORNE	28.69	25	180
ORANGE	3000176 ANAHEIM	18.13	16	182
	3000186 EL TORO	12.94	8	30
	3000190 LOS ALAMITOS-ORANGEWOOD	20.00	17	180
RIVERSIDE	3300144 RIVERSIDE-RUBIDOUX	18.35	15	176
	3300146 RIVERSIDE-MAGNOLIA	17.92	17	180
	3300149 PERRIS	14.73	13	30
SAN BERNARDINO	3600171 ONTARIO AIRPORT	28.87	20	29
	3600175 UPLAND-ARB	19.15	19	181
	3600181 LAKE GREGORY	7.32	7	30
	3600197 FONTANA-ARROW HWY	19.29	18	178
	3600203 SAN BERNARDINO-FOURTH ST	19.19	18	179

TABLE E-5 (continued)
SULFATES EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(24-hour average concentrations in micrograms per cubic meter (ug/m^3))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
SAN DIEGO AIR BASIN				
SAN DIEGO	8000131 EL CAJON-REDWOOD AVE	13.50	12	103
	8000138 SAN DIEGO-330A 12TH AVE	17.91	17	101
SACRAMENTO VALLEY AIR BASIN				
SACRAMENTO	3400277 SACTO-H.D. STOCKTON BLVD	6.71	7	98
SAN JOAQUIN VALLEY AIR BASIN				
KERN	1500203 BAKERSFIELD-CHESTER ST	12.23	12	78
	1500243 OILDALE-3311 MANOR	12.41	10	89
	1500250 TAFT COLLEGE	10.01	9	35
SOUTHEAST DESERT AIR BASIN				
LOS ANGELES	7000096 LANCASTER-W PONDERA ST	8.06	6	20
RIVERSIDE	3300137 PALM SPRINGS-FIRE STATION	6.60	6	30
	3300150 BANNING-ALLESANDRO	10.32	9	30
	3300157 INDIO-JACKSON	8.70	7	29
SAN BERNARDINO	3600188 TRONA-MARKET ST	37.44	33	165

[1] EPDC = Expected Peak Day Concentration. The EPDC is equal to the calculated 1-in-1 year recurrence rate concentration.

[2] DV = Designation Value. The DV is the highest measured concentration that is equal to or less than the EPDC, after the EPDC is rounded to the precision of the relevant ambient air quality standard. For example, an EPDC of 7.60 ug/m^3 would be rounded to 8 ug/m^3 and the highest measured concentration equal to or less than 8 ug/m^3 would be considered for the designation value.

[3] #OBS = Number of Observations in the 1990-1992 period.

TABLE E-6
HYDROGEN SULFIDE EXPECTED PEAK DAY CONCENTRATIONS AND DESIGNATION VALUES
(1-hour average concentrations in parts per hundred million (pphm))

AIR BASIN/COUNTY	SITE NUMBER AND SITE NAME	EPDC[1]	DV[2]	#OBS[3]
SOUTH CENTRAL COAST AIR BASIN				
SAN LUIS OBISPO	4000845 SAN LUIS OBISPO-7020 LEWIS	2.18	2	1065
SANTA BARBARA	4200370 EL CAPITAN BEACH	0.57	1	366
	4200371 SANTA MARIA-GLACIER LANE	1.48	1	273
	4200389 BATTLES-BETTERAVIA RD	1.22	1	1004
	4200401 SANTA BARBARA-UC W CAMPUS	1.20	1	910
GREAT BASIN VALLEYS AIR BASIN				
INYO	1400696 COSO JUNCTION	0.23	0	274
	1400718 COSO JCT-10 MI EAST	4.81	5	271
MONO	2600785 MAMMOTH LAKES-GATEWAY HC	0.43	0	31
SOUTHEAST DESERT AIR BASIN				
SAN BERNARDINO	3600188 TRONA-MARKET ST	7.08	7	731
LAKE COUNTY AIR BASIN				
LAKE	1700720 ANDERSON SPRINGS	1.37	1	1096
	1700725 HOBERGS-1 MILE NW	1.96	2	1096
	1700728 GLENBROOK-HIGH VALLEY RD	1.36	1	1091
	1700729 HOBERGS-15385 TRINITY RD	1.04	1	365

[1] EPDC = Expected Peak Day Concentration. The EPDC is equal to the calculated 1-in-1 year recurrence rate concentration.

[2] DV = Designation Value. The DV is the highest measured concentration that is equal to or less than the EPDC, after the EPDC is rounded to the precision of the relevant ambient air quality standard. For example, an EPDC of 4.81 pphm would be rounded to 5 pphm and the highest measured concentration equal to or less than 5 pphm would be considered for the designation value.

[3] #OBS = Number of Observations in the 1990-1992 period.

ATTACHMENT F

TECHNICAL DOCUMENTATION FOR UPDATING THE SCREENING PROCEDURE FOR MAKING NITROGEN DIOXIDE ATTAINMENT DESIGNATIONS

Technical Documentation for the Proposed Amendment to the Nitrogen Dioxide Screening Value

The following is a description of the technical basis for the proposed amendment to the "Screening Procedure for Determining Attainment Designations for Areas with Incomplete Air Quality Data" (the Screening Procedure) in Appendix 4 to the designation criteria (refer to discussion in Chapter II of the Staff Report). The Screening Procedure provides a method for designating areas as attainment for nitrogen dioxide, sulfur dioxide, sulfates, and lead when air quality data are limited or do not exist. Specifically, the following technical description relates to updating the screening value for "total annual oxides of nitrogen (NOx) emissions in an air basin," which is one of the screening parameters for nitrogen dioxide specified in Appendix 4 to the designation criteria.

A. The Need for Amending the Screening Procedure for Nitrogen Dioxide

The California Code of Regulations, Title 17, section 70304(c) states:

> "Where an area has limited or no air quality data for nitrogen dioxide..., the state board shall designate that area attainment for a pollutant if it finds that no state standard for that pollutant has been violated in that area based on the state board's 'Screening Procedure for Determining Attainment Designations for Areas with Incomplete Air Quality Data'...."

One of the screening parameters for nitrogen dioxide requires that the total annual NOx emissions in an air basin be no greater than 25,000 tons per year. The value of this screening parameter was based on a relationship between the estimated emissions and the reported air quality. After this parameter was established, the methods for calculating the emissions from on-road motor vehicles were changed, causing an increase in the emissions estimates in all air basins.

Four air basins have been designated as attainment for nitrogen dioxide based on the screening procedure. Two of these air basins, the North Coast and the Mountain Counties Air Basins, are now above the 25,000 tons/year threshold for total annual NOx emissions as a result of the revised emission estimates. The other two air basins, Northeast Plateau and Great Basin Valleys Air Basins, are still below the threshold. The revised 1990 (most recent year available) NOx emissions for the four air basins are listed below:

Air Basin	Total NOx Emissions (Tons/Year)
North Coast	29,549
Mountain Counties	27,093
Northeast Plateau	16,859
Great Basin Valleys	4,318

If the screening value remains at 25,000 tons/year, two air basins would no longer qualify for their attainment designation. This is not because of an actual increase in emissions but only because of a change in the emission estimation method. Therefore, the Air Resource Board (ARB) staff proposes to recalculate the screening value for total annual NOx emissions in the air basin to reflect the increase in the annual NOx emission estimates. The ARB staff proposes to use the same calculation methodology as approved by the Board when it adopted the Screening Procedure in 1989. The calculation procedure for the new NOx screening value is described below.

B. Calculation Procedure

The screening value is recalculated using the emissions for San Diego Air Basin. This air basin currently is designated as attainment for nitrogen dioxide. However, at the time the Screening Procedure originally was established, the San Diego Air Basin was designated as nonattainment for nitrogen dioxide. Furthermore, emission and air quality data for San Diego County provided the original basis for the NOx screening parameter. Consistent with the original calculations, the recalculation of the screening value is based on the revised 1988 emission estimates and the 1988 air quality data for the San Diego Air Basin.

The emission estimates for on-road motor vehicles are based on the most recent draft version of the EMFAC7F program. For San Diego Air Basin, the annual on-road motor vehicle emissions, in tons per average day (T/D), are a composite of the estimated summer emissions (two-thirds weighting) and the estimated winter emissions (one-third weighting), and are calculated as follows:

Annual NOx Emissions for On-Road Motor Vehicles
= (Summer NOx emissions * 2/3) + (Winter NOx emissions * 1/3)
= (157.59 T/D * 2/3) + (168.41 T/D * 1/3)
= 161.20 T/D

For all other NOx emission sources for the year 1988, emission estimates are projected backwards from the 1990 emission inventory. The total annual emissions for sources other than on-road motor vehicles are calculated as follows:

Annual NOx Emissions for All Other Sources
= Other Mobile Sources + Total Stationary Sources
= 59.16 T/D + 20.28 T/D
= 79.44 T/D

The total annual NOx emissions are then calculated by adding the emission estimate for on-road motor vehicles and that for all other sources, as follows:

Total 1988 Annual NOx Emissions in San Diego Air Basin
= On-Road Motor Vehicles + All Other Sources
= 161.20 T/D + 79.44 T/D
= 240.64 T/D * 365 Days
= 87,834 Tons/Year

The highest one-hour nitrogen dioxide (NO_2) concentration recorded in 1988 in the San Diego Air Basin was 0.28 ppm (parts per million). The state one-hour NO_2 standard is 0.25 ppm. In calculating the NOx screening value, the ARB staff used a safety factor of 2 in order to allow a margin of error in the Screening Procedure. The calculation for the NOx screening value is as follows:

$$\text{NOx Screening Value} = \frac{\text{NOx Emissions in 1988}}{\text{Safety Factor}} * \frac{\text{State Ambient } NO_2 \text{ Standard}}{\text{Highest } NO_2 \text{ Conc. in 1988}}$$

$$= \frac{87{,}834 \text{ Tons/Year}}{2} * \frac{0.25 \text{ ppm}}{0.28 \text{ ppm}}$$

$$= 39{,}212 \text{ Tons/Year}$$

This calculated value is rounded to the even number of 40,000 tons/year, which is proposed as the revised screening value for the parameter of total annual NOx emissions in the air basin in the Screening Procedure for attainment of the state NO_2 standard.

A review of the revised emission estimates shows that for each of the four air basins (listed on page F-2) whose current nitrogen dioxide attainment status is based on the Screening Procedure, the total NOx emissions in the air basin are below the revised screening value of 40,000 tons/year. Therefore, these four air basins will continue to be designated as attainment for nitrogen dioxide. This result is consistent with the ARB staff's intent, which is not to make unwarranted changes in the area designations when there is no reason to believe there have been changes in the ambient air quality.

ATTACHMENT G

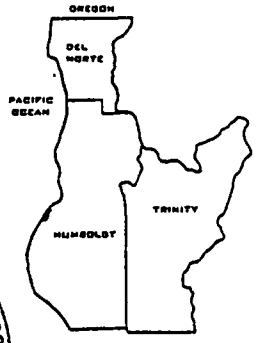
REDESIGNATION REQUESTS AND SUPPORTING INFORMATION

ITEM 1A

NORTH COAST UNIFIED AIR QUALITY MANAGEMENT DISTRICT

2389 MYRTLE AVENUE
EUREKA, CALIFORNIA 95501

PHONE (707) 443-3093
FAX (707) 443-3099



October 13, 1992

Mr. Ron Rothacker, Manager
Air Quality Data Review Section
Technical Support Division
Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

Subject: Ozone Designation for North Coast Unified Air Quality Management District

Dear Ron:

As you know, we have previously requested the North Coast to be classified as attainment for ozone. This request was based upon 3 years of ozone monitoring records that were obtained from Trinidad to Centerville Beach, near Ferndale.

ARB felt that these sites were inappropriate and suggested a monitoring site slightly south of Fortuna, where ozone concentrations are expected to be the highest.

The District subsequently located a site at the Rohnerville Airport. The site is not located near any major sources of NO_X, is relatively free of trees and located inland enough that fog is not an influence.

Ozone equipment was set up on June 10, 1992, at the site and calibrated on June 11. The ARB did a site audit of the ozone monitor on June 17, and found the results to be 4.5% low on average. Monitoring continued without disruption through September 1992, during the normal ozone season in order to determine a maximum concentration.

The maximum 1-hour ozone concentration of 0.054 ppm occurred on September 16 at 2:00 p.m., with the second high 1-hr value of 0.042 on the same date, one hour later at 3:00 p.m. This compares with Eureka 1990 maximum 1-hr value of 0.04 and the 1991 maximum 1-hr value of 0.05. Gasquet ozone is higher than both sites with 1990 at 0.07 and 0.06.

Based upon the 1992 ozone data collected at the Rohnerville Airport and the 3-year ozone data collected in the Humboldt Air Basin (1988-1990), which recorded very similar concentrations, we believe a case can be made that the District be classisifed as attainment for the state ozone standard.

We are therefore, requesting the ARB make this change in the ozone designation status for the North Coast Unified Air Quality Management District.

I have attached a copy of the 1992 ozone (1-hr) concentrations measured at the Rohnerville Airport. Please let me know if any additional information or data is needed to satisfy this request.

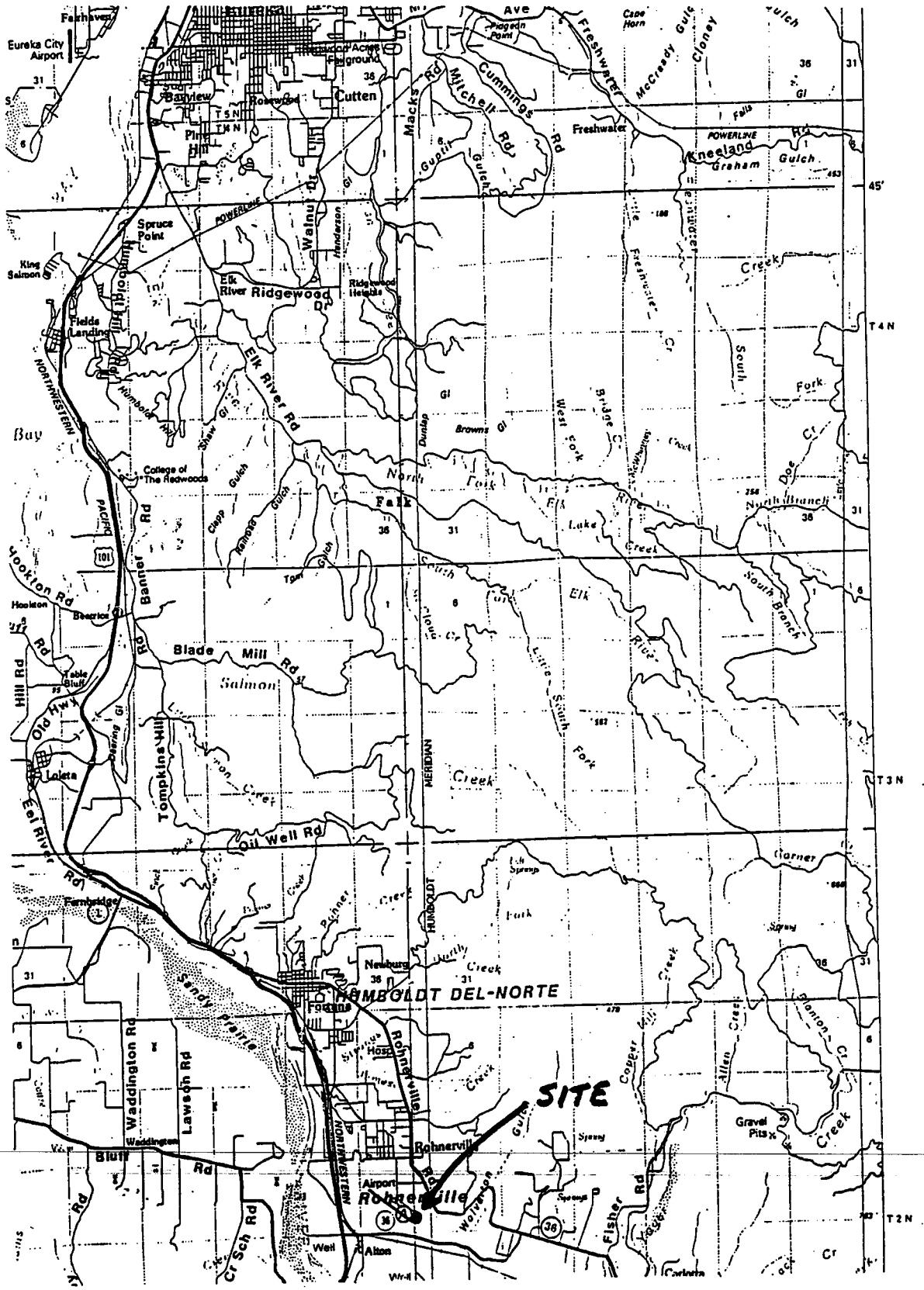
Sincerely,

Wayne Morgan

Wayne Morgan
Air Pollution Control Officer

WM:darbltr

Enclosure


SITE
HUMBOLDT DEL-NORTE
Eureka City Airport
Fairhaven
Bayview
Cutten
Rohnerville
Fortuna
Falk
Loleta
Fields Landing
Spruce Point
Ridgewood
Elk River
Blade Mill Rd
Oil Well Rd
Elk River Rd
Banner Rd
Hookton Rd
Old Hwy
Eel River Rd
Waddington Rd
Lawson Rd
Tompkins Hill
Kneeland
Freshwater
Cutting
Macks Rd
Mitchell Rd
Cummings Rd
Walnut Dr
Ridgewood Dr
Sandy Prairie
Newburg
Airport
Alton
Well
Gravel Pits
Fisher Rd
Cr Sch Rd
College of The Redwoods
Table Bluff
Beatrice
Fernbridge
Bay View
Bluff Rd
Salmon
Creek
Lake
Fork
Bay
T4N
T3N
T2N
45'
MERIDIAN
HUMBOLDT
NORTHWESTERN
PACIFIC
POWERLINE

OZONE, PPHM

ROHNERVILLE AIRPORT

1992

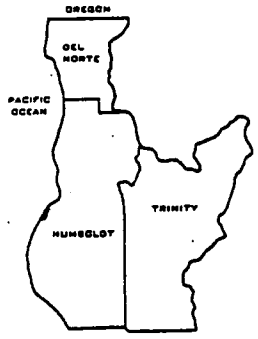
	JUN		JUL		AUG		SEP		OCT		
	HIGH HOUR	DAILY AVE.	HIGH HOUR	DAILY AVE.	HIGH HOUR	DAILY AVE.	HIGH HOUR	DAILY AVE.			
1			2.3	1.6	2.5	2.0	2.6	1.2			1
2			2.3	1.4	2.4	1.9	2.6	1.8			2
3			2.2	1.7	2.5	2.0	2.6	1.9			3
4			2.3	1.8	2.7	2.1	1.8	1.5			4
5			2.3	1.4	2.2	1.7	3.3	1.8			5
6			2.5	1.7	2.0	1.4	3.1	2.2			6
7			3.1	2.0	2.4	1.4	3.8	2.1			7
8			3.0	1.7	2.6	1.7	2.9	1.9			8
9			3.0	1.6	2.8	1.8	2.6	1.6			9
10			2.8	1.7	3.7	1.7	3.2	1.5			10
11			2.6	2.0	3.4	1.7	2.8	1.9			11
12			2.5	1.9	3.5	2.2	3.6	2.9			12
13	3.1	1.9	2.5	1.7	3.5	2.3	3.7	2.5			13
14	3.6	2.4	3.0	1.8	2.9	2.1	3.9	2.4			14
15	3.3	2.5	3.5	2.0	2.1	1.7	3.9	2.5			15
16	3.0	2.5	2.9	1.6	2.5	2.1	[illegible]	2.1			16
17	3.1	2.5	3.1	2.0	2.7	1.7	3.4	1.9			17
18	3.4	2.6	2.8	2.0	2.6	1.7	3.4	2.1			18
19	2.7	2.4	3.0	2.0	2.5	1.6	3.8	2.2			19
20	2.6	1.6	2.7	2.0	2.9	2.0	3.5	1.7			20
21	2.6	1.6	2.5	1.7	3.4	2.4	3.4	1.8			21
22	2.6	1.4	2.3	1.8	3.0	2.2	2.7	1.4			22
23	2.3	1.4	2.7	2.0	3.2	2.5	1.6	0.8			23
24	2.2	1.3	2.8	2.2	3.3	2.0	3.2	2.0			24
25	2.9	2.0	2.7	2.2	3.8	2.5	2.7	2.0			25
26	3.4	2.4	2.2	1.6	3.5	2.1	2.7	1.7			26
27	2.3	1.9	2.3	1.8	3.8	2.0	2.5	1.1			27
28	3.0	1.6	2.8	1.9	3.5	1.7	3.3	1.8			28
29	2.5	2.0	2.4	1.5	3.7	2.3	3.2	1.6			29
30	2.9	2.1	1.9	1.5	3.2	2.5	3.9	1.5			30
31			2.6	1.7	1.7	1.4					31

ITEM 1B

NORTH COAST UNIFIED AIR QUALITY MANAGEMENT DISTRICT

2389 MYRTLE AVENUE
EUREKA, CALIFORNIA 95501

PHONE (707) 443-3093
FAX (707) 443-3099



June 15, 1993

JUN 1993
Technical Support Division

Richard Bradley, Chief
Air Quality Data Branch
Tecnical Support Division
Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

Dear Rich:

Please find attached the suggested data and analysis of comparable ozone data with that collected in Humboldt County for purposes of redesignating the area attainment for ozone. This data collection and presentation follows the suggestions of Ron Rothacker of your staff. We have tried to arrange the data and analysis in a simplified manner for your quick review. Since July 1, the start of the smog season, is quickly approaching, we request a quick review and decision by June 24 as to whether you feel the data and results are sufficient for you to recommend a change in the ozone designation status for the North Coast Unified Air Quality Management District. We are requesting a favorable decision in order to avoid the need and expense of another 3 months of ozone data collection at the Rohnerville Airport site near Fortuna, CA.

Thank you for your assistance and consideration of our request.

Sincerely,

Wayne Morgan
Air Pollution Control Officer

WM:darbltr

Enclosure

COMPARISON OF 1992 OZONE LEVELS FOR
OZONE ATTAINMENT DETERMINATION

The table below shows the highest, average hourly, and average maximum hourly values for ozone at selected Northern California sites. The 1992 Trend column lists whether 1992 ozone readings were higher, lower, or the same as readings over the previous sampling periods. The < > line shows the difference in 1992 ozone readings from the average of all previous ozone readings for the specified site. If all three columns had higher (+) readings in 1992 then it is assumed that ozone values were higher than normal in 1992. If all three columns had lower (-) readings in 1992 than it is assumed that ozone values were lower than normal in 1992. If the different values were mixed or even (±) than it is assumed that ozone values were within a normal range for 1992.

Site	high	average hourly	average daily max hourly	1992 Trend
Gasquet				
1990	.07	.021	.035	
1991	.06	.021	.035	higher
1992	.07	.022	.037	
< >	+.005	+.01	+.02	
Eureka (Humboldt County)				
1990*	.04	.008	.018	
1991	.05	.010	.021	normal
1992*	.04	.013	.025	
< >	-.005	+.04	+.06	
Fortuna (Humboldt County)				
1992*	.05	.019	.029	
Ukiah				
1986	.07	.024	.041	
1987	.09	.023	.044	lower
1988	.09	.025	.043	
1992	.06	.013	.032	
< >	-.02	-.012	-.011	
Yreka				
1986	.08	.024	.044	
1987	.07	.026	.050	
1988	.08	.023	.043	
1989	.08	.024	.043	normal
1990	.08	.024	.044	
1992	.08	.021	.040	
< >	±0	-.003	-.005	
Chico				
1986	.11	.028	.049	
1987	.11	.030	.050	
1988	.10	.028	.049	
1989	.10	.028	.049	lower
1990	.13	.025	.044	
1991	.10	.026	.045	
1992	.09	.026	.046	
< >	-.02	-.001	-.002	

Redding

1986	.12	.033	.058	
1987	.13	.038	.069	
1988	.12	.031	.057	
1989	.09	.027	.050	normal
1990	.13	.032	.058	
1991	.11	.037	.065	
1992	.11	.033	.058	
< >	-.01	±0	-.001	

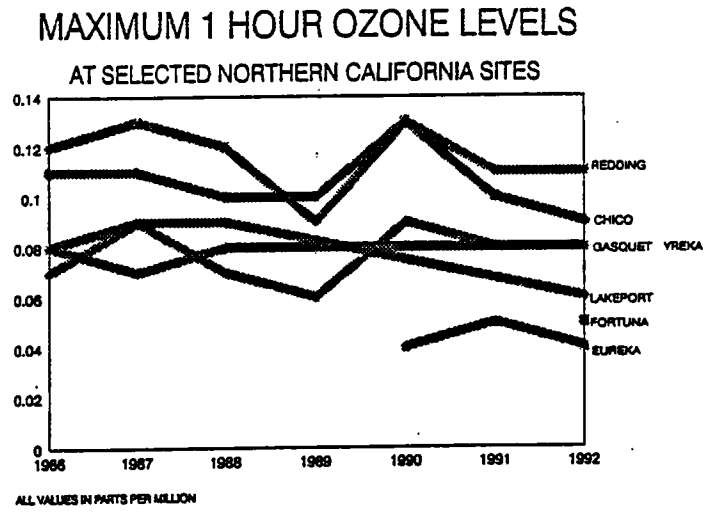
Lakeport

1986	.08	.025	.039	
1987	.09	.026	.041	
1988	.07	.019	.034	
1989	.06	.020	.033	normal
1990	.09	.021	.035	
1991	.08	.028	.042	
1992	.08	.022	.037	
< >	±0	-.001	±0	

* not a full year of monitoring data
Eureka 90 - Aug. thru Dec.
Eureka 92 - Jan. thru April
Fortuna 92 - June thru Sep.

Based on the above readings it appears that ozone values in 1992 in the comparison areas were within the range that would be considered normal based on the previous several years of ozone monitoring. It is also apparent that ozone values in the Eureka and Fortuna areas are substantially lower than values found in other Northern California areas, including the Lakeport and Mendocino sites which are currently classified as attainment for the California Ozone Ambient Air Quality Standard.

The Fortuna monitoring site, which was operated from June through September in 1992, showed higher average and average maximum readings than the Eureka site; although the maximum hourly value recorded was no higher than the maximum hourly value recorded at Eureka. The Fortuna site, picked because it is the most likely site in Humboldt County to have higher ozone values based on the meteorology of the County, still had ozone values well below the values found in other Northern California monitoring sites.



The preceding graph visually shows the information presented in the last table for maximum hourly ozone levels at the selected sites. The horizontal bars are the maximum hourly value for each site for the years

shown. As is apparent both Eureka and Fortuna, and to a lesser extent Gasquet, are well below the maximum values found in other Northern California sites, including sites that are currently classified as attainment for the California Ozone Ambient Air Quality Standard.

Ozone Season Levels For 1992

The table below compares the 1992 ozone levels from the previously selected sites during the prime ozone months of July, August, and September to see how the Fortuna site in Humboldt County relates to other examined sites during the peak ozone months.

Site	high	average daily max. hourly
Gasquet	.06	.038
Fortuna	.05	.029
Ukiah	nd	nd
Yreka	.07	.046
Chico	.09	.063
Redding	.11	.072
Lakeport	.07	.039

nd = no data

As can be seen from the above table, during the prime summer ozone months the Fortuna site in Humboldt County is still well below other Northern California sites for both the maximum ozone values and the average daily maximum hourly ozone values .

Wind Direction vs Peak Ozone Values During Ozone Season in 1992

The table below shows the maximum hourly values for 1992 at selected Northern California sites and the maximum hourly value at Fortuna for the next day together with the prevailing wind direction between the hours of 6 am to 12 pm to look at the possibility of long range ozone transport from sites with higher maximum ozone levels than Fortuna. The maximum hourly ozone value for September 15, the day before Fortuna had its highest hourly ozone value, is also listed for each selected site, except Gasquet, to see if high ozone values on those days could have contributed to the high ozone value at Fortuna on the 16th.

Site	Date	maximum hourly value	Wind direction in Fortuna	max hourly ozone in Fortuna
Gasquet	5/21	0.07	north	nd
	9/16	0.05		
Eureka	4/6	0.04	north	nd
	9/16	nd		
Fortuna	9/16	0.05	southwest	
Yreka	5/4	0.08	northwest	nd
	9/15	nd		
Chico	9/29	0.09	northeast	.032
	9/15	0.08		

Sacramento	9/26	0.13	northwest	.025
	9/15	0.07		
Redding	9/29	0.11	northeast	.032
	9/15	0.07		
Lakeport	3/5	0.08	southeast	nd
	9/15	0.04		
Napa	8/24	0.09	southwest	.038
	9/15	0.04		
Sonoma	8/24	0.09	southwest	.038
	9/15	0.05		

nd = no data

As can be seen from the data presented above no strong correlation exists between wind direction, distant site ozone levels, and ozone levels monitored in Fortuna. On the day Fortuna had its maximum one hour ozone level of 0.05 ppm the winds during the morning hours came predominately out of the southwest. As most of the population and ozone precursor sources in Humboldt County are north of the Fortuna site there might be three possible reasons for the slight increase above normal in ozone levels at Fortuna this day.

1. Ozone from distant sites south of Humboldt County was transported north over the ocean and came ashore with southwesterly onshore winds.

2. Ozone precursor gases from sources within Humboldt County and to the north of Fortuna were carried offshore and underwent photochemical reactions before being transported back to shore with onshore winds.

3. Ozone precursor gases from the local area around Fortuna underwent photochemical reactions at or near the source sites.

Given that none of the distant sites examined had exceptionally high ozone levels for the day prior to Fortuna's maximum level, and the fact that the North Coast is fairly isolated from the other sites by miles of mountainous terrain with no common sharing of air space, to make any argument about outside transport into the District appears unnecessary. On days when the distant sites had their maximum ozone values no significant corresponding increase in Fortuna's ozone levels occurred on the following days even when winds were favorable for transport in that direction. While the Fortuna maximum value following Napa's and Sonoma's maximum days did show a slight increase over the average daily maximum hourly value for Fortuna it was still within the range considered to be normal background (0.03 - 0.04 ppm) by ARB.

Summary

Based on all the preceding data the following conclusions seem reasonable:

1. Humboldt County is unlikely to exceed the California Ozone Ambient Air Quality Standard with current levels of precursor emissions in the county.

2. The generation of precursor emissions in Humboldt County is insignificant compared with other California urbanized areas which approach or exceed the California Ozone Standard.

3. Ozone transport from distant nonattainment areas may have a minor affect on North Coast ozone levels, but does not seem to be sufficient to create nonattainment conditions in Humboldt County.

4. Further research and continued monitoring of ambient ozone in Humboldt County is unlikely to produce much new or different data and is probably not worth the funds and resources needed to conduct the research.

5. Therefore, the North Coast should be reclassified to ozone attainment.

ITEM 2A

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

ALAMEDA COUNTY
Edward R. Campbell
Loni Hancock
(Secretary)
Greg Harper
Don Perata

CONTRA COSTA COUNTY
Paul L. Cooper
Sunne Wright McPeak
Tom Powers

MARIN COUNTY
Harold C. Brown, Jr.

NAPA COUNTY
Paul Battisti
(Vice-Chairperson)

SAN FRANCISCO COUNTY
Roberta Achtenberg
Carole Migden

SAN MATEO COUNTY
Janet Fogarty
Michael D. Nevin

SANTA CLARA COUNTY
Marge Bruno
Rod Diridon
Joe Head
Barbara Koppel

SOLONO COUNTY
Sam Caddle

SONOMA COUNTY
Jim Harberson
Patricia Hilligoss
(Chairperson)

April 30, 1993

RECEIVED
MAY 4 1993
Office of the Chairwoman
Air Resources Board

Ms. Jananne Sharpless
California Air Resources Board
2020 L Street
P. O. Box 2815
Sacramento, CA 95812

Dear Ms. Sharpless:

I hereby request that the Bay Area Air Quality Management District be designated "nonattainment-transitional" with respect to the California ambient air quality standard for carbon monoxide (8-hr average). The area meets the two criteria listed in Terry McGuire's 4/9/93 letter to air pollution control officers:

1) We expect to attain the standard throughout the area within three years.

2) In 1992 the standard was not violated on more that two days at any monitoring site in the area.

In fact, we had no exceedances of the standard at any monitoring site during calendar year 1992. The highest measured value was 7.5 parts per million.

We are confident that the continuing reductions in motor vehicle emissions, accelerated by the oxygenated fuels program, will result in continuing attainment of the State and federal carbon monoxide standards in the Bay Area.

We will be pleased to supply any additional information or supporting documentation required for approval of this request.

Sincerely,

Milton Feldstein
Air Pollution Control Officer

MF:TEP:pc

cc: Terry McGuire, ARB

939 ELLIS STREET • SAN FRANCISCO, CALIFORNIA 94109 • (415) 771-6000 • FAX (415) 928-8560

RECYCLED PAPER

ITEM 2B

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

20 August 1993

Rich Bradley
Air Quality Branch
California Air Resources Board
2020 L Street
P. O. Box 2815
Sacramento, CA 95812

Rick

Dear Mr. Bradley:

I am submitting inventory projections and ambient air quality analysis to support our request to be redesignated to "nonattainment-transitional" status for the State 8-hr carbon monoxide standard. This information is provided as a followup to our recent phone conversations and your request that we provide a demonstration of attainment for the Bay Area.

Exceedances at our San Jose station are due primarily to on-road motor vehicle emissions.

We have updated our mobile source inventory, using VMT and speed projections provided by the Metropolitan Transportation Commission, and the most currently available (draft) EMFAC7F emission factors from ARB. On-road motor vehicle emissions for carbon monoxide (regional and Santa Clara County) are shown in the table below for the years 1990 through 1996. Measured high values are also shown for 1990 through 1992, along with the State design value in the form of a 1-year recurrence value. This latter value is calculated from monitored data for 1991 and 1992, and is projected based on County inventory trends for 1993 through 1996.

	M V EMISSIONS (tons/day)			San Jose CO (ppm)	
Year	BAAQMD	S. Clara Co.	percent	High 8-hr	Design*
1990	2673	694	100	11.3	NA
1991	2522	633	91.2	10.9	12.0
1992	2149	540	77.8	7.5	11.1**
	---------- projected ----------				
1993	2060	517	74.5	8.4	9.8
1994	1951	489	70.5	8.0	9.3
1995	1832	459	66.1	7.5	8.7
1996	1715	432	62.2	7.0	8.2

* The 1-year recurrence value is the value expected to occur once a year, on average, based on statistical analysis of the previous three years of data. Attainment would be achieved in a future year when this 1-year recurrence value drops to 9.0 ppm, or below. (9.0 ppm is the numerical level of the State standard.)

** The design value for 1992 covers the beginning of the oxygenated fuels program in California, so it may not be appropriate as a basis for projection. Therefore the 1991 design value is used as the basis for the attainment calculation.

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RECYCLED PAPER

The table shows that the highest expected values will be less than 9 ppm in the future, and that the design value should drop below 9.0 by 1995, thus constituting attainment within three years.

If you have further questions please call me.

Sincerely

Tom

Tom Perardi
Director of Planning

cc: Patrick Nevis

ITEM 3

SACRAMENTO METROPOLITAN

NORMAN D. COVELL
Air Pollution Control Officer

RICHARD G. JOHNSON
Assistant Air Pollution Control Officer

AIR QUALITY
MANAGEMENT DISTRICT

May 10, 1993

AIR RESOURCES BOARD
RECEIVED
MAY 18 1993
Technical Support Division

Jim Boyd
Executive Officer
Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

Re: CO Non-attainment Boundary

Dear Mr. Boyd:

The Sacramento Metropolitan Air Quality Management District hereby requests a change in the boundary of the carbon monoxide non-attainment area for Sacramento County to include only the Sacramento Urbanized Area. In that way, the State and Federal carbon monoxide non-attainment boundaries will be the same.

The reasons for this request are provided as follows:

- The Air Resources Board designated the entire county of Sacramento as non-attainment for carbon monoxide in April 1989. It appears that CARB typically designates the entire county as the non-attainment area. It is then the local air district's responsibility to request a change in the definition of the boundary of the designated area, and to define an urbanized area that best reflects the non-attainment area.

- All violations of the State standard have occurred at monitoring stations in the urbanized area. This is consistent with the nature of CO formation, which is primarily a localized phenomenon resulting from on-road vehicles.

- Changing the boundary would help to more accurately define the nature of the carbon monoxide problem in the Sacramento area. Including remote, rural parts of the county in the non-attainment area creates an inaccurate and misleading view of the problem.

- Most of the CO non-attainment areas in the state of California have boundaries which encompass only urbanized areas. A change in the boundary would be more consistent with the statewide approach.

- A change in the boundary would also establish consistency with the Federal non-attainment area for CO.

916-386-6650 • FAX 916-386-6674 • SMAQMD • 8411 Jackson Rd. • Sacramento CA 95826

- The Sacramento Urbanized Area portion of the non-attainment area will be easily defined by the federal description and the county lines.

- Such a definition encourages and reflects a regional definition for a regional problem for planning and control program purposes.

Enclosed is a copy of the Federal Register notice which describes the CO non-attainment boundary as the "Census Bureau Urbanized Area" of Sacramento County as well as a map prepared by the Sacramento Area Council of Governments (SACOG) which illustrates this definition. Since the Census Bureau defines this area based on "blocks," a legal definition is not readily available. Given that this definition is legally acceptable to EPA, we trust that ARB will also accept it. If you or your staff have any questions, please contact Paul Zykofsky (386-7002) or Bob Rogen (386-7026).

Thank you for your kind attention.

Sincerely,

Norm Covell
Air Pollution Control Officer

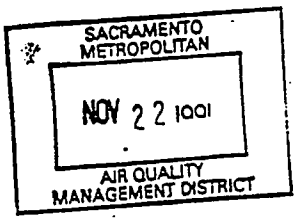
Encls: 1) Copy from Federal Register, Vol. 56, No. 215, page 56724 (Nov. 6, 1991).
2) Map showing Federal Air Quality Planning Boundaries.

cc: Rich Bradley, CARB Technical Support Division
Gayle Sweigert, CARB
Dick Johnson, SMAQMD
Les Ornelas, SMAQMD

FILE: G:\PLAN\PICCAA\PLANS\CO_BOUND.LTR

Federal Register

Wednesday
November 6, 1991



Part II

Environmental Protection Agency

40 CFR Part 81

Air Quality Designations and Classifications; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 81

[Air Docket No. A-90-42; FRL-3946-1]

RIN 2060-AC56

Designation of Areas for Air Quality Planning Purposes

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This rulemaking sets forth the attainment status, including designations and classifications for selected areas affected by the ozone, carbon monoxide (CO), particulate matter (PM), and lead national ambient air quality standards (NAAQS). The tables following this rulemaking set forth, on a State-by-State, pollutant-by-pollutant basis (as appropriate), the attainment status of the above-mentioned NAAQS as submitted by the appropriate States, and approved or as designated and classified by the EPA. Designations and classifications revised as a result of technical corrections will be republished.

EFFECTIVE DATE: This regulation will become effective on January 6, 1992.

ADDRESSES: Written comments on this rulemaking must be limited to addressing the technical correctness of these determinations and significant new policy issues and must be received on or before December 6, 1991. Such comments should be sent in duplicate to the attention of: Air Docket No. A-90-42, U.S. EPA (LE-131), 401 M St., SW., Washington, DC 20460. The docket is located in Rm. M-1500, First Floor, Waterside Mall, 401 M St., SW., Washington, DC. Materials relevant to this rulemaking may be inspected at this location during the hours from 8:30 a.m. to 12 noon and from 1:30 p.m. to 3:30 p.m., Monday through Friday, except for legal holidays. In addition, the public may inspect the same information that is maintained in the docket at the following locations.

Regional Offices	States
Susan Studlien, Chief, State Air Programs Branch, EPA Region I, J.F.K. Federal Building, Boston, MA 02203-2211, (617) 565-3245; FTS 835-3245.	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.
William S. Baker, Chief, Air Programs Branch, EPA Region II, 26 Federal Plaza, New York, NY 10278, (212) 264-2517; FTS 264-2517.	New Jersey, New York, Puerto Rico, and Virgin Islands.
Marcia Spink, Chief, Air Programs Branch, EPA Region III, 841 Chestnut Building, Philadelphia, PA 19107, (215) 597-9075; FTS 597-9075.	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia.
Tom Hansen, Acting Chief, Air Programs Branch, EPA Region IV, 345 Courtland St., NE., Atlanta, GA 30365, (404) 347-2864; FTS 257-2864.	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.
Stephen H. Rothblatt, Chief, Regulation Development Branch, EPA Region V, 230 South Dearborn St., Chicago, IL 60604, (312) 353-2211; FTS 353-2211.	Illinois and Indiana.
Gary Gulezian, Chief, Air Toxics and Radiation Branch, EPA Region V, 230 South Dearborn St., Chicago, IL 60604, (312) 353-8559; FTS 353-8559.	Michigan and Wisconsin.
George Czerniak, Chief, Air Enforcement Branch, EPA Region V, 230 South Dearborn St., Chicago, IL 60604, (312) 353-2088; FTS 353-2088.	Ohio and Minnesota.
Gerald Fontenot, Chief, Air Programs Branch, EPA Region VI, 1445 Ross Ave., Dallas, TX 75202-2733, (214) 655-7204; FTS 255-7204.	Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.
Gale Wright, Chief, Air Branch, Region VII, 726 Minnesota Ave., Kansas City, KS 66101, (913) 236-7020; FTS 276-7020.	Iowa, Kansas, Missouri, and Nebraska.
Douglas M. Skie, Chief, Air Programs Branch, EPA Region VIII, 999 18th St., Denver Place - Suite 500, Denver, CO 80202-2405, (303) 293-1750; FTS 330-1750.	Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.
David L. Calkins, Chief, Air Programs Branch, EPA Region IX, 75 Hawthorne St., San Francisco, CA 94105, (415) 744-1210; FTS 484-1210.	Arizona, California, Guam, Hawaii, and Nevada.
George Abel, Chief, Air & Radiation Branch, EPA Region X, 1200 Sixth Ave., Seattle, WA 98101, (206) 553-4166; FTS 399-4166.	Alaska, Idaho, Oregon, and Washington.

FOR FURTHER INFORMATION CONTACT:
Ozone/CO Issues:
Barry Gilbert or Valerie Broadwell, Ozone/CO Programs Branch, (919) 541-5238/3310; FTS 629-5238/3310.
Lead, SO_2 Issues:
Laurie Ostrand, SO_2/Particulate Matter Programs Branch, (919) 541-3277; FTS 629-3277.
Particulate Matter Issues:
Larry Wallace, SO_2/Particulate Matter Programs Branch, (919) 541-0906; FTS 629-0906.
Issues of a general nature:
Hank Young, Regional Operations Branch, (919) 541-5543; FTS 629-5534.
Air Quality Management Division (MD-15), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, NC 27711.

SUPPLEMENTARY INFORMATION:

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c. EPA action.
d. Reclassifications upward.
5. Enactment + 120 days: State submits list of all areas—general.
6. Enactment + 180 days: EPA notifies States of intent to modify suggested designations for certain areas.

7. Enactment + 200 days: States respond to EPA's proposed modifications.
8. Enactment + 240 days.
a. Ozone and CO areas designated nonattainment at date of enactment—classified serious and higher.
b. Ozone and CO areas designated nonattainment at date of enactment—classified marginal or moderate. —
i. Designations.
ii. Boundaries.
iii. Classifications.
c. Other treatment.
d. Areas designated entirely attainment/unclassifiable at enactment but now subject to redesignation to nonattainment.
i. Serious and higher.
ii. Marginal/moderate.
iii. Other treatment.
9. Procedural requirements.
a. Designations and boundaries.
i. Notice-and-comment rulemaking.
ii. Judicial review.
b. Classifications.
i. Notice and comment.
ii. Judicial review.
B. PM–10.
1. Initial PM–10 designations.
2. Additional PM–10 designations.
3. Total suspended particulates (TSP).
C. Sulfur Dioxide (SO_2).
1. Initial SO_2 designations.
2. Additional SO_2 designations.
D. Lead
1. Background.
2. Today's action.
3. Additional actions.
4. Miscellaneous.
III. Tables
IV. Other Regulatory Requirements
A. Executive Order 12291.
B. Regulatory Flexibility Act.

I. Background

A. Purpose

The purpose of this document is to announce and promulgate designations, classifications, and boundaries for areas of the country with respect to the NAAQS for ozone, CO, particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM–10), and lead in accordance with the requirements of the Clean Air Act (CAA).

B. Preenactment Status and Clean Air Act Amendments (CAAA) of 1990

The nation's first Federal efforts at controlling air pollution began in 1963 with passage of the CAA. Four amendments followed in 1967, 1970, 1977 and 1990. The 1967 Amendments directed the previous Department of Health, Education and Welfare to identify regional areas with common air masses throughout the nation [Air Quality Control Regions (AQCR's)]. By 1970, 57 AQCR's were named. Later that year, 34 additional areas were announced.

The 1970 Amendments authorized the Administrator of the newly created EPA to identify additional areas, but only at the States' initiative. As of January 1972, 247 AQCR's were listed.

Section 107(d) of the 1977 Amendments gave the EPA the authority to designate areas nonattainment without a State's request. After EPA's initial designation of areas as attainment/unclassifiable or nonattainment in 1978, however, subsequent designations could be made only at a State's request. In that same year, EPA published, for the first time, a list of all section 107(d) nonattainment areas in 40 CFR part 81.

C. CAAA and Subsequent EPA Actions

This section summarizes the relevant provisions of the CAAA as applicable to ozone and CO areas. A discussion of the provisions applicable to PM–10, SO_2, and lead areas is found in sections II. B., C., and D. of this document.

The CAAA of 1990 authorized EPA to designate areas nonattainment and to classify them according to degree of severity. Classification, in turn, triggers a set of control requirements designed to bring areas into attainment by their specified attainment dates.

Under the CAAA of 1990, preenactment ozone and CO nonattainment areas were classified on the date of enactment according to the severity of their problem. States were required, by 120 days after enactment, to submit lists designating all areas of the State as attainment, unclassifiable, or nonattainment for ozone and CO. The EPA was required to promulgate these lists by 240 days after enactment, making revisions, including boundary modifications, as appropriate. Ozone or CO areas classified serious or higher are subject to a separate process for determining boundaries which places a strong presumption in favor of expanding boundaries to the Metropolitan Statistical Area (MSA) [or Consolidated Metropolitan Statistical Area (C/MSA)].

D. Chronology of EPA and State Actions

1. *CAAA of 1990.* The CAAA of 1990 reaffirm the major role of the States in developing and implementing State implementation plans (SIP's) to attain the NAAQS. On November 15, 1990, the day the CAAA were signed into law, EPA Administrator William K. Reilly sent a letter to State Governors alerting them to the significance of the legislation and summarizing the Amendments.

One month later, William G. Rosenberg, Assistant Administrator for Air and Radiation, followed up the November 15, 1990 letter with a second letter to State Governors. This letter notified Governors of those initial State actions or submittals required of States, particularly those actions needed within a very short time period.

In January 1991, a third letter to States went out from each Regional Administrator providing more detailed information on determining designations, classifications, and boundaries; notification of SIP deficiencies; and information about other early State actions. Attached to the letter was a list of current and planned guidance materials that would be provided by EPA to support State activities.

2. *Chronology of events.* The first official actions the States took came 45 days after enactment of the CAAA (December 30, 1990). Preenactment ozone and/or CO nonattainment areas classified under section 107(d)(4)(A)(iv) as serious, severe, or extreme would take as their nonattainment area boundaries the boundary of their respective C/MSA unless the State notified the Administrator, no later than 45 days after enactment, of its intent to study the boundaries further (the 45-day letter).

In addition, under sections 181(a)(4) and 186(a)(3), EPA was authorized to reclassify an area upward or downward (a "bump down") if the design value of an area placed it within 5 percent of the next classification. The EPA requested that States seeking a bump down make the request within 45 days of enactment. (Section 181(b)(3) provides that EPA shall automatically grant the request of any State to reclassify an ozone nonattainment area to a higher classification.)

The next major event occurred 90 days after enactment, February 13, 1991, when the EPA responded to States' bump down requests.

On March 15, 1991 (120 days after enactment), States were required to submit to EPA a list of all their ozone and CO nonattainment areas, including boundary recommendations. States were urged to submit at the same time SO_2, PM–10, and lead nonattainment areas, including boundary recommendations. States were encouraged to provide at this time the additional boundary studies and recommendations for the serious, severe, and extreme ozone and CO areas covered by the 45-day letters. By

May 14, 1991 (180 days after enactment), EPA Regional Administrators notified States of any potential modifications to the States' recommendations. States were encouraged in the 180-day letter to respond to EPA's proposal within 20 days (by June 3, 1991, which is 200 days after enactment) for ozone and CO areas, and within 60 or 120 days, depending on the type of modification, for lead. Many States did so.

With respect to ozone and CO, today's action is final except for the following counties for ozone: Orange and Putnam (New York, New Jersey-Long Island CMSA); Muskegon (Muskegon, MI); Washington (Parkersburg-Marietta, OH) and Pasco (Tampa, FL); and the following counties for CO: Hancock, Brooke, and Jefferson (Steubenville); and Utah (Provo, UT).

With respect to lead, PM-10, and SO_2, refer to the appropriate section below for a description of the specific action being taken.

3. *Presentation of technical information.* Copies of all of the above mentioned correspondence and other correspondence between the States, interested parties, and EPA regarding this process are available for review in the Air Docket No A-90-42 maintained in Rm. M-1500, 401 M St., SW., Washington, DC 20460 (first floor of the EPA Washington DC, Waterside Mall Office). Identical information is also available for review at the EPA Regional Offices listed above in the addresses section of this rulemaking package.

Detailed discussions concerning the basis for EPA's actions and decisions are excluded from this rulemaking and are included in a Technical Support Document (TSD). The TSD is also available in the Air Docket and respective Regional Offices. Where appropriate in this rule, the reader is directed to the TSD for additional information.

II. Summary of Today's Action

A. Ozone/CO

1. *Introduction.* This section will describe EPA's interpretation of the designations/classifications/boundaries requirements applicable to ozone/CO areas; and it will describe EPA's actions in promulgating or announcing these decisions.

This section is organized chronologically. The reader is invited to refer to the chronology of CAAA requirements and EPA/State administrative actions described above. The most important submissions by the States, and preliminary and final EPA actions, are summarized in tables included as part of this rule.

2. *Enactment—a. Designations/boundaries/classifications—i. Designations.* As described in this section, at the date of enactment, all areas of the country were designated with respect to ozone and CO by operation of law in accordance with the preenactment designations. For areas that were designated nonattainment before enactment, EPA interprets the CAAA to maintain the preenactment designation for the area and to begin a process for determining the boundaries for the area.

Section 107(d)(1)(C) provides that each ozone and CO area designated nonattainment, attainment, or unclassifiable immediately before the date of enactment of the CAAA "is designated, by operation of law," as a nonattainment, attainment, or unclassifiable area, respectively.–

Section 107(d)(2)(A) requires EPA to publish a Federal Register notice with respect to this designation, but does not specify a time for doing so. Accordingly, this rulemaking serves the purpose of fulfilling this requirement to promulgate the date-of-enactment designations, coupled with the requirements discussed below, to promulgate the classifications and boundaries for these areas.

ii. *Boundaries.* As noted above, section 107(d)(1)(C) requires that each area designated preenactment of the CAAA be designated again, by operation of law, in the same fashion. Because the specific boundaries of the areas are to be determined subsequently, as described below, EPA interprets the section 107(d)(1)(C) requirement as generally specifying that the appropriate areas be designated, but not necessarily as solidifying their pre-enactment boundaries. For example, as of the date of enactment, the Tampa, Florida, area became designated nonattainment, but the specific boundaries of that area were to be determined subsequently.

Nevertheless, for certain purposes, each area designated by operation of law under section 107(d)(1)(C) retained its preenactment boundaries at the date of enactment. For example, locations within a metropolitan area that were designated nonattainment at enactment remained subject to the nonattainment new source review (NSR) requirements of the NSR programs EPA had previously approved for the nonattainment areas (under Part D of Title I of the Clean Air Act prior to the CAAA). The preenactment boundaries are identified in the version at 40 CFR part 81, Subpart C-Section 107 Attainment Status Designations (part 81 tables), preceding the enactment of the CAAA.

iii. *Classifications/other treatments—(a) General.* –As described in this section, all areas (with certain exceptions) designated nonattainment by operation of law as of the date of enactment were classified as of the date of enactment in accordance with air quality.

Section 181(a)(1) provides:

> Each area designated nonattainment for ozone pursuant to section 107(d) shall be classified at the time of such designation under table 1, by operation of law, as a Marginal Area, a Moderate Area, a Serious Area, a Severe Area, or an Extreme Area based on the design value for the area.

Section 186(a)(1) includes an identical provision for CO areas (except that the classifications are limited to moderate or serious).

Based on these provisions, EPA has taken the position that classifications for areas designated nonattainment prior to enactment occurred at the same time that those areas were designated by operation of law as nonattainment under section 107(d)(1)(C)(i), which was the date of enactment. As discussed below, EPA has taken the position that, for metropolitan areas that included at least some locations designated nonattainment at enactment, such classification is not delayed until the time of the designations required to be promulgated 240 days after enactment under section 107(d)(4)(A)(ii).

For ozone, classification is to be based on the following table of design values (section 181(a)(1), table 1):

Area classification	Design value (parts per million)
Marginal	0.121 up to (but not including) 0.138
Moderate	0.138 up to (but not including) 0.160
Serious	0.160 up to (but not including) 0.180
Severe-15	0.180 up to (but not including) 0.190
Severe-17	0.190 up to (but not including) 0.280
Extreme	0.280 and above

Severe-15 and -17 areas (EPA's nomenclature) face the same requirements but differ in their attainment dates (15 years for severe-15; 17 years for severe-17). Severe-17 applies to areas with a design value of .190 to .280 for ozone years 1986-1988.

For CO, classification is to be based on the following table of design values (section 186(a)(1), table 3):

Area classification	Design value (ppm)
Moderate-1	9.1-12.7
Moderate-2	12.8-16.4

California—Carbon Monoxide

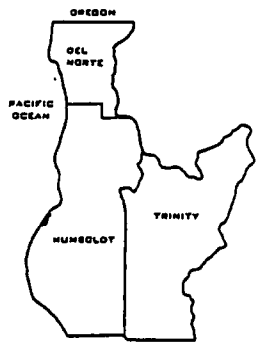
Designated Area	Designation		Classification	
	Date[1]	Type	Date[1]	Type
Riverside County (part) - that portion of Riverside County which lies to the west of a line described as follows:		Nonattainment		Serious
1. Beginning at the Riverside - San Diego County boundary and running north along the range line common to Range 4 East and Range 3 East, San Bernardino Base and Meridian;				
2. then east along the Township line common to Township 8 South and Township 7 South;				
3. then north along the range line common to Range 5 East and Range 4 East;				
4. then west along the Township line common to Township 6 South and Township 7 South to the southwest corner of Section 34, township 6 South, Range 4 East;				
5. then north along the west boundaries of Sections 34, 27, 22, 15, 10, and 3, Township 6 South, Range 4 East;				
6. then west along the Township line common to Township 5 South and Township 6 South;				
7. then north along the range line common to Range 4 East and Range 3 East;				
8. then west along the south boundaries of Sections 13, 14, 15, 16, 17, and 18, Township 5 South, Range 3 East;				
9. then north along the range line common to Range 2 East and Range 3 East;				
10. then west along the Township line common to Township 4 South and Township 3 South to the intersection of the southwest boundary of partial Section 31, Township 3 South, Range 1 West;				
*11. then northwest along that line to the intersection with the range line common to Range 2 West and Range 1 West;				
12. then north to the Riverside-San Bernardino County line,				
San Bernardino County (part) - that portion of San Bernardino County which lies south and west of a line described as follows:		Nonattainment		Serious
1. Beginning at the San Bernardino - Riverside County boundary and running north along the range line common to Range 3 East and Range 2 East, San Bernardino Base and Meridian;				
2. then west along the Township line common to Township 3 North and Township 2 North to the San Bernardino - Los Angeles County boundary; and that portion of San Bernardino County which lies south and west of a line described as follows:				
3. latitude 35 degrees, 10 minutes north and longitude 115 degrees, 45 minutes west.				
Modesto Area				
Stanislaus County (part)				
Modesto Urbanized Area (Census Bureau Urbanized Area)		Nonattainment		Moderate ≤ 12.7ppm
Sacramento Area				
Census Bureau Urbanized Areas				
Placer County (part)		Nonattainment		Moderate ≤ 12.7ppm
Sacramento County (part)		Nonattainment		Moderate ≤ 12.7ppm
Yolo County (part)		Nonattainment		Moderate ≤ 12.7ppm
San Diego Area				
San Diego County (part)		Nonattainment		Moderate ≤ 12.7ppm
Western part of San Diego County - that portion of San Diego County which lies west of a line described as follows:				
1. Beginning at the United States - Mexico border and running north along the range line common to range 7 East, and Range 6 East, San Bernardino Base and Meridian, to the southeast corner of Township 16 South, Range 6 East;				
2. then west along the Township line common to Township 16 South and Township 17 South to the southwest corner of Township 16 South, Range 6 East;				
3. then north along the range line common to Range 6 East and Range 5 East to the southeast corner of Township 14 South, Range 5 East;				
4. then west along the Township line common to Township 14 South and Township 15 South to the point of intersecon with the east boundary of Cuyamaca Park;				

ITEM 4

NORTH COAST UNIFIED AIR QUALITY MANAGEMENT DISTRICT

2389 MYRTLE AVENUE
EUREKA, CALIFORNIA 95501

PHONE (707) 443-3093
FAX (707) 443-3099



April 29, 1993

Terry McGuire, Chief
Technical Support Division
Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

AIR RESOURCES BOARD
RECEIVED
MAY 4 1993
Technical Support Division

Subject: Redesignation Request

Dear Terry:

I recently received your reminder about the Air Resources Board deadlines for considering redesignation requests. We have previously requested attainment redesignation for various pollutants and believe that your staff is probably working on our request. To avoid any misunderstandings or oversight that might cause us to miss the May 1, 1993 deadline, I want to officially make the request for redesignation.

We are requesting that the North Coast Unified AQMD be reclassified from "Unclassified" to "Attainment" for H_2S, SO_2 and SO_4 (Humboldt County portion). We have previously submitted ambient air quality data that should assist in the evaluation of this request. In addition, emission inventory data to exercise your screening procedure is available and for 1991 Inventory Year shows point and areawide stationary sources in Humboldt County to be responsible for 230 ton per year of Sox. This emission level is well within the adopted ARB Screening Criteria of 1700 tons per year for attainment designation.

We again reiterate our desire to be reclassified as "Attainment" for ozone during 1993 and in time for your Board's anticipated redesignation actions during November 1993.

If you anticipate problems with this request or need additional information, please let me know as soon as possible so that we can evaluate any additional options. Thank you for your assistance in this request.

Sincerely,

Debra T. Harris for

Wayne Morgan
Air Pollution Control Officer

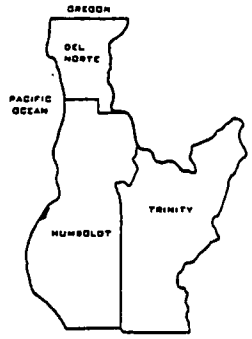
WM:darbltr.ltrs

ITEM 5

NORTH COAST UNIFIED AIR QUALITY MANAGEMENT DISTRICT

2389 MYRTLE AVENUE
EUREKA, CALIFORNIA 95501

PHONE (707) 443-3093
FAX (707) 443-3099



December 16, 1992

Ron Rothacker
Technical Support, Air Quality Data Branch
Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

Dear Mr. Rothacker:

Thank you for detailing the information needed in order for the proper submittal of details necessary to arrive at conclusions about the attainment status of our District with respect to the state Hydrogen Sulfide standard. The following is information which should provide a start to discussions which may lead to our designation as attainment for Hydrogen Sulfide.

1. The site in question is in the southwest part of Eureka and is referred to as Fort Humboldt. The site number is 12-513. Pollutant code is 42406 for Total Reduced Sulfur (TRS) compounds, including Hydrogen sulfide, methyl mercaptans, dimethyl sulfide, and dimethyl disulfide. A map is attached which indicates the location of the site and a site report has been previously filed.

2. The equipment used is a Monitor Labs 8850 pulsed fluorescence sulfur dioxide monitor. An oven is provided prior to the monitor to oxidize all total reduced sulfur compounds to SO_2 for analysis. Prior to the oven a monitor labs proprietary sieve is used which removes SO_2.

3. The main sources of the TRS are the two kraft pulp mills which are within two miles of the site as indicated on the attached map. Many complaints are received due to the malodors from these mills even though their odorous emissions are in compliance with limits set by the District. Since the site is next to Highway 101, there may be occasions when a catalytic converter overload creates a hydrogen sulfide concentration at the site.

4. We have also included wind roses for the years 1988, 1989 and 1990 derived from the downtown Eureka National Weather Service office for use in the Hot Spots program for determining risks from air toxics by the two pulp mills.

5. Also attached is a summary of the data which has been sent to ARB on a routine basis for the site. Monthly values are normally less than half of the state H_2S standard. There was one value on July 25, 1991 which caused a high 35 ppb one hour average. This odor was also accompanied by some 50 complaints of odor in the Eureka area and was traced to a problem that occurred at the Louisiana-Pacific pulp mill. Noncondensible gases containing DMS, DMDS, and MM were normally oxidized in the plant's lime kiln. However, during the morning and with high winds directly traceable to the LP mill, the lime kiln was down and the gases routed to a backup flare burner. It was found to be functioning inefficiently which allowed the release of these noncondensible gases into the atmosphere via the main 300 foot stack. Since these gases contain no H_2S, we do not feel this value to be valid for comparison with the H_2S standard.

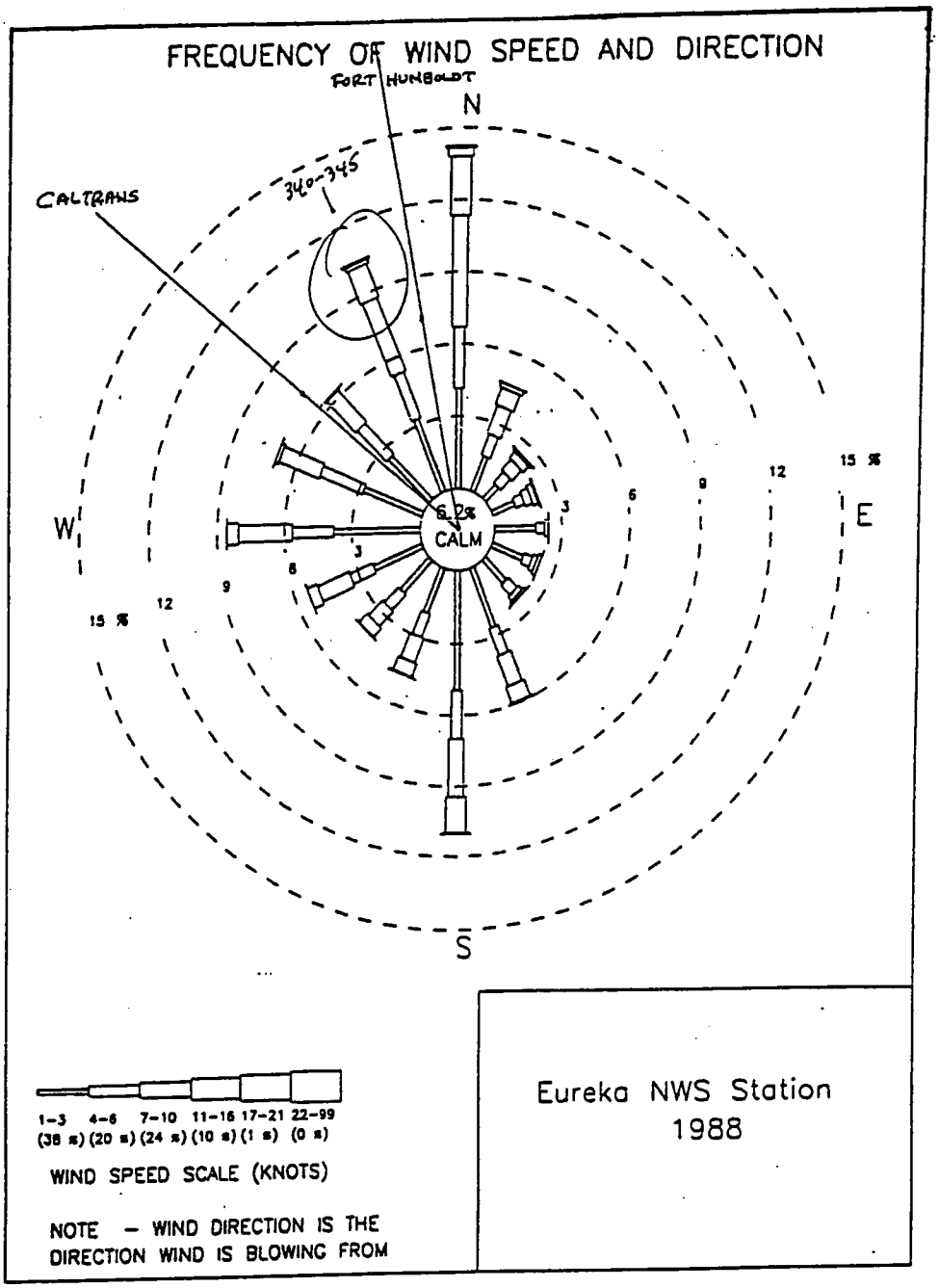
6. ARB quality assurance audits have been conducted on the equipment each year and found to be within allowable parameters.

If there is more information which you will need to begin the process of determining attainment of the District for H_2S, please let me know. It is the intent of the District to convert the equipment to monitoring for SO_2, if we can show attainment for H_2S. Please contact Bob Clark if other details are needed.

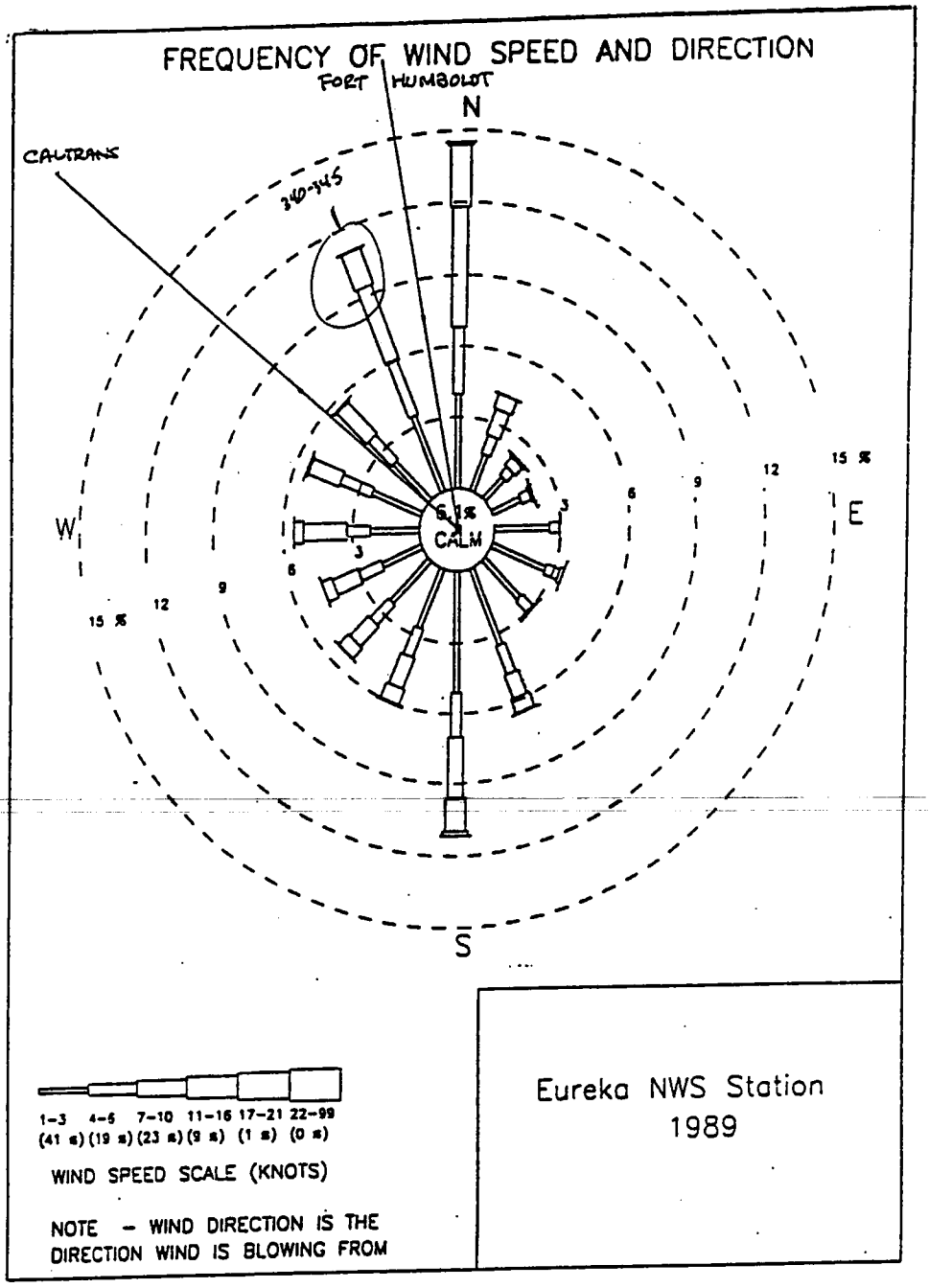
Sincerely,

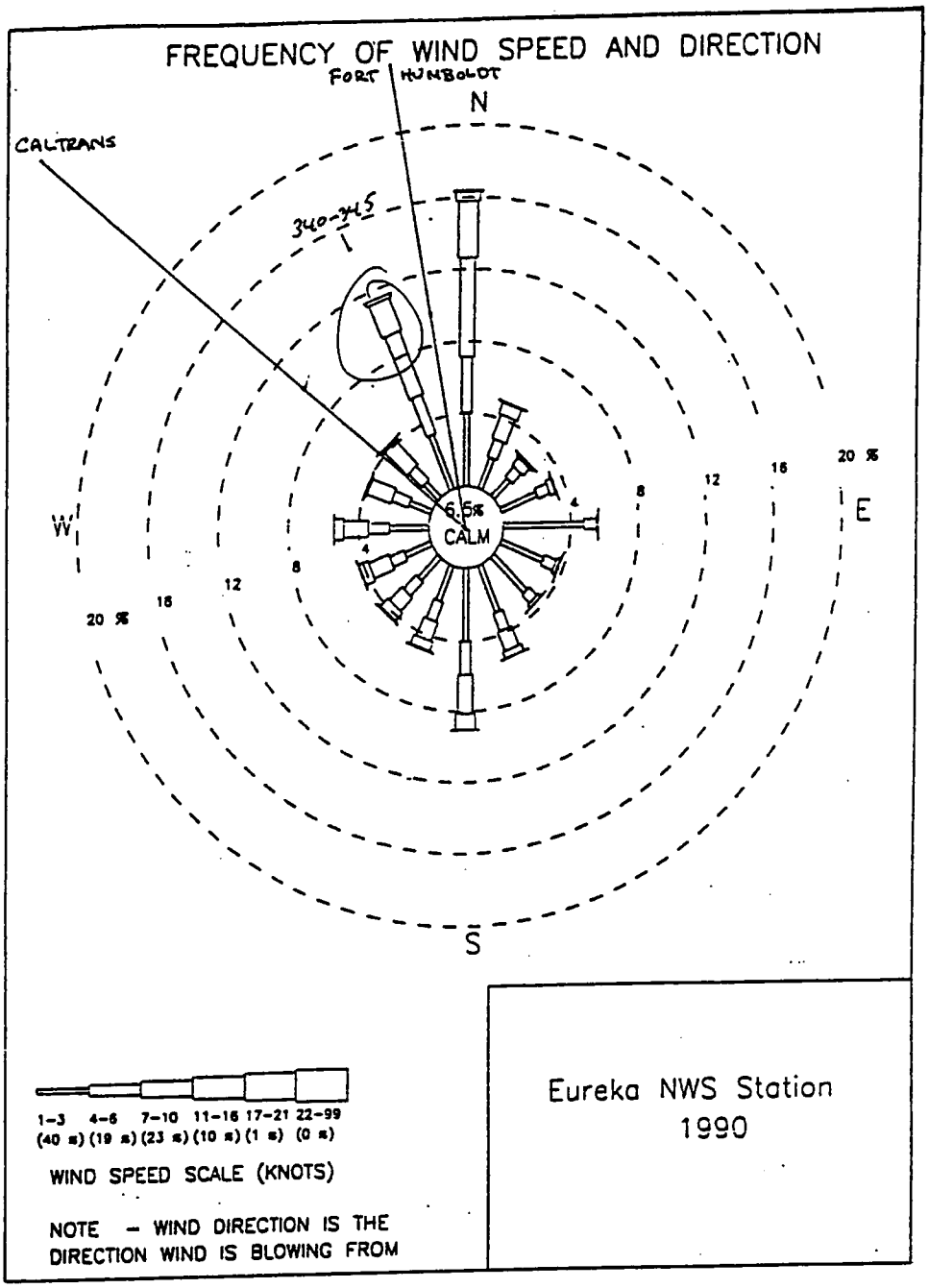
Wayne Morgan

Wayne Morgan
Air Pollution Control Officer


FREQUENCY OF WIND SPEED AND DIRECTION
FORT HUMBOLDT
N
CALTRANS
340-345
W
E
S
15 %
12
9
6
3
6.2%
CALM
1-3 4-6 7-10 11-16 17-21 22-99
(38 %) (20 %) (24 %) (10 %) (1 %) (0 %)
WIND SPEED SCALE (KNOTS)
NOTE – WIND DIRECTION IS THE DIRECTION WIND IS BLOWING FROM
Eureka NWS Station
1988

RCVD 5/6/91


FREQUENCY OF WIND SPEED AND DIRECTION
FORT HUMBOLDT
CALTRANS
340-345
N
E
S
W
15 %
12
9
6
3
5.1%
CALM
1-3 (41 %)
4-5 (19 %)
7-10 (23 %)
11-16 (9 %)
17-21 (1 %)
22-99 (0 %)
WIND SPEED SCALE (KNOTS)
NOTE - WIND DIRECTION IS THE DIRECTION WIND IS BLOWING FROM
Eureka NWS Station
1989


FREQUENCY OF WIND SPEED AND DIRECTION
FORT HUMBOLDT
CALTRANS
340-345
N
W
E
S
4
8
12
16
20 %
6.5%
CALM
1-3 (40 %)
4-6 (19 %)
7-10 (23 %)
11-16 (10 %)
17-21 (1 %)
22-99 (0 %)
WIND SPEED SCALE (KNOTS)
NOTE - WIND DIRECTION IS THE DIRECTION WIND IS BLOWING FROM
Eureka NWS Station
1990

FORT HUMBOLDT
TOTAL REDUCED SULFUR (TRS)
MONTHLY HIGH HOURS (PPB)

	1991	1992	1990
1	13	4	
2	8	9	
3	7	7	
4	6	5	
5	9	9	
6	10	6	
7	35 *	15	
8	4	12	9
9	8	5	10
10	8	6	14
11	9	6	12
12	3		13

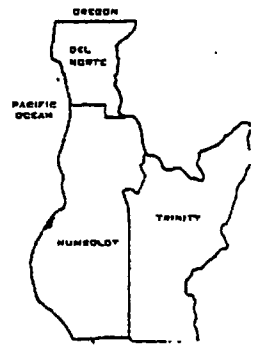
* The value of 35 ppb TRS was mostly DMS, +DMDS from noncondensible system at the Louisiana-Pacific pulp mill. No H_2S.

With more than 2 years of data and no H_2S values (1 TRS) > 3/4 of 30 = 23 ppb. The District is showing attainment of the state H_2S standard hourly value of 30 ppb.

NORTH COAST UNIFIED AIR QUALITY MANAGEMENT DISTRICT

2369 MYRTLE AVENUE
EUREKA, CALIFORNIA 95501

PHONE (707) 443-3093
FAX (707) 443-3099



FAX TRANSMITTAL SHEET

DATE: 5/11/93

ATTN: Ron Rothacker
Air Quality Data Review Section

FAX NO: 916/327-8524

FROM: Bob Clark

TEL NO: (707) 443-3093
FAX NO: (707) 443-3099

RE: Information about the content of the gases which caused the 35 ppb TRS episode. A sample of this gas was analyzed by Air Toxics Ltd. in Feb '93 with attached results. There is some H_2S but it represents only about 8% on a 16 mole/min basis. 8% x 35 ppb = 3 ppb or negligible contribution. This should answer question you posed to other ARB staff.

TOTAL NUMBER OF PAGES INCLUDING TRANSMITTAL SHEET: 3

IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL AS SOON AS POSSIBLE. THANK YOU

OF009

MAO INCINERATOR EXISTING EMISSIONS

ASSUMPTIONS

- NCG FLOW TO INCINERATOR = 2,000 ACFM
- WATER SATURATED @ 130°F = 15% H_2O
- MANUFACTURERS GUARANTEES (EXHAUST)

NO_x	= 60 ppm	TRS	= <5 ppm
CO	= 25 ppm		
VOC	= 10 ppm	SO_2	= 43 ppm

- GAS FLOW EXITING SCRUBBER = 15,835 ACFM

WATER SATURATED @ 138°F = 20% WATER

15,835 ACFM (.8) $(^{528}/_{598})$ = 11,200 dscfm

- NCG GAS SPLIT BY VOLUME (AIR TOXICS LTD. 1993)

H_2S (Hydrogen Sulfide)	2500 ppmv	— 0.25%
COS (Carbonyl Sulfide)	ND	
CH_3SH (Methyl Mercaptan)	18,000 ppmv	— 1.8%
CH_3SCH_3 (Dimethyl Sulfide)	9,800 ppmv	— 0.98%
CS_2 (Carbon Disulfide)	ND	
CH_3SSCH_3 (Dimethyl Disulfide)	310 ppmv	— 0.031%

- NCG FLOW = (2,000 ACFM)(.85) $(^{528}/_{598})$ = 1520 SCFM
- ASSUME IDEAL GAS BEHAVIOR FOR ALL GASES

SO_2

ASSUME MCG = 2,000 SCFM CONSERVATIVELY

	% By Vol	SCFM	lb mole/min (385 scf/lb mole)	lb mole SO_2/min
H_2S	0.25	5	0.013	.013
Methyl Mercaptan	1.80	36	0.094	.094
Dimethyl Sulfide	0.98	19.6	0.051	.051
Dimethyl Disulfide	0.031	0.62	0.0016	.0032
		.013	0.1596	0.1612 lb mole SO_2/min
			± .081	

SO_2 OUT OF INCINERATOR

$$\left(0.1612 \frac{\text{lb mole } SO_2}{\text{min}}\right)\left(\frac{60 \text{ min}}{1 \text{ hr}}\right)\left(\frac{64.06 \text{ lbs } SO_2}{\text{lb mole } SO_2}\right) = 620 \text{ lb/hr}$$

MINIMUM SCRUBBER EFFICIENCY = 99%

$$(620 \text{ lb/hr})(.01) = 6.2 \text{ lb/hr}$$

$$\left(6.2 \frac{\text{lb}}{\text{hr}}\right)\left(\frac{24 \text{ hr}}{\text{day}}\right)\left(\frac{355 \text{ day}}{\text{yr}}\right)\left(\frac{1 \text{ ton}}{2{,}000 \text{ lb}}\right) = 26.4 \text{ tons/yr}$$

ITEM 6

Santa Barbara County
Air Pollution Control District

April 25, 1993

Mr. Terry McGuire, Chief
Technical Support Division
Air Resources Board
2020 L Street
Sacramento, CA 95812

Dear Mr. McGuire:

The Santa Barbara County Air Pollution Control District (APCD) is requesting that the Santa Maria Valley-Solomon Hills hydrogen sulfide (H_2S) nonattainment area as descibed in Title 17, Article 1.5, Section 60200(b), of the California Code of Regulations (Attachment 1) be redesignated as nonattainment-transitional. Attached as support for our request, we are submitting documentation generated from "data for record" for the years 1980 through 1992 for those stations monitoring hydrogen sulfide within the nonattainment area.

There were two monitoring stations sampling hydrogen sulfide and submitting data for record within the nonattainment area (Attachment 2). The Lake Marie Estates/Glacier Lane monitoring station operated between 1975 and 1990. Monitoring was discontinued in response to the decommissioning of its associated emissions sources. A condition exists, however, within the source's permit which requires the reinstatement of monitoring should the source again become operational. No additional hydrogen sulfide sources have been permitted within the nonattainment area. The Battles Gas Plant monitoring station, sited to document the regional air quality impacts of Santa Maria as well as the source specific impacts of the Battles Gas Plant, continues to sample for hydrogen sulfide as it has since 1987 as part of a permit condition for that facility.

The number of hydrogen sulfide standard violations at the Lake Marie Estates/Glacier Lane monitoring station had decreased from 53 in 1980 to only 1 in 1989 and there had been a significant decrease in the maximum concentrations recorded during those violations. The Battles Gas Plant monitoring station has recorded 9 standard violations since 1987 - 1 in 1987, 3 in 1988, 4 in 1989, 1 in 1990, 0 in 1991, and 0 in 1992. There continue to be no violations of the hydrogen sulfide standard at monitoring stations outside the nonattainment area (Attachment 3).

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James M. Ryerson, Air Pollution Control Officer William A. Master, Assistant Director

The meteorological data and pollutant roses for the Battles Gas Plant monitoring station (Attachment 4) show that wind directions were consistent from 1987 through 1992. In the years 1987 through 1989, the hydrogen sulfide standard violations occurred when the winds were from the southeast quadrant and the monitor was downwind of the now decomissioned major source. The one violation which occurred in 1990 was when the winds were from the northeast quadrant and the monitor was downwind of the Battles Gas Plant. Over the past three years since the decommissioning of major sources in the nonattainment area, the number of hydrogen sulfide standard violations has qualified the nonattainment area for redesignation consideration to that of nonattainment - transitional. We believe that the documentation provided shows that the area meets the requirements for the redesignation.

Should you have any questions or require additional information, please contact me at (805) 961-8871.

Sincerely,

Duane R. Sikorski
Supervising Air Quality Specialist

Attachments

cc: Ron Rothacker, ARB
Kathy Milway, SBCAPCD