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July 14, 2000

Ms. Deborah Jordan
Acting Director
Air Division
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, California 94105

Dear Ms. Jordan:

This letter transmits the Air Resources Board's (ARB) recommendations for area designations and nonattainment area boundaries for the new eight-hour ozone National Ambient Air Quality Standard in California. We have enclosed our final staff report entitled "Recommended Area Designations for the Federal Eight-Hour Ozone Standard," which includes the designations and boundaries as approved by our Board on March 23, 2000 and reflected in Resolution 00-10. This final report also reflects more complete ozone data for the 1999 calendar year that became available subsequent to Board action – these data do not change any of the recommended designations.

Our recommended nonattainment area boundaries for the eight-hour ozone standard generally follow existing one-hour ozone federal nonattainment area boundaries, with a few exceptions. These exceptions are based on changes to air basin boundaries, as well as the need to separate some very large areas according to political jurisdiction. This can create a confusing situation, especially for transportation agencies that must analyze conformity for one-hour and eight-hour ozone nonattainment areas. We are requesting that you remedy this situation by updating the one-hour ozone nonattainment area boundaries to match the more current eight-hour ozone boundaries.

I would also like to respond to some of the issues raised by the U.S. Environmental Protection Agency (U.S. EPA) while we were developing our recommendations. These issues include: a mechanism for linking the attainment demonstrations for each nonattainment area to address transport between these areas; the appropriate designation for Sutter County; and the appropriate boundary affecting Joshua Tree National Park.

Linking the Attainment Demonstrations. We have recommended sixteen separate nonattainment areas spanning the State from Shasta County in the north to Imperial County in the south. Given the extensive pollutant transport between these areas, the eight-hour ozone State Implementation Plans (SIPs) will rely on emission reductions from a combination of local, upwind, statewide, and national control measures to demonstrate progress and attainment.

We recognize U.S. EPA's concern that intrastate ozone and ozone precursor transport be properly addressed to ensure that all areas of the State attain the standard. We expect two major ozone field studies in Northern and Southern California to provide the technical basis for two modeling domains in the SIPs. As we have discussed, ARB intends to package the local SIPs for areas within each domain to demonstrate attainment in both upwind and downwind areas. Over the next several months, ARB staff will work with U.S. EPA and local air districts to formalize this approach through a Memorandum of Agreement.

Sutter County. U.S. EPA has concurred with most of ARB's recommendations, but we continue to disagree on the appropriate designation for Sutter Buttes. In this case, a monitor sited atop an isolated mountain to detect pollutant transport aloft measures high levels of ozone. The ozone concentrations aloft are not representative of air quality in the nearby community 2,000 feet below – the community monitor detects no violations. Although we disagree with U.S. EPA's assertion that Sutter Buttes should be designated nonattainment, we appreciate your staff's efforts to find more sensible ways to implement the standard in just the elevated portion of Sutter County.

Joshua Tree National Park. Another area of disagreement is the nonattainment area boundary in the Eastern Desert, which excludes most of the Joshua Tree National Park. We do not believe there is sufficient monitoring data to change the existing boundaries at this time. We plan to initiate special purpose monitoring in the Eastern Desert by next year to determine the extent of ozone pollution in the area. This monitoring will help resolve whether to expand the nonattainment area to include the whole Park or beyond. We will work with U.S. EPA, the air districts, the National Park Service, and other interested stakeholders to define appropriate nonattainment area boundaries. In the meantime, upwind sources in the South Coast Air Basin and Coachella Valley that impact air quality in the Park are already being controlled as part of existing ozone strategies.

We look forward to working with you as you finalize the area boundaries. If you have any questions, please call me at (916) 445-4383 or Ms. Cynthia Marvin, Chief, Air Quality and Transportation Planning Branch, at (916) 322-7236.

Sincerely,

Michael P. Kenny
Executive Officer

Enclosure

cc: (with Enclosure)

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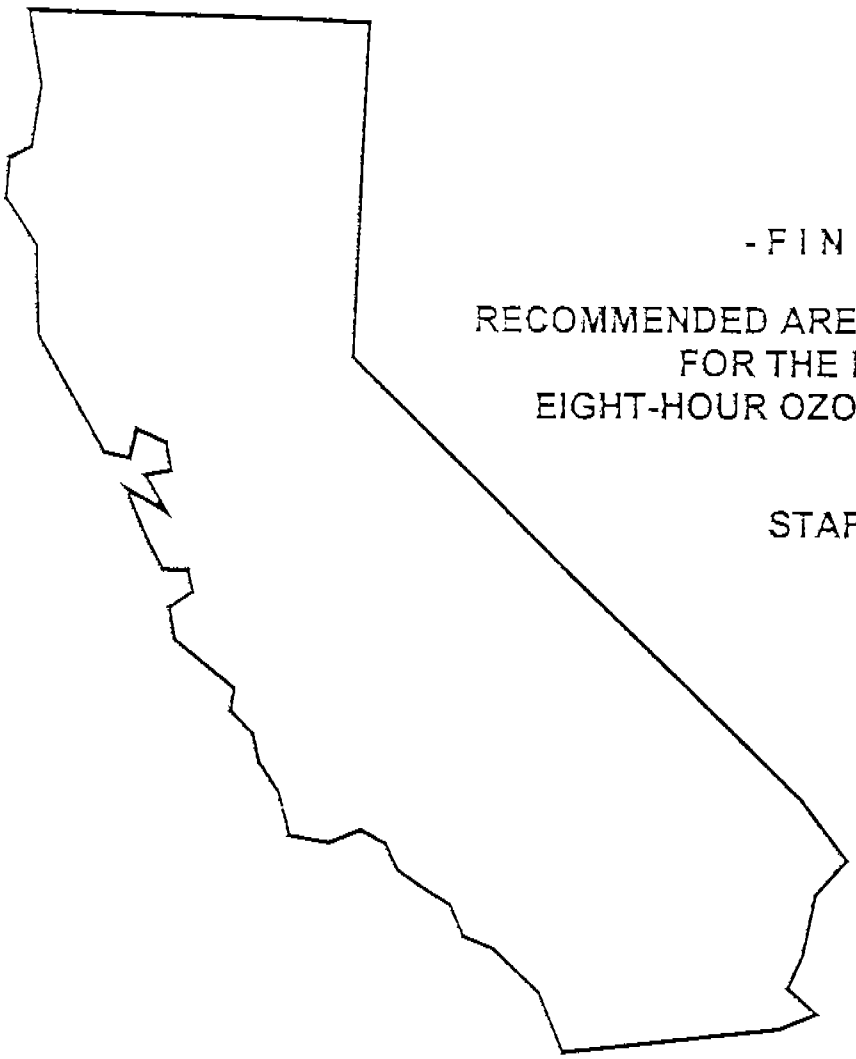

- F I N A L -

RECOMMENDED AREA DESIGNATIONS FOR THE FEDERAL EIGHT-HOUR OZONE STANDARD

STAFF REPORT

Approved: March 23, 2000

California Environmental Protection Agency

Air Resources Board

- F I N A L -

RECOMMENDED AREA DESIGNATIONS FOR THE FEDERAL EIGHT-HOUR OZONE STANDARD

Approved by the Air Resources Board on March 23, 2000

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This report has been reviewed by the staff of the Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Air Resources Board, nor does the mention of trade names or commercial products constitute endorsement or recommendation of use.

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EXECUTIVE SUMMARY

What is ARB proposing?

We are proposing recommendations for area designations under the federal eight-hour ozone standard to the U.S. Environmental Protection Agency (U.S. EPA). We are proposing sixteen nonattainment areas. Eleven of these areas (South Coast Air Basin, San Joaquin Valley, Sacramento Region, San Francisco Bay Area, Ventura County, San Diego County, Eastern Kern County, Antelope Valley, Western Mojave Desert, Coachella Valley, and Imperial County) are already nonattainment for the federal one-hour ozone standard. Only minor boundary changes are recommended for these areas. The five new nonattainment areas are Shasta County, Tehama County, Western Nevada County, Central Mountain Counties (Amador and Calaveras), and the Southern Mountain Counties (Tuolumne and Mariposa).

The Board approved these proposed area designations and boundaries on March 23, 2000 (see Appendix C for Board Resolution), and directed staff to transmit the recommendations to U.S. EPA.

What is the status of the federal eight-hour ozone standard?

In 1992, U.S. EPA began reviewing the existing one-hour ozone standard out of concern that it did not offer adequate health protection against day-long exposures at levels just below the standard. More recent human health studies indicated that longer ozone exposures at lower levels also resulted in adverse health effects – including coughing, increased asthma attacks, chronic lung inflammation, decreased lung function, and decreased lung defenses against bacterial respiratory infections. In response, U.S. EPA established the new eight-hour standard for ozone in July 1997. This standard does not replace the existing one-hour standard. Both federal ozone standards now apply, along with California's own one-hour ozone standard.

In May 1999, an appeals court placed the eight-hour ozone standard on hold, pending further clarification from U.S. EPA on how it selected the specific level of the standard. U.S. EPA cannot implement the standard, but the court did note that U.S. EPA can make designations to fulfill its statutory obligations.

How does the eight-hour federal standard compare to California's State ozone standard?

The eight-hour federal standard provides a level of health protection that is closer to California's own one-hour ozone standard. The eight-hour standard provides greater protection against longer exposures at lower levels – the kind of air pollution often seen in the transport-impacted communities of the California foothills. The State one-hour ozone standard provides more protection against the high peak levels typically seen in

California's urban areas. To provide adequate public health protection in the State, both harmful one-hour and eight-hour ozone exposures need to be addressed.

What is the federal process for new area designations?

The federal Clean Air Act (as amended by the Transportation Equity Act for the 21st Century or "TEA-21") establishes timeframes for states to recommend and U.S. EPA to finalize area designations for the eight-hour ozone standard. States were to recommend nonattainment area boundaries in July 1999, with U.S. EPA finalizing designations by July 2000. However, in response to the appeals court decision, U.S. EPA asked states to submit only monitoring data. In an August 1999 letter to U.S. EPA, we provided these data and indicated that we would follow with recommendations on area boundaries. To ensure that California's views are considered when U.S. EPA proceeds with designations, we are proposing area designation recommendations now.

When will the area designations become effective?

It is uncertain when the designations will be effective. U.S. EPA has stated their intention to finalize designations this year. Under the Clean Air Act, three programs are triggered upon designation:

- State Implementation Plan (SIP). In Section 110, the Act requires each nonattainment area to develop a SIP describing how and when it will attain the standard. States have up to three years after final designation to submit SIPs. If U.S. EPA finalizes designations this year, we expect eight-hour ozone SIPs to be due in 2003. Transport of pollutants between nonattainment areas is a statewide concern. As with existing, approved federal ozone plans, ARB will be responsible for integrating local elements to ensure that the statewide SIP shows attainment in both upwind and downwind areas.

- New Source Review (NSR). Each area must adopt and implement programs to ensure that new and modified sources are as clean as possible. Major stationary sources wishing to site in these areas must comply with the lowest-achievable emission rates and obtain offsetting emission reductions to ensure that emissions from stationary sources in the region are lower than before the new source was constructed. Existing one-hour nonattainment areas already have NSR programs in place. New nonattainment areas will need to adopt NSR regulations, within a timeframe to be determined by U.S. EPA.

- Transportation Conformity. In addition, nonattainment areas must verify that transportation plans "conform" to the SIP – growth in the transportation system cannot interfere with an area's efforts to attain the standard. Although the conformity regulations used to provide a grace period after area designations, a 1999 court decision found that the grace period was not allowed. The Federal Highways Administration (FHWA) is currently amending their regulation to remove the grace

period. Because of this, nonattainment areas are subject to transportation conformity requirements upon designation and must immediately make a conformity showing to continue receiving federal transportation funding. U.S. EPA and FHWA are developing guidance describing how local transportation agencies in areas designated nonattainment under the eight-hour standard can show conformity before a SIP is developed.

In response to the court order barring implementation, it is possible U.S. EPA may delay the final designations, or postpone the effective date. SIP development, NSR and transportation conformity will not apply until the designations are final.

Why are rural areas designated nonattainment in cases where much of the pollution comes from upwind urban areas?

Many of the new nonattainment areas in the State are small, predominantly rural counties, which are significantly affected by pollutant transport from upwind urban areas. But the primary purpose of area designations is to let the public know whether the air quality in their area meets health-based standards. Determining which areas are responsible for the emissions that cause unhealthy air (and controlling those emissions) is a separate process. Under the Clean Air Act, all nonattainment areas must implement NSR and conformity programs. Beyond those programs, the State must work with upwind and downwind areas to determine their relative control responsibilities and ensure the combined plans demonstrate attainment throughout California. The Summer 2000 Central California Ozone Study will provide key information on pollutant transport to support these efforts. If the majority of the emissions responsible for nonattainment are transported from upwind, the majority of the reductions must come from the upwind area as well. All local areas must, however, evaluate how they can reduce local emissions to meet the ozone standard as expeditiously as possible.

In response to California's persistent efforts on this issue, the most recent draft of U.S. EPA's implementation guidance would allow the rural areas impacted by intrastate transport to rely on a combination of statewide regulations for mobile sources, consumer products and pesticides; emission reductions from upwind areas; and strong local programs to mitigate the impacts of growth to meet the new standard. We also expect that these rural areas will need considerable technical support from ARB to develop and implement their SIPs – we intend to provide this assistance.

I. BACKGROUND

The purpose of ambient air quality standards is to protect public health and welfare. Air quality standards consist of four elements – the pollutant; the averaging time; the level or concentration not to be exceeded; and the form of the standard or attainment test. On any given day, when the measured pollutant concentration over the specific averaging time is above the level of the standard, the area experiences an "exceedance" of the standard. Whether or not the area records a "violation" must be determined through the form of the standard.

Both the U.S. Environmental Protection Agency (U.S. EPA) and the Air Resources Board (ARB) have adopted standards covering a variety of pollutants including ozone, particulate matter, carbon monoxide, nitrogen dioxide, lead, and sulfur dioxide. The federal government set its existing one-hour ozone standard in 1979, followed by California with its own, more stringent standard in 1987. In July 1997, U.S. EPA established a new eight-hour standard for ozone (*Federal Register, Vol. 62, No. 138, July 18, 1997*). Table 1 shows each of the ozone standards, with the level expressed as the parts of ozone per million parts of air (ppm).

Table 1
Comparison of Ozone Standards

Standard	Federal One-Hour	Federal Eight-Hour	State One-Hour
Averaging time	1 hour	8 hours	1 hour
Level	0.12 ppm	0.08 ppm	0.09 ppm
Form (attainment test)	Three exceedances allowed in a three-year period, fourth is a violation.	Calculate the three-year average of the annual fourth highest eight-hour concentration and compare to the level of the standard.	Statistical calculation intended to allow no more than one expected exceedance per year.

In 1992, U.S. EPA began reviewing the existing one-hour ozone standard out of concern that it did not offer adequate health protection against multi-hour exposures at levels below the standard. Studies of both healthy and asthmatic people show adverse effects in the lung after one to three hour exposures to ozone at levels as low as 0.12 ppm (the pre-existing federal standard). These effects include changes in lung function, respiratory symptoms (including more frequent and more severe attacks in asthmatics), and decreased exercise performance. Community health (epidemiological) studies also link ozone exposure to an increase in symptoms, aggravation of asthma,

and increased hospital admissions for respiratory illness. Clinical studies on exposure to lower ozone levels of 0.08 ppm to 0.12 ppm, for six to eight hours, show health effects including: decreased lung function and respiratory symptoms like coughing and lung/airway inflammation.

The new standard provides greater protection against longer exposure at lower levels – the type of air pollution often seen in transport impacted areas on the East Coast and in the foothill communities of California. In California, urban areas generally experience more pronounced peak ozone levels (during the day), while many downwind rural areas record slightly lower levels but for a more prolonged period (at night). To provide adequate public health protection in the State, both harmful one-hour and multi-hour ozone exposures need to be addressed.

The promulgation of the eight-hour ozone standard did not eliminate the federal one-hour standard. Both federal standards plus the State standard apply. In 1998, U.S. EPA had revoked the federal one-hour ozone standard in areas that attained the standard. Because the court ruling preventing U.S. EPA from enforcing the eight-hour standard, in July 2000, U.S. EPA reinstated the one-hour standard across the country.

A. Court Action

Section 109(b)(1) of the Clean Air act requires U.S. EPA to set an air quality standard at a level that protects public health with an adequate margin of safety. Based on health studies, U.S. EPA relied on a risk assessment approach for the eight-hour ozone standard and chose a level to protect against most, but not all, harmful effects.

On May 14, 1999, a three-judge panel of the U.S. Court of Appeals for the District of Columbia put the eight-hour ozone standard on hold pending further clarification from U.S. EPA on how it selected the specific level of the standard. The Court stated that the factors U.S. EPA used to determine the degree of public health concern associated with different levels of ozone were reasonable, but found U.S. EPA did not clearly articulate the rationale for selecting a level for the standard. The Court left the eight-hour standard in place, but prevented U.S. EPA from enforcing it. The Court did, however, note that the Clean Air Act requires U.S. EPA to finalize designations within a specified time period (three years after the standard was established for ozone). U.S. EPA and the U.S. Department of Justice have since requested a review of the case before the U.S. Supreme Court and the Court has agreed to hear the case.

Because the Court of Appeals questioned only the process of setting the standard, not the health science upon which it was based, we expect that the eight-hour ozone standard will ultimately be implemented - either because it is upheld on appeal or because U.S. EPA provides the clarification requested by the court. U.S. EPA has indicated it intends to proceed with area designations.

Updated

II. AREA DESIGNATION REQUIREMENTS AND PROCESS

The Clean Air Act states that the establishment of a new standard starts the process to identify areas that violate the standard (Section 107), followed by development of plans (Section 110) and strategies to improve air quality (Section 171). Designations indicate which areas do not attain a standard, while classifications are tied to the severity of air pollution in each area.

A. Designations

Air quality designations are intended to notify the public about air quality in the areas where they live, work, or travel. This is accomplished by designating areas as nonattainment, attainment, and unclassifiable. The nonattainment label has traditionally identified a region with unhealthy air. However, the Clean Air Act also allows areas with clean air to be included in a nonattainment area if they contain emission sources that contribute to unhealthful air elsewhere in the region. Areas that meet the ozone standard are considered to have healthful air and are designated attainment. Areas without adequate ozone monitoring data are designated unclassifiable.

There are 208 ozone monitors across California. ARB and district monitors are located to measure air quality in communities and in areas with air quality problems. U.S. EPA is considering consolidating attainment and unclassified into a single designation.

B. Classifications

Section 172(a)(1) of the Clean Air Act specifies that areas that have been designated nonattainment will be classified for the purpose of applying control requirements and an attainment date, based on the severity of nonattainment. It is not clear what framework will be used to classify areas that violate the eight-hour ozone standard. U.S. EPA was developing an approach different than the one used for the federal one-hour ozone standard, but the Court decision appears to remove that option. We remain committed to work with U.S. EPA to ensure that whatever approach is used, the provisions are workable for California and treat areas impacted by intrastate transport appropriately. We describe the current situation further below.

For the federal one-hour ozone standard, nonattainment areas are classified from marginal to extreme based on measured air quality in the area. This classification scheme is specifically prescribed in Subpart 2 of the Clean Air Act, which governs states' efforts to comply with the one-hour ozone standard. This subpart also ties classifications to planning requirements and mandatory measures that must be implemented in each nonattainment area (like Smog Check and vapor recovery for service stations).

For the eight-hour standard, U.S. EPA had previously proposed implementation under Subpart 1 of the Act, which contains more general requirements for all

nonattainment areas and all pollutants. U.S. EPA identified three potential classifications for areas that violate the eight-hour standard – transitional, traditional, and international transport. Transitional areas were expected to attain the standard largely as a result of regional controls from upwind sources, with minimal local controls. Although the transitional classification was originally designed for Eastern states impacted by interstate transport, U.S. EPA later extended eligibility to areas affected by intrastate transport (including many in California). All other areas not affected by international transport would have been classified as traditional.

In its decision, the Court of Appeals held that U.S. EPA must implement the eight-hour standard under Subpart 2, with the same marginal to extreme classifications used for the one-hour standard. U.S. EPA has not revisited its guidance since the Court ruling, and is challenging this finding.

C. Requirement for State Recommendations

The Clean Air Act, as amended by TEA-21, requires states to submit recommendations on initial area designations and boundaries for the new federal eight-hour ozone standard to U.S. EPA by July 1999. In June 1999, responding to the Court of Appeals decision, U.S. EPA instead asked states to simply submit data indicating which monitors violated the eight-hour ozone standard from 1996 through 1998. In an August 1999 letter to U.S. EPA, we provided these data and indicated we would follow with recommendations on area boundaries. To ensure that California's views are considered when U.S. EPA proceeds with designations, we are proposing area designation recommendations now.

This staff report contains California's recommendations for area designations and the most appropriate nonattainment area boundaries based on currently available monitoring data. If U.S. EPA delays proposing or finalizing these designations and boundaries, we intend to update our recommendations as appropriate, based on more current information.

D. Process to Identify Nonattainment Areas

Area designations are based on air quality data. To determine which air quality monitors do not attain the eight-hour ozone standard, we followed three basic steps:

1. We used district- and ARB-collected data on daily ambient ozone concentrations from 1997 to 1999 from each of the 208 ozone monitoring stations across California. We evaluated the data for completeness as specified in U.S. EPA's Guideline on Data Handling Conventions for the 8-Hour Ozone NAAQS *(U. S. EPA, December 1998)*.

2. For each monitor we calculated the daily maximum eight-hour average ozone concentration from 1997 to 1999, identifying the fourth highest values for each year, and then calculating the arithmetic three-year

average of these values. This is the design value. Appendix A lists the annual fourth highest eight-hour ozone concentrations from 1997 to 1999 and the calculated design value for all ozone monitoring stations with ARB and local district data reported by July 12, 2000.

3. We compared the design value of each monitor to the standard. U.S. EPA rounding convention specifies that monitors having design values that are equal to or higher than 0.085 ppm violate the standard. Monitors with design values that are less than 0.085 ppm meet the standard.

Regions with either no monitoring data or for which the available monitoring data do not meet completeness criteria established by U.S. EPA will be considered unclassifiable at the current time.

E. Criteria for Establishing Boundaries for Nonattainment Areas

Section 107(d)(1)(A) of the Clean Air Act defines a nonattainment area as any area that does not meet or that contributes to nearby areas not meeting the ambient air quality standard. The Act allows states to consider factors such as population density, traffic congestion, commercial development, industrial development, meteorological conditions and pollutant transport in determining nonattainment area boundaries (Section 107 (d)(4)(v)). U.S. EPA's draft guidance echoes the opportunity for states to consider these factors (*U.S. EPA, November 17, 1998, Draft Implementation Guidance for the Revised Ozone and Particulate Matter National Ambient Air Quality Standards and the Regional Haze Program).* Some of the proposed nonattainment areas contain tribal lands. We expect U.S. EPA to address tribal areas when they propose or finalize the area designations.

Our recommendations considered geography and meteorology, metropolitan areas, transportation corridors, the location of emission sources and existing political jurisdictions. Although every nonattainment area is unique, these recommendations were guided by several broad principles:

- In existing one-hour ozone nonattainment areas, we attempted to retain the same nonattainment area boundaries for the eight-hour ozone standard. There were a few exceptions based on special circumstances.

- For new nonattainment areas, one monitor that violates the eight-hour ozone standard would place the county into nonattainment status. This is consistent with the nonattainment area boundaries for the federal one-hour ozone standard. Although we made exceptions for counties transected by distinct geographic barriers (for example, the Sierra Nevada Mountains), the smallest nonattainment areas recommended are generally counties.

- Some adjoining counties are combined into multi-county nonattainment areas because of similarities in the types of emission sources, commute patterns,

the population density of the counties, and/or the types of controls likely to be considered in the future.

F. Process for Developing Recommendations

In developing the boundary recommendations presented in this report, we worked with the local air districts, as well as regional and state transportation agencies. We sought public input through a workshop held on May 13, 1999, providing the opportunity to present both oral and written comments. We have also met with districts through individual meetings and conference calls, as well as monthly meetings or conference calls with the California Air Pollution Control Officers Association planning managers. In addition, we have participated in workshops sponsored by the Federal Highway Administration to discuss nonattainment area recommendations and the impacts on transportation conformity with potential new nonattainment areas. We also met with U.S. EPA Region IX staff to develop support for this proposal and will continue working with them to reflect our recommendations in the final designations.

III. PROPOSED AREA DESIGNATIONS

As shown in Figure 1, most of California will be nonattainment for the eight-hour ozone standard. We are proposing to split this very large region into sixteen distinct nonattainment areas. We are also proposing that seventeen areas be designated attainment. Table 2 presents a summary of the proposed area designations and corresponding boundaries. Following the figure and table, we discuss each of the designation recommendations, including the status of ozone air quality plans for the federal one-hour standard in the proposed eight-hour ozone nonattainment areas.

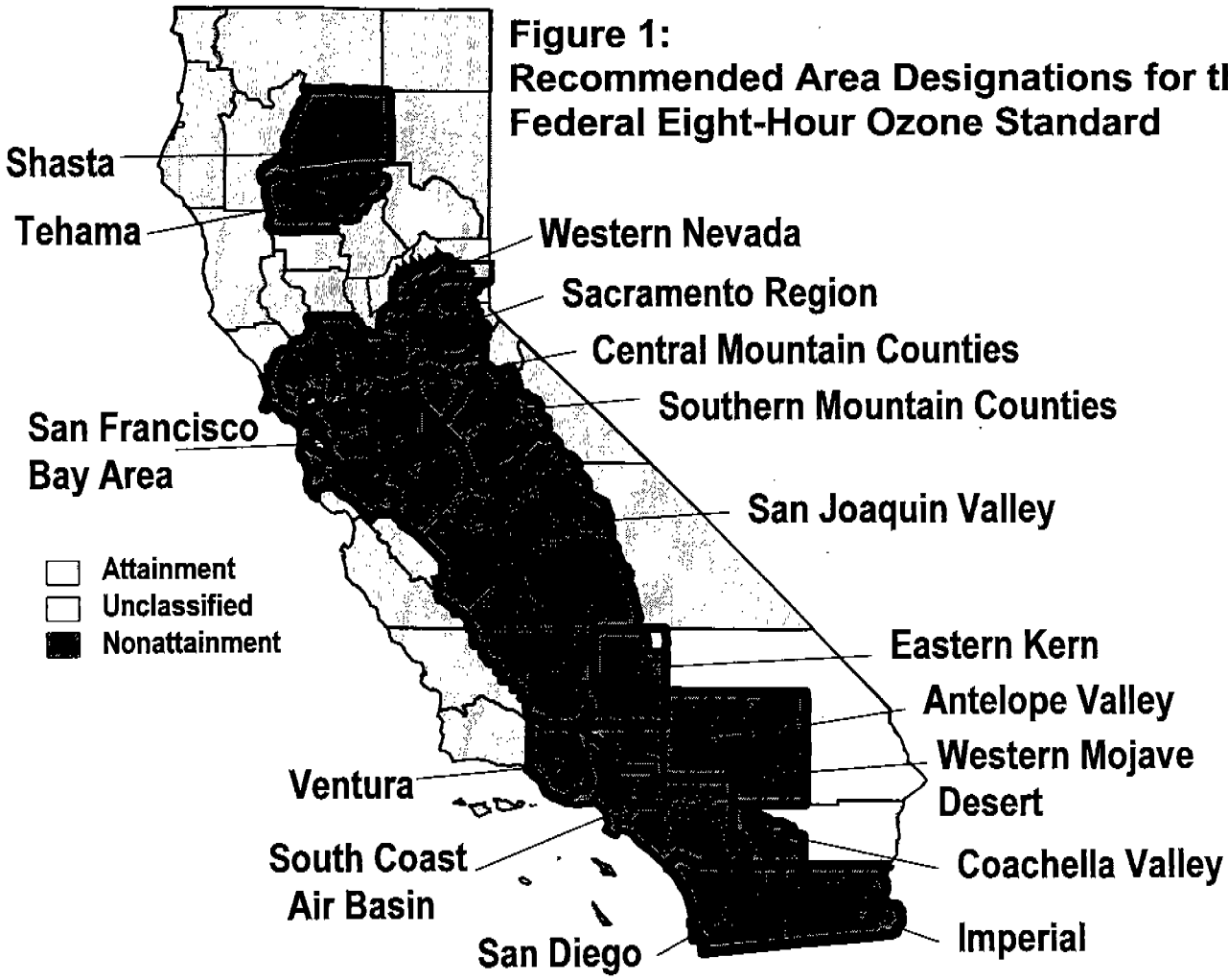


Figure 1: Recommended Area Designations for the Federal Eight-Hour Ozone Standard

Updated

Table 2
Recommended Nonattainment Areas in California for the Federal Eight-Hour Ozone Standard
(based on 1997-1999 air quality data)

	Nonattainment Area	Design Value[1] (ppm)	Area Included
Existing Areas	South Coast Air Basin	0.147	Western Los Angeles (including Catalina and San Clemente Islands), Orange, Southwestern San Bernardino, and Western Riverside Counties
	San Joaquin Valley	0.113	San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and Western Kern Counties
	Eastern Kern County	0.096	Portion of Kern County east of the Tehachapi Mountains except the Indian Wells Valley
	Sacramento Region	0.103	Sacramento, Yolo, Eastern Solano, western portions of El Dorado and Placer
	San Francisco Bay Area	0.086	Marin, Southern Sonoma, Napa, Western Solano, Contra Costa, Alameda, Santa Clara, San Francisco, San Mateo Counties
	Ventura	0.106	Continental portion of Ventura County (excludes Anacapa and San Nicolas Islands)
	Western Mojave Desert	0.118	Central San Bernardino County
	Antelope Valley	0.089	Northeastern Los Angeles County
	Coachella Valley	0.100	Central Riverside County
	San Diego County	0.099	San Diego County
	Imperial County	0.091	Imperial County
New Areas	Shasta County	0.095	Shasta County
	Tehama County	0.086	Tehama County
	Western Nevada County	0.095	Portion of Nevada County west of the crest of the Sierra Nevada
	Central Mountain Counties	0.096	Amador and Calaveras Counties
	Southern Mountain Counties	0.095	Tuolumne and Mariposa Counties

[1]The design value is the three-year average of the annual fourth highest eight-hour ozone concentration at the highest monitor (if less than 0.085 = attainment, if 0.085 ppm or greater = nonattainment)

Updated

A. Nonattainment

1. *South Coast Air Basin*

The South Coast Air Basin nonattainment area would include Western Los Angeles (including Catalina and San Clemente Islands, which are not part of the Channel Islands), Orange, Southwestern San Bernardino, and Western Riverside Counties. This nonattainment area is under the jurisdiction of the South Coast Air Quality Management District. In 1996, ARB extended the boundary of the South Coast Air Basin in northwestern Riverside County to include the 75 square mile Banning Pass area already under the same jurisdiction, due to similarities in geography and meteorology (*ARB, 1996, Proposed Amendments to Divide the Southeastern Desert Air Basin and to Modify the Boundary of the South Coast Air Basin)*. Except for this minor modification, the proposed eight-hour ozone nonattainment area would correspond to the federal one-hour ozone nonattainment area. The formal description of this new boundary is included in Appendix B.

The South Coast violates the federal one-hour ozone standard (with an attainment date of 2010), as well as the State standard. This area adopted a 1999 SIP since approved by ARB and U.S. EPA.

2. *San Joaquin Valley*

The San Joaquin Valley nonattainment area would consist of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and Western Kern Counties. The area is under the jurisdiction of the San Joaquin Valley Unified Air Pollution Control District. The boundaries for this area would coincide with the current air basin/district boundaries and would not include Eastern Kern (unlike the existing nonattainment area for the federal one-hour standard). The 1994 Ozone SIP includes the San Joaquin Valley, which had a 1999 attainment date. Because the San Joaquin Valley did not attain the one-hour ozone standard, U.S. EPA is planning to "bump-up" the area from a serious classification to severe – requiring additional controls while extending the attainment date to 2005. We expect that the area will need to revise its SIP to attain the one-hour standard for submittal to U.S. EPA in early 2002. San Joaquin Valley also violates the State ozone standard.

3. *Eastern Kern County*

Kern County is located in two different air basins, the San Joaquin Valley Air Basin and the Mojave Desert Air Basin. The Tehachapi and Sierra Nevada Mountains separate the eastern and western portions of the County. Western Kern is part of the San Joaquin Valley Unified Air Pollution Control District while Eastern Kern is under the jurisdiction of the Kern County Air Pollution Control District (Kern County APCD). We recommend that Western Kern remain part of the San Joaquin Valley nonattainment area, while Eastern Kern (with the exception of the Indian Wells Valley area) becomes

its own nonattainment area. The Indian Wells Valley is discussed further in the Unclassifiable Areas section of the report.

Eastern Kern prepared its own local strategy, separate from the San Joaquin Valley, as part of the 1994 Ozone SIP. Eastern Kern currently violates the State standard.

4. Sacramento Region

The Sacramento Region nonattainment area boundary would generally correspond to the one-hour ozone nonattainment area, which also violates the State ozone standard. The proposed eight-hour nonattainment area would include portions of two different air basins (Sacramento Valley and Mountain Counties) and five counties (Sacramento, Yolo, Eastern Solano, Western Placer, and Western El Dorado). These areas are all covered by a single transportation planning agency. Placer County is split into two air basins, Sacramento Valley and Mountain Counties. We are proposing not to incorporate the southern tip of Sutter County (which is included in the one-hour nonattainment area) because the growth expected in Southern Sutter County when the one-hour nonattainment areas were finalized has not materialized. The formal definition of the Sacramento Region boundary is included in Appendix B.

The 1994 SIP includes the one-hour ozone nonattainment area (known as the Sacramento Metropolitan Nonattainment Area), which has a 2005 attainment date. The air districts within this area adopted a regional plan as part of the 1994 Ozone SIP and have been coordinating their implementation efforts. The Sacramento Region violates the State standard.

5. San Francisco Bay Area

The San Francisco Bay Area is under the jurisdiction of the Bay Area Air Quality Management District and includes Marin, Southern Sonoma, Napa, Western Solano, Contra Costa, Alameda, Santa Clara, San Francisco, and San Mateo Counties. Sonoma and Solano Counties are each split into two air basins; part of each county is in the San Francisco Bay Area and would be included in this nonattainment area. The eastern portion of Solano would be included in the Sacramento Region nonattainment area. The San Francisco Bay Area is currently nonattainment for the federal one-hour ozone standard (with an attainment date of 2000), as well as the State standard. The entire district would be nonattainment for the eight-hour standard with the same boundary as the one-hour ozone nonattainment area. On July 22, 1999, ARB approved the Bay Area's 1999 SIP. U.S. EPA has not yet acted on this plan.

6. Ventura

Like the existing one-hour ozone nonattainment area, the Ventura eight-hour nonattainment area would include Ventura County, excluding Anacapa and San Nicolas Islands (two of the Channel Islands). The Channel Islands are attainment for the eight-

hour ozone standard, as shown by the monitor located on Santa Rosa Island. Ventura is under the jurisdiction of the Ventura County Air Pollution Control District. Ventura violates the federal one-hour standard and the State standard. The 1994 Ozone SIP includes Ventura County, which has a 2005 attainment date.

7. Western Mojave Desert

The existing Southeast Desert Modified Air Quality Management Area (Southeast Desert Modified AQMA) is designated nonattainment for the one-hour ozone standard and covers a patchwork of counties, districts and air basins. Because of jurisdictional and air basin changes made after 1995, we propose to split this region into three nonattainment areas for the eight-hour standard – Coachella Valley, Antelope Valley, and Western Mojave Desert. We have proposed no changes to the overall territory covered in the one-hour nonattainment area boundary – the area would simply be split along geographic and jurisdictional lines.

The Western Mojave Desert nonattainment area would consist of the San Bernardino County portion of the Southeast Desert Modified AQMA. It is located in the Mojave Desert Air Basin, a geographically distinct area from the Coachella Valley, and is under the jurisdiction of the Mojave Desert Air Pollution Control District. The formal definition of this area is included in Appendix B. Western Mojave violates both federal and State one-hour ozone standards. The 1994 Ozone SIP includes Western Mojave as part of the Southeast Desert Modified AQMA, with an attainment date of 2007.

8. Antelope Valley

The Antelope Valley nonattainment area would cover Northern Los Angeles County. Antelope Valley is located in the Mojave Desert Air Basin and is now under the jurisdiction of the Antelope Valley Air Pollution Control District. The Antelope Valley split from the South Coast Air Quality Management District and was established as a separate air pollution control district in 1997. The formal definition of this area is included in Appendix B. The 1994 Ozone SIP includes Antelope Valley as part of the Southeast Desert Modified AQMA, with an attainment date of 2007. Antelope Valley also violates the State ozone standard.

9. Coachella Valley

The Coachella Valley area is in Riverside County in the Salton Sea Air Basin, under the jurisdiction of the South Coast AQMD. The formal definition of this proposed Coachella Valley nonattainment area is included in Appendix B. Coachella Valley also violates the State ozone standard. Coachella Valley is also part of the Southeast Desert nonattainment area for the federal one-hour ozone standard.

10. San Diego County

Like the existing federal one-hour ozone nonattainment area, the eight-hour area would include all of San Diego County, under the jurisdiction of the San Diego Air Pollution Control District. The 1994 Ozone SIP covered San Diego, with an attainment date of 1999. San Diego achieved one year of "clean data" for the federal one-hour ozone standard in 1999, and has applied for an extension of the attainment date as provided by the Clean Air Act. San Diego also violates the State ozone standard.

11. Imperial County

The Imperial County nonattainment area would correspond to the existing federal one-hour ozone nonattainment area. Imperial County is under the jurisdiction of Imperial County Air Pollution Control District. The SIP to meet the federal one-hour ozone standard in Imperial has been deferred, pending development of a comprehensive, multi-pollutant California-Mexico border plan to improve air quality throughout the region. Extensive technical work to support the border plan is underway. Imperial also violates the State ozone standard.

12. Shasta County

The first new nonattainment area would consist of Shasta County, in the northern portion of the Sacramento Valley. Shasta County is under the jurisdiction of the Shasta County Air Quality Management District. Shasta currently attains the federal one-hour standard, but violates the State standard.

13. Tehama County

Also in the Sacramento Valley, Tehama is under the jurisdiction of the Tehama County Air Pollution Control District. This area attains the federal one-hour standard, but violates the State standard.

14. Western Nevada County

This new nonattainment area would include the western portion of Nevada County, up to the crest of the Sierra Nevada. We propose to split Nevada County into eastern and western portions. These two areas are separated by a major mountain range. In addition, two monitors located in western Nevada County violate the eight-hour standard, while the monitor located in eastern Nevada County attains. The formal definition of the boundary between eastern and western Nevada County is included in Appendix B. Western Nevada County is under the jurisdiction of the Northern Sierra Air Quality Management District. Nevada County also violates the State standard.

Updated

15. Central Mountain Counties

The Central Mountain Counties nonattainment area would cover all of Amador and Calaveras Counties. Each county has a local air district with jurisdiction in that county. Each county is also designated attainment for the federal one-hour standard, although Amador and Calaveras have experienced some exceedances of that standard in recent years. The Central Mountain Counties violate the State ozone standard.

16. Southern Mountain Counties

The Southern Mountain Counties nonattainment area would cover all of Tuolumne and Mariposa Counties. Each county has a local air district with jurisdiction in that county. Each county is also designated attainment for the federal one-hour standard. The Southern Mountain Counties violate the State ozone standard.

B. Attainment Areas

The following areas have ozone monitoring data that meet or are expected to meet the eight-hour standard according to the criteria established by U.S. EPA when complete 1999 data become available *(U.S. EPA, December 1998, Guideline on Data Handling Conventions for the 8-Hour Ozone NAAQS)*. We recommend that these areas be designated attainment (listed from north to south):

- **Northeast Plateau Air Basin**
  (includes Siskiyou, Modoc, and Lassen Counties)
- **North Coast Air Basin**
  (includes Del Norte, Humboldt, Trinity, Mendocino, and Northern Sonoma Counties)
- **Glenn County**
- **Butte County**
- **Lake County**
- **Colusa County**
- **Sutter County**
- **Yuba County**
- **Northern Mountain Counties**
  (includes Plumas and Sierra Counties)
- **Eastern Nevada County**
  (the portion east of the crest of the Sierras -- see Appendix B for detail)
- **Eastern Placer County**
  (the portion located in the Lake Tahoe Air Basin)
- **Eastern El Dorado County**
  (the portion located in the Lake Tahoe Air Basin)
- **North Central Coast Air Basin**
  (includes Monterey, San Benito, and Santa Cruz Counties)
- **Great Basin Valleys Air Basin**
  (includes Alpine, Mono, and Inyo Counties)

- **San Luis Obispo County**
- **Santa Barbara**
  (excludes Channel Islands – San Miguel, Santa Rosa, Santa Cruz, and Santa Barbara Islands)
- **Northern Channel Islands**
  (the islands located in the South Central Coast Air Basin, including San Miguel, Santa Rosa, Santa Cruz, Anacapa, San Nicolas, and Santa Barbara)

C. Unclassifiable Areas

These regions have either no monitoring data or the available monitoring data do not meet completeness criteria established by U.S. EPA, and will be considered unclassifiable at the current time.

1. Indian Wells Valley

The Indian Wells Valley is a desert region in northeastern Kern County that includes the China Lake Naval Air Weapons Station and the town of Ridgecrest. This area is under the jurisdiction of the Kern County APCD. Because the El Paso Mountains separate the Indian Wells Valley from the remainder of Eastern Kern County, we are proposing a separate area. The Indian Wells Valley has one year of clean monitoring data using a Federal Reference Monitor. We have proposed designating the Indian Wells Valley an unclassifiable area until three years of complete data are available. The formal boundary definition is included in Appendix B.

2. Eastern Riverside and Eastern San Bernardino Counties

Riverside and San Bernardino Counties are two of the largest counties in the country. The far western portion of each county is urbanized and part of the South Coast nonattainment area, while the middle portions of the counties are less populated and more impacted by transport from the upwind urban area. The middle portion of the counties are part of the Southeast Desert nonattainment area under the one-hour federal standard, and we have proposed designating these areas nonattainment under the eight-hour standard, retaining identical boundaries.

There are little data in the far eastern portion of Riverside and San Bernardino Counties to indicate the extent to which unhealthy air is transported into the desert. At the current time, there are no Federal Reference Method (FRM) ozone monitors operating east of Twenty-Nine Palms. We understand that proponents of a landfill project in the Eagle Mountain area outside the southeastern border of Joshua Tree National Park will install a FRM ozone monitor before the end of this year. In conjunction with the affected districts, ARB will also initiate special purpose monitoring in the eastern desert to determine the extent of ozone pollution in the area. If these air quality data indicate that the eastern desert does record violations of the eight-hour

ozone standard, we will work with the Park, the affected air districts, and U.S. EPA to expand the nonattainment areas appropriately.

D. Issues

1. *Sutter-Yuba Area*

ARB and local air district staff agree that the Sutter-Yuba Area (under the jurisdiction of the Feather River Air Quality Management District) should be considered attainment for the eight-hour standard. Air quality monitors intended to measure population exposure in Sutter and Yuba Counties are located in Pleasant Grove and Yuba City (at elevations of 160 feet and 60 feet respectively). These monitors show attainment of the eight-hour ozone standard. However, a special purpose monitor located at the top of Sutter Buttes to detect pollutant transport at high elevations, measures ozone levels aloft that exceed the standard. This monitor is located at over 2,000 feet, on top of an isolated mountain on private property in the middle of the Sacramento Valley. We believe this situation is no different than installing a monitor on top of an elevated tower to measure transport aloft. U.S. EPA currently excludes monitors atop towers from designations. (The Tuscan Buttes monitor in Tehama County has the same issue, but the monitor intended to measure population exposure in that county also violates the standard, so we have included Tehama as a nonattainment area.)

We believe, and have recommended, that all of Sutter and Yuba Counties should be designated attainment. However, U.S. EPA maintains that data from the Sutter Buttes monitor must be used for area designations. In discussions with U.S. EPA management in Region IX, they have been receptive to limiting the size of the nonattainment area to just the 2,000 foot elevation represented by the Sutter Buttes monitor. This limited nonattainment area would not be subject to control requirements, and the local area would not be required to prepare a SIP. Instead, the SIP for the upwind area would include a regional modeling demonstration showing that this elevated site will attain the standard as a result of upwind controls and the comprehensive statewide program.

2. *Central Nevada County*

The Northern Sierra AQMD requested that we split Nevada County into Eastern and Western portions. Based on air quality data, and geographic considerations, we agreed to split the County at the crest of the Sierra Nevada. The Northern Sierra AQMD also asked that we move the proposed nonattainment boundary further west to below the Sierra crest, based on extrapolated ozone concentrations from the White Cloud monitor in Central Nevada. We did not concur with this request. There is no geographic barrier separating Central Nevada, and we do not have meteorological data that would rule out the possibility that violations may extend further east. In fact, under up-slope transport conditions, high ozone concentrations could occur east of White Cloud.

3. Joshua Tree National Park

The National Park Service has requested that all of Joshua Tree National Park (located east of Coachella Valley) be included in a nonattainment area. The Park bases this request on its use of passive oxidant monitors within the Park boundary. The passive oxidant monitor is not designed to measure ozone over an eight-hour period. The monitor is not ozone specific, is usually left in place for a week, and air flow is not controlled (which is needed to determine ambient air concentrations). Passive oxidant monitoring results cannot be compared to the federal ozone standard, and are not appropriate for designations. The special purpose ozone monitoring for eastern Riverside and eastern San Bernardino Counties discussed above will also determine whether violations of the eight-hour standard are occurring in the easternmost portions of the Park.

IV. IMPLEMENTING THE EIGHT-HOUR OZONE STANDARD

The primary goal of ambient air quality standards is to protect public health. These standards establish the air quality goals and are different from the emission standards that we use to control individual pollution sources like power plants or automobiles. In order to ensure steady progress toward attainment of air quality standards, states need to develop and implement clean air plans and control measures.

To implement the eight-hour standard, California will build on our existing clean air plans. In 1994, we prepared and submitted to U.S. EPA a comprehensive and far-reaching SIP to achieve the one-hour federal ozone standard. Areas covered in the 1994 SIP include: South Coast Air Basin, Southeast Desert Modified AQMA, Sacramento Metropolitan Area, Ventura County, San Joaquin Valley, and San Diego County. The 1994 Ozone SIP relies on emission reductions from a broad range of federal and state control measures – both already adopted and expected in the future. These statewide strategies are complemented by local rules to reduce emissions primarily from stationary and area sources. The rules and commitments needed to attain the federal one-hour ozone standard by the statutory attainment date are included in the 1994 ozone SIP.

Additional ozone SIPs address the San Francisco Bay Area, Santa Barbara County, Monterey Bay Area, Yuba City Area (Sutter and Yuba Counties) and the Chico Area (Butte County).

We intend to update the State's strategy for reducing emissions from mobile sources, consumer products, and pesticides in 2001, based on the most current air quality data, emission inventories, and modeling. We will include this new statewide strategy in a revision to the South Coast's one-hour ozone SIP in 2001, a new one-hour ozone SIP for the San Joaquin Valley in 2002, and local California Clean Air Act plans in 2003 – as well as in the eight-hour ozone SIPs.

A. Implementation Guidance

Since before the eight-hour standard was finalized, ARB and California air districts have worked with U.S. EPA to develop policies to sensibly implement the eight-hour ozone standard. In 1998, U.S. EPA staff distributed draft guidance discussing the Agency's expectations for a variety of implementation issues including area boundaries, attainment dates, and control requirements (*U.S. EPA, 1998, Draft Implementation Guidance for the Revised Ground-Level Ozone and Particulate Matter National Ambient Air Quality Standards and a Regional Haze Program*). Although the finalization of this guidance has been placed on hold pending the outcome of the legal proceedings, we believe the principles outlined continue to be sound and should guide the eventual implementation of the eight-hour ozone standard.

As discussed in Chapter II, Section B (Classifications), U.S. EPA proposed to implement the eight-hour ozone standard under the more flexible provisions of

Subpart 1 of the Act. However, the Court questioned this interpretation, contending that any ozone standard must be implemented under the more prescriptive Subpart 2. Because the classification scheme in Subpart 2 is designed specifically for the pre-existing federal one-hour ozone standard, it is unclear how U.S. EPA would implement the eight-hour standard under that Subpart. U.S. EPA included this issue in its petition to the Supreme Court.

The key issues we raised in the development of U.S. EPA's implementation guidance are summarized below.

1. Attainment Dates

The ability to establish appropriate attainment dates for the eight-hour ozone standard, based on area-specific factors, has been the most critical implementation issue for California. U.S. EPA's draft guidance allows states to link the attainment dates for downwind areas to the attainment dates for the upwind pollution contributors (even if both areas are in the same state) – acknowledging that it is impractical to expect transport-impacted areas to attain air quality standards before the emissions are significantly reduced in the upwind area. The other key issue is the need for additional time for areas to attain the eight-hour standard, beyond the attainment date for the one-hour standard. In the last draft of the guidance, U.S. EPA indicated that the agency would formally establish attainment dates for each area, in the rulemaking on the area's SIP, based on the facts and circumstances specific to each area. We supported this case-by-case approach and urged U.S. EPA to consider the following factors in evaluating attainment dates in SIPs:

- the severity of an area's pollution problem;
- the existing level of control and the time needed to realize the full benefits of previously adopted programs;
- the availability of technically feasible, cost-effective control strategies;
- the need for advanced technologies; and
- the need to make expeditious and steady progress toward clean air.

2. Simplified NSR and Conformity for Small, Predominantly Rural Areas Significantly Affected by Pollutant Transport

Many of the new nonattainment areas in the State are small, predominantly rural counties, which are significantly affected by pollutant transport from upwind urban areas. These areas do not currently have NSR or conformity programs in place. U.S. EPA recognized the need to provide some relief from the full traditional programs for Eastern states in similar situations. We have previously urged U.S. EPA to establish low hurdle NSR provisions for these new areas, based on the requirements for marginal one-hour nonattainment areas -- a major source threshold of 100 tons per year, the Lowest Achievable Emissions Rates; and offsets at a 1:1 ratio. For transportation conformity, U.S. EPA was developing a simplified program for transitional

nonattainment areas -- we emphasized the need for predominantly rural areas in California to be able to take advantage of that same program.

3. Credit for Upwind Reductions

The draft guidance specifically permits downwind areas to take credit for emission reductions in upwind areas when assessing progress toward meeting the standard and in attainment demonstrations. California used this approach in developing the attainment strategy for the Southeast Desert in the 1994 Ozone SIP. Because this sparsely populated desert region is significantly affected by transport from the South Coast, the Desert's attainment and progress demonstrations for the one-hour ozone standard rely heavily on emission reductions in the South Coast. We expect the same relationship to exist for the small, predominantly rural counties in California that are impacted by transport.

4. Mandatory Measures

For the one-hour ozone standard, the Clean Air Act requires implementation of specific mandatory control measures, based on the classification of the nonattainment area. We have two issues with using the same approach for the eight-hour standard. First, the one-size-fits-all solution never does fit California well -- the success of our air quality program depends on being able to pursue the most efficient strategies to reduce emissions and air pollution in California. Second, this approach does not appropriately deal with areas where the overwhelming cause of air pollution is transport from upwind regions. U.S. EPA's draft guidance concurs with California's recommendations that each area specify the most appropriate mix of strategies, with mandatory measures defined as whatever controls the area needs to attain.

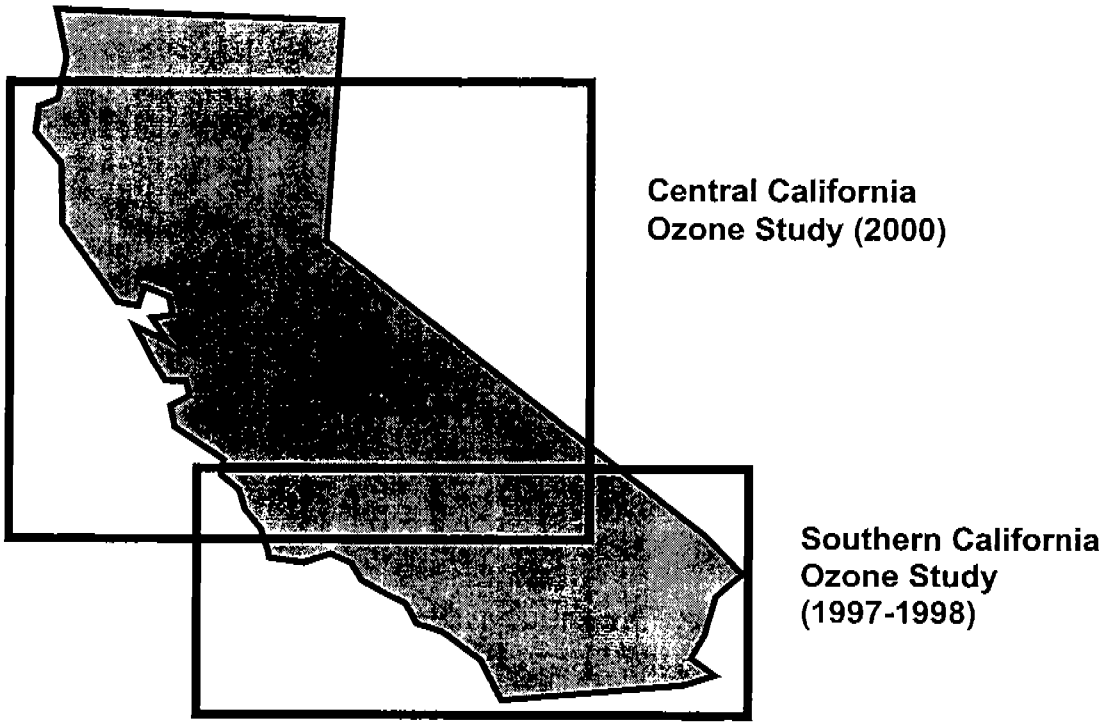
B. Major Regional Ozone Studies in California

We will rely on two new air quality field studies to provide the technical underpinnings of the eight-hour ozone SIP. The Southern California Ozone Study (SCOS) and the Central California Ozone Study (CCOS) will supply abundant new data to significantly increase our understanding of pollutant transport throughout the State. The data from these field studies will be used to refine our photochemical ozone models and expand the modeling domains to cover virtually the entire State within two modeling domains (see Figure 2). The modeling will be used to develop California Clean Air Act plans with attainment demonstrations in 2003, as well as the eight-hour ozone SIPs. We expect the new SIPs to link together the local plans within each of these two regions in California.

- The CCOS modeling domain spans an area from north of Redding to south of the Tehachapi Mountains. The domain covers the entire Central California area and portions of Nevada and the Pacific Ocean. This field study is scheduled for Summer 2000, with measurements focused in Central and Northern California.

- The SCOS modeling domain goes from just north of Kern and San Luis Obispo Counties to Rosarito in Mexico. The intensive field measurements focused on the South Coast Air Basin, in Summer 1997 with some monitoring continuing through 1998.

Figure 2
Modeling Domains for Regional Ozone Studies in California



APPENDIX A

1997 TO 1999 EIGHT-HOUR OZONE DATA BY SITE

Updated

Basin Name	County Name	Site Name		1997	1998	1999	Avg.
Great Basin Valleys	Inyo	Death Valley Natl Monument	4th Max	0.077	0.082	0.079	**0.079**
			Valid Days	333	334	345	
	Mono	Mammoth Lakes-Gateway HC	4th Max	0.076	0.068		**0.072**
			Valid Days	204	111		
Lake County	Lake	Lakeport-Lakeport Blvd	4th Max	0.058	0.055	0.07	**0.061**
			Valid Days	352	359	360	
Lake Tahoe	El Dorado	South Lake Tahoe-Sandy Way	4th Max	0.066	0.073	0.068	**0.069**
			Valid Days	360	359	362	
Mojave Desert	Kern	Mojave-923 Poole Street	4th Max	0.092	0.102	0.096	**0.096**
			Valid Days	353	359	354	
	Los Angeles	Lancaster-W Pondera Street	4th Max	0.09	0.103	0.076	**0.089**
			Valid Days	331	349	357	
	San Bernardino	Barstow	4th Max	0.091	0.086	0.093	**0.090**
			Valid Days	328	319	353	
		Hesperia-Olive Street	4th Max	0.11	0.121	0.102	**0.111**
			Valid Days	361	350	346	
		Joshua Tree-National Monument	4th Max	0.117	0.11	0.101	**0.109**
			Valid Days	358	347	359	
		Phelan-Beekley Road & Phelan Road	4th Max	0.118	0.131	0.106	**0.118**
			Valid Days	362	361	353	
		Trona-Athol	4th Max	0.063			**0.063**
			Valid Days	81			
		Trona-Athol and Telegraph	4th Max	0.077	0.085	0.082	**0.081**
			Valid Days	264	340	356	
		Twentynine Palms-Adobe Road #2	4th Max	0.092	0.094	0.091	**0.092**
			Valid Days	331	361	361	
		Victorville-Armagosa Road	4th Max	0.104	0.124	0.094	**0.107**
			Valid Days	350	353	342	
Mountain Counties	Amador	Jackson-Clinton Road	4th Max	0.084	0.107	0.097	**0.096**
			Valid Days	349	325	363	
	Calaveras	San Andreas-Gold Strike Road	4th Max	0.085	0.105	0.099	**0.096**
			Valid Days	359	362	362	
	El Dorado	Cool-Highway 193	4th Max	0.092	0.115	0.104	**0.103**
			Valid Days	181	180	205	

Updated

Basin Name	County Name	Site Name		1997	1998	1999	Avg.
Mountain Counties (cont.)	El Dorado (cont.)	Placerville-Gold Nugget Way	4th Max	0.09	0.102	0.104	**0.098**
			Valid Days	362	356	358	
	Mariposa	Jerseydale - 6440 Jerseydale	4th Max	0.093	0.097	0.096	**0.095**
			Valid Days	183	183	183	
		Yosemite Natl Park-Turtleback Dome	4th Max	0.081	0.094	0.085	**0.086**
			Valid Days	338	340	332	
	Nevada	Grass Valley-Litton Building	4th Max	0.096	0.094	0.096	**0.095**
			Valid Days	362	364	341	
		Truckee-Fire Station	4th Max	0.073	0.063	0.064	**0.066**
			Valid Days	350	292	226	
		White Cloud Mountain	4th Max	0.083	0.093	0.09	**0.088**
			Valid Days	182	175	192	
	Placer	Colfax-City Hall	4th Max	0.077	0.093	0.089	**0.086**
			Valid Days	363	354	333	
	Plumas	Quincy-N Church Street	4th Max	0.041	0.069	0.072	**0.060**
			Valid Days	47	315	358	
	Tuolumne	Five Mile Learning Center	4th Max	0.085	0.097	0.096	**0.092**
			Valid Days	340	183	266	
		Sonora-Barretta Street	4th Max	0.086	0.1	0.087	**0.091**
			Valid Days	361	348	361	
North Central Coast	Monterey	Carmel Valley-Ford Road	4th Max	0.061	0.057	0.063	**0.060**
			Valid Days	362	361	362	
		King City-750 Metz Road	4th Max	0.059	0.067	0.061	**0.062**
			Valid Days	363	341	360	
		Monterey-Silver Cloud Court	4th Max	0.059	0.052	0.059	**0.056**
			Valid Days	358	349	358	
		Salinas-Natividad Road #2	4th Max	0.045	0.046	0.054	**0.048**
			Valid Days	337	358	357	
	San Benito	Hollister-Fairview Road	4th Max	0.066	0.077	0.073	**0.072**
			Valid Days	362	364	350	
		Pinnacles National Monument	4th Max	0.076	0.088	0.082	**0.082**
			Valid Days	347	352	343	
	Santa Cruz	Davenport	4th Max	0.051	0.052	0.06	**0.054**
			Valid Days	340	329	343	

Basin Name	County Name	Site Name		1997	1998	1999	Avg.
North Central Coast (cont.)	Santa Cruz (cont.)	Santa Cruz-2544 Soquel Avenue	4th Max	0.056	0.058	0.061	**0.058**
			Valid Days	353	351	353	
		Scotts Valley-Scotts Valley Drive	4th Max	0.063	0.068	0.067	**0.066**
			Valid Days	360	354	360	
		Watsonville-Airport Boulevard	4th Max	0.056	0.056	0.059	**0.057**
			Valid Days	359	352	355	
North Coast	Mendocino	Ukiah-E Gobbi Street	4th Max	0.054	0.06	0.061	**0.058**
			Valid Days	357	357	358	
		Willits-899 S Main Street	4th Max	0.044	0.052	0.046	**0.047**
			Valid Days	354	358	362	
	Sonoma	Healdsburg-Municipal Airport	4th Max	0.081	0.086	0.081	**0.082**
			Valid Days	349	342	348	
Northeast Plateau	Siskiyou	Yreka-Foothill Drive	4th Max	0.059	0.066	0.062	**0.062**
			Valid Days	270	346	360	
Sacramento Valley	Butte	Chico-Manzanita Avenue	4th Max	0.066	0.078	0.087	**0.077**
			Valid Days	361	360	360	
	Colusa	Colusa-Sunrise Blvd	4th Max	0.073	0.078	0.077	**0.076**
			Valid Days	362	361	363	
	Glenn	Willows-E Laurel Street	4th Max	0.077	0.076	0.081	**0.078**
			Valid Days	306	358	363	
	Placer	Auburn-Dewitt-C Avenue	4th Max	0.083	0.106	0.102	**0.097**
			Valid Days	329	171	272	
		Rocklin-Rocklin Road	4th Max	0.085	0.098	0.093	**0.092**
			Valid Days	357	361	364	
		Roseville-N Sunrise Blvd	4th Max	0.079	0.099	0.089	**0.089**
			Valid Days	361	362	358	
	Sacramento	Elk Grove-Bruceville Road	4th Max	0.084	0.086	0.095	**0.088**
			Valid Days	341	319	354	
		Folsom-Natoma Street	4th Max	0.091	0.113	0.101	**0.101**
			Valid Days	349	352	323	
		North Highlands-Blackfoot Way	4th Max	0.082	0.095	0.085	**0.087**
			Valid Days	334	351	351	
		Sacramento-3801 Airport Road	4th Max		0.088	0.082	**0.085**
			Valid Days		183	343	

Updated

Basin Name	County Name	Site Name		1997	1998	1999	Avg.
Sacramento Valley (cont.)	Sacramento (cont.)	Sacramento-Del Paso Manor	4th Max	0.083	0.098	0.094	**0.091**
			Valid Days	321	325	328	
		Sacramento-Earhart Drive	4th Max	0.077			**0.077**
			Valid Days	285			
		Sacramento-T Street	4th Max	0.07	0.085	0.086	**0.080**
			Valid Days	358	363	361	
		Sloughhouse	4th Max	0.084	0.111	0.106	**0.100**
			Valid Days	92	212	212	
	Shasta	Anderson-North Street	4th Max	0.081	0.092	0.082	**0.085**
			Valid Days	182	244	337	
		Lassen Volcanic Natl Park-Manzanita Lake	4th Max	0.067	0.078	0.084	**0.076**
			Valid Days	346	355	330	
		Redding-Health Dept Roof	4th Max	0.086	0.105	0.094	**0.095**
			Valid Days	181	243	323	
	Solano	Vacaville-Elmira Road	4th Max	0.071	0.096	0.088	**0.085**
			Valid Days	363	333	352	
	Sutter	Pleasant Grove-4 miles SW	4th Max	0.074	0.085	0.084	**0.081**
			Valid Days	357	359	361	
		Yuba City-Almond Street	4th Max	0.072	0.088	0.083	**0.081**
			Valid Days	358	361	359	
	Tehama	Red Bluff-Oak Street	4th Max	0.076	0.098	0.086	**0.086**
			Valid Days	352	347	328	
	Yolo	Davis-UCD Campus	4th Max	0.068	0.087	0.088	**0.081**
			Valid Days	360	358	364	
		Woodland-Gibson Road	4th Max		0.087	0.086	**0.086**
			Valid Days		210	355	
		Woodland-Sutter Street	4th Max	0.071			**0.071**
			Valid Days	357			
Salton Sea	Imperial	Calexico-East	4th Max	0.079	0.098	0.089	**0.088**
			Valid Days	325	352	360	
		Calexico-Ethel Street	4th Max	0.093	0.092	0.089	**0.091**
			Valid Days	361	360	363	
		Calexico-Grant Street	4th Max	0.105	0.051		**0.078**
			Valid Days	327	101		

Basin Name	County Name	Site Name		1997	1998	1999	Avg.
Salton Sea (cont.)	Imperial (cont.)	El Centro-9th Street	4th Max	0.096	0.08		**0.088**
			Valid Days	354	327		
		Niland-English Road	4th Max	0.067	0.088		**0.077**
			Valid Days	38	305		
		Westmorland-W 1st Street	4th Max		0.091		**0.091**
			Valid Days		214		
	Riverside	Indio-Jackson Street	4th Max	0.075	0.095	0.088	**0.086**
			Valid Days	281	362	359	
		Palm Springs-Fire Station	4th Max	0.1	0.107	0.094	**0.100**
			Valid Days	338	350	350	
San Diego	San Diego	Alpine-Victoria Drive	4th Max	0.093	0.114	0.092	**0.099**
			Valid Days	357	352	354	
		Camp Pendleton	4th Max	0.083	0.088	0.076	**0.082**
			Valid Days	267	350	356	
		Chula Vista	4th Max	0.081	0.075	0.07	**0.075**
			Valid Days	352	354	346	
		Del Mar-Mira Costa College	4th Max	0.079	0.073	0.07	**0.074**
			Valid Days	354	362	354	
		El Cajon-Redwood Avenue	4th Max	0.076	0.086	0.07	**0.077**
			Valid Days	352	351	347	
		Escondido-E Valley Parkway	4th Max	0.083	0.087	0.07	**0.080**
			Valid Days	360	297	352	
		Oceanside-Mission Avenue	4th Max	0.073	0.075	0.07	**0.072**
			Valid Days	361	359	352	
		Otay Mesa-Paseo International	4th Max	0.079	0.067	0.063	**0.069**
			Valid Days	361	357	354	
		San Diego-12th Avenue	4th Max	0.072	0.065	0.064	**0.067**
			Valid Days	352	345	346	
		San Diego-Logan Avenue	4th Max			0.047	**0.047**
			Valid Days			71	
		San Diego-Overland Avenue	4th Max	0.074	0.073	0.073	**0.073**
			Valid Days	357	355	342	
San Francisco Bay Area	Alameda	Fremont-Chapel Way	4th Max	0.057	0.069	0.068	**0.064**
			Valid Days	354	354	360	

Basin Name	County Name	Site Name		1997	1998	1999	Avg.
San Francisco Bay Area (cont.)	Alameda (cont.)	Hayward-La Mesa	4th Max	0.062	0.069	0.078	**0.069**
			Valid Days	344	242	244	
		Livermore-Old 1st Street	4th Max	0.072	0.096	0.091	**0.086**
			Valid Days	352	357	358	
		Oakland-Alice Street	4th Max	0.039	0.036	0.045	**0.040**
			Valid Days	363	284	357	
		San Leandro-County Hospital	4th Max	0.062	0.054	0.069	**0.061**
			Valid Days	344	243	241	
	Contra Costa	Bethel Island Road	4th Max	0.065	0.086	0.089	**0.080**
			Valid Days	361	360	361	
		Concord-2975 Treat Blvd	4th Max	0.072	0.088	0.093	**0.084**
			Valid Days	359	359	360	
		Pittsburg-10th Street	4th Max	0.059	0.071	0.074	**0.068**
			Valid Days	360	360	360	
		Richmond-13th Street	4th Max	0.043			**0.043**
			Valid Days	117			
		San Pablo-El Portal	4th Max	0.056	0.05	0.058	**0.054**
			Valid Days	227	359	354	
	Marin	San Rafael	4th Max	0.048	0.047	0.059	**0.051**
			Valid Days	357	357	354	
	Napa	Napa-Jefferson Avenue	4th Max	0.055	0.069	0.078	**0.067**
			Valid Days	356	353	355	
	San Francisco	San Francisco-Arkansas Street	4th Max	0.042	0.042	0.05	**0.044**
			Valid Days	359	360	357	
	San Mateo	Redwood City	4th Max	0.053	0.047	0.047	**0.049**
			Valid Days	356	350	359	
	Santa Clara	Gilroy-9th Street	4th Max	0.07	0.085	0.073	**0.076**
			Valid Days	338	236	239	
		Los Gatos	4th Max	0.062	0.078	0.074	**0.071**
			Valid Days	342	242	239	
		Mountain View-Cuesta	4th Max	0.06	0.06	0.07	**0.063**
			Valid Days	337	234	240	
		San Jose-4th Street	4th Max	0.057	0.07	0.069	**0.065**
			Valid Days	357	350	356	

Basin Name	County Name	Site Name		1997	1998	1999	Avg.
San Francisco Bay Area (cont.)	Santa Clara (cont.)	San Jose-935 Piedmont Road	4th Max	0.053	0.065	0.067	**0.061**
			Valid Days	333	244	241	
		San Martin-Murphy Avenue	4th Max	0.07	0.094	0.078	**0.080**
			Valid Days	334	243	242	
	Solano	Fairfield-Bay Area AQMD	4th Max	0.069	0.083	0.091	**0.081**
			Valid Days	335	243	242	
		Vallejo-304 Tuolumne Street	4th Max	0.056	0.06	0.072	**0.062**
			Valid Days	360	360	357	
	Sonoma	Santa Rosa-5th Street	4th Max	0.047	0.051	0.064	**0.054**
			Valid Days	353	346	359	
San Joaquin Valley	Fresno	Clovis-N Villa Avenue	4th Max	0.115	0.121	0.104	**0.113**
			Valid Days	353	358	357	
		Fresno-1st Street	4th Max	0.098	0.117	0.104	**0.106**
			Valid Days	359	362	358	
		Fresno-Drummond Street	4th Max	0.092	0.113	0.102	**0.102**
			Valid Days	360	352	363	
		Fresno-Sierra Skypark #2	4th Max	0.097	0.122	0.099	**0.106**
			Valid Days	360	359	346	
		Parlier	4th Max	0.106	0.108	0.105	**0.106**
			Valid Days	352	358	345	
		Shaver Lake - Perimeter Road	4th Max	0.092	0.092	0.091	**0.091**
			Valid Days	181	179	182	
	Kern	Arvin-Bear Mountain Blvd	4th Max	0.105	0.114	0.109	**0.109**
			Valid Days	361	361	359	
		Bakersfield-5558 California Avenue	4th Max	0.097	0.103	0.099	**0.099**
			Valid Days	356	342	350	
		Bakersfield-Golden State Highway	4th Max	0.09	0.105		**0.097**
			Valid Days	354	323		
		Edison	4th Max	0.105	0.124	0.105	**0.111**
			Valid Days	359	361	359	
		Maricopa-Stanislaus Street	4th Max	0.097	0.123		**0.110**
			Valid Days	351	336		
		Oildale-3311 Manor Street	4th Max	0.088	0.109	0.092	**0.096**
			Valid Days	344	339	350	

Basin Name	County Name	Site Name		1997	1998	1999	Avg.
San Joaquin Valley (cont.)	Kern (cont.)	Shafter-Walker Street	4th Max	0.085	0.101	0.094	**0.093**
			Valid Days	352	349	363	
	Kings	Hanford-S Irwin Street	4th Max	0.097	0.104	0.098	**0.099**
			Valid Days	360	354	357	
	Madera	Madera-Pump Yard	4th Max	0.07	0.093	0.088	**0.083**
			Valid Days	101	359	354	
	Merced	Merced-S Coffee Avenue	4th Max	0.074	0.112	0.105	**0.097**
			Valid Days	360	350	361	
	San Joaquin	Stockton-E Mariposa	4th Max	0.074	0.083	0.088	**0.081**
			Valid Days	359	359	363	
		Stockton-Hazelton Street	4th Max	0.071	0.086	0.085	**0.080**
			Valid Days	360	360	357	
		Tracy-24371 Patterson Pass Road	4th Max	0.079	0.089	0.094	**0.087**
			Valid Days	349	358	359	
	Stanislaus	Modesto-14th Street	4th Max	0.082	0.098	0.087	**0.089**
			Valid Days	361	213	361	
		Modesto-Rover 14th Street	4th Max		0.061		**0.061**
			Valid Days		136		
		Turlock-S Minaret Street	4th Max	0.089	0.107	0.09	**0.095**
			Valid Days	329	359	356	
	Tulare	Sequoia & Kings Canyon Np	4th Max			0.105	**0.105**
			Valid Days			108	
		Sequoia National Park-Lookout Point	4th Max	0.101	0.099	0.108	**0.102**
			Valid Days	254	257	302	
		Sequoia Natl Park-Lower Kaweah	4th Max	0.097	0.094	0.097	**0.096**
			Valid Days	346	300	286	
		Visalia-N Church Street	4th Max	0.095	0.109	0.1	**0.101**
			Valid Days	360	355	330	
South Central Coast	San Luis Obispo	Atascadero-Lewis Avenue	4th Max	0.069	0.078	0.075	**0.074**
			Valid Days	355	364	350	
		Grover City-Lesage Drive	4th Max	0.06	0.054	0.061	**0.058**
			Valid Days	358	347	344	
		Morro Bay	4th Max	0.052	0.052	0.058	**0.054**
			Valid Days	359	365	364	

Basin Name	County Name	Site Name		1997	1998	1999	Avg.
South Central Coast (cont.)	San Luis Obispo (cont.)	Nipomo-Guadalupe Road	4th Max	0.056	0.058	0.06	**0.058**
			Valid Days	358	347	359	
		Nipomo-Regional Park	4th Max		0.046	0.062	**0.054**
			Valid Days		61	351	
		Paso Robles-Santa Fe Avenue	4th Max	0.073	0.098	0.077	**0.082**
			Valid Days	360	348	358	
		San Luis Obispo-Marsh Street	4th Max	0.056	0.053	0.056	**0.055**
			Valid Days	362	362	360	
	Santa Barbara	Carpinteria-Gobernador Road	4th Max	0.073	0.069	0.065	**0.069**
			Valid Days	354	356	362	
		El Capitan Beach	4th Max	0.068	0.062	0.063	**0.064**
			Valid Days	358	351	359	
		Exxon Site 10-UCSB West Campus	4th Max	0.076	0.061		**0.068**
			Valid Days	340	191		
		Gaviota-East	4th Max	0.069	0.051		**0.060**
			Valid Days	358	85		
		Gaviota-GTC Site B	4th Max	0.066	0.063	0.063	**0.064**
			Valid Days	359	356	347	
		Gaviota-GTC Site C	4th Max	0.072	0.058		**0.065**
			Valid Days	362	116		
		Gaviota-West	4th Max	0.069	0.048		**0.058**
			Valid Days	351	83		
		Goleta-Fairview	4th Max	0.074	0.063	0.061	**0.066**
			Valid Days	360	349	361	
		Las Flores Canyon #1	4th Max	0.08	0.082	0.074	**0.078**
			Valid Days	321	331	358	
		Lompoc-HS&P	4th Max	0.071	0.068	0.072	**0.070**
			Valid Days	360	354	358	
		Lompoc-S H Street	4th Max	0.064	0.057	0.063	**0.061**
			Valid Days	351	360	358	
		Paradise Road-Los Padres National Forest	4th Max	0.081	0.086	0.079	**0.082**
			Valid Days	362	361	360	
		Point Conception-Lighthouse	4th Max	0.061	0.05		**0.055**
			Valid Days	318	75		

Basin Name	County Name	Site Name		1997	1998	1999	Avg.
South Central Coast (cont.)	Santa Barbara (cont.)	Santa Barbara-W Carillo Street	4th Max	0.066	0.062	0.062	**0.063**
			Valid Days	352	361	362	
		Santa Maria-Broadway	4th Max	0.058	0.049	0.052	**0.053**
			Valid Days	331	360	338	
		Santa Rosa Island	4th Max	0.064	0.066	0.069	**0.066**
			Valid Days	358	352	308	
		Santa Ynez-Airport Road	4th Max	0.07	0.067	0.066	**0.067**
			Valid Days	357	349	360	
		Vandenberg Air Force Base-STS Power	4th Max	0.064	0.066	0.067	**0.065**
			Valid Days	344	361	364	
		Vandenberg Air Force Base-Watt Road	4th Max	0.043			**0.043**
			Valid Days	59			
	Ventura	El Rio-Rio Mesa School #2	4th Max	0.074	0.072	0.065	**0.070**
			Valid Days	359	351	355	
		Ojai-Ojai Avenue	4th Max	0.089	0.091	0.085	**0.088**
			Valid Days	361	361	356	
		Piru-2 miles SW	4th Max	0.086	0.091	0.076	**0.084**
			Valid Days	358	360	364	
		Simi Valley-Cochran Street	4th Max	0.105	0.113	0.102	**0.106**
			Valid Days	362	363	359	
		Thousand Oaks-Moorpark Road	4th Max	0.087	0.095	0.087	**0.089**
			Valid Days	362	358	362	
		Ventura County-W Casitas Pass Road	4th Max	0.085	0.081	0.082	**0.082**
			Valid Days	358	357	359	
		Ventura-Emma Wood State Beach	4th Max	0.075	0.071	0.066	**0.070**
			Valid Days	355	360	348	
South Coast	Los Angeles	Azusa	4th Max	0.112	0.124	0.095	**0.110**
			Valid Days	353	354	341	
		Burbank-W Palm Avenue	4th Max	0.095	0.101	0.082	**0.092**
			Valid Days	349	352	355	
		Glendora-Laurel	4th Max	0.12	0.14	0.095	**0.118**
			Valid Days	364	348	357	
		Hawthorne	4th Max	0.083	0.063	0.065	**0.070**
			Valid Days	357	360	362	

Basin Name	County Name	Site Name		1997	1998	1999	Avg.
South Coast (cont.)	Los Angeles (cont.)	Los Angeles-North Main Street	4th Max	0.081	0.095	0.076	**0.084**
			Valid Days	360	358	359	
		Lynwood	4th Max	0.054	0.051	0.041	**0.048**
			Valid Days	326	354	360	
		North Long Beach	4th Max	0.066	0.063	0.065	**0.064**
			Valid Days	363	357	358	
		Pasadena-S Wilson Avenue	4th Max	0.099	0.115	0.084	**0.099**
			Valid Days	362	348	362	
		Pico Rivera	4th Max	0.096	0.104	0.079	**0.093**
			Valid Days	350	356	360	
		Pomona	4th Max	0.095	0.119	0.089	**0.101**
			Valid Days	364	362	356	
		Reseda	4th Max	0.084	0.098	0.08	**0.087**
			Valid Days	362	362	364	
		Santa Clarita-County Fire Station	4th Max	0.116	0.128	0.094	**0.112**
			Valid Days	360	349	364	
		West Los Angeles-VA Hospital	4th Max	0.079	0.07	0.067	**0.072**
			Valid Days	362	364	362	
	Orange	Anaheim-Harbor Blvd	4th Max	0.07	0.085	0.059	**0.071**
			Valid Days	362	358	154	
		Costa Mesa-Mesa Verde Drive	4th Max	0.063	0.074	0.067	**0.068**
			Valid Days	149	351	340	
		El Toro	4th Max	0.077	0.083	0.071	**0.077**
			Valid Days	365	355	356	
		La Habra	4th Max	0.082	0.093	0.077	**0.084**
			Valid Days	363	363	360	
	Riverside	Banning Airport	4th Max	0.135	0.123	0.115	**0.124**
			Valid Days	282	329	359	
		Banning-Allesandro	4th Max	0.096	0.079		**0.087**
			Valid Days	361	180		
		Lake Elsinore-W Flint Street	4th Max	0.063	0.127	0.106	**0.098**
			Valid Days	101	347	360	
		Perris	4th Max	0.055	0.113	0.09	**0.086**
			Valid Days	134	362	364	

Basin Name	County Name	Site Name		1997	1998	1999	Avg.
South Coast (cont.)	Riverside (cont.)	Riverside-Rubidoux	4th Max	0.117	0.135	0.103	**0.118**
			Valid Days	327	356	356	
	San Bernardino	Crestline	4th Max	0.125	0.183	0.133	**0.147**
			Valid Days	350	359	362	
		Fontana-Arrow Highway	4th Max	0.117	0.131	0.095	**0.114**
			Valid Days	362	364	360	
		Mount Baldy, Mount Baldy Road	4th Max	0.104			**0.104**
			Valid Days	85			
		Redlands-Dearborn	4th Max	0.127	0.148	0.113	**0.129**
			Valid Days	361	364	363	
		San Bernardino-4th Street	4th Max	0.126	0.144	0.114	**0.128**
			Valid Days	364	352	355	
		Upland	4th Max	0.112	0.137	0.1	**0.116**
			Valid Days	358	355	357	

APPENDIX B

NEW BOUNDARY DEFINITIONS

Updated

Sacramento Region

El Dorado County (part) - All portions of the county except that portion of El Dorado County within the drainage area naturally tributary to Lake Tahoe including said Lake.

Placer County (part) - All portions of the county except that portion of Placer County within the drainage area naturally tributary to Lake Tahoe including said Lake, plus that area in the vicinity of the head of the Truckee River described as follows: commencing at the point common to the aforementioned drainage area crestline and the line common to Townships 15 North and 16 North, Mount Diablo Base and Meridian (M.D.B.&M.), and following that line in a westerly direction to the northwest corner of Section 3, Township 15 North, Range 16 East, M.D.B.&M., thence south along the west line of Sections 3 and 10, Township 15 North, Range 16 East, M.D.B.&M., to the intersection with the said drainage area crestline, thence following the said drainage area boundary in a southeasterly, then northeasterly direction to and along the Lake Tahoe Dam, thence following the said drainage area crestline in a northeasterly, then northwesterly direction to the point of beginning.

Sacramento County

Solano County (part) - That portion of Solano County which lies north and east of a line described as follows: description of boundary in Solano county between San Francisco and Sacramento: beginning at the intersection of the westerly boundary of Solano County and the 1/4 section line running east and west through the center of Section 34; Township 6 North, Range 2 West, M.D.B.&M., thence east along said 1/4 section line to the east boundary of Section 36, Township 6 North, Range 2 West, thence south 1/2 mile and east 2.0 miles, more or less, along the west and south boundary of Los Putos Rancho to the northwest corner of Section 4, Township 5 North, Range 1 West, thence east along a line common to Township 5 North andTownship 6 North to the northeast corner of Section 3, Township 5 North, Range 1 East, thence south along section lines to the southeast corner of Section 10, Township 3 North, Range 1 East, thence east along section lines to the south 1/4 corner of Section 8, Township 3 North, Range 2 East, thence east to the boundary between Solano and Sacramento Counties.

Western Nevada County

Nevada County (part) - that portion of Nevada County, which lies west of a line, described as follows: beginning at the Nevada-Placer County boundary and running north along the western boundaries of Sections 24, 13, 12, 1, Township 17 North, Range 14 East, Mount Diablo Base and Meridian, and Sections 36, 25, 24, 13, 12, Township 18 North, Range 14 East to the Nevada-Sierra County boundary.

Eastern Kern County

Kern County (part) - that portion of Kern County (with the exception of that portion in Hydrolic Unit # 18090205 --the Indian Wells Valley) east and south of a line described as follows:

Beginning at the Kern – Los Angeles County boundary and running north and east along the northwest boundary of the Rancho La Liebre Land Grant to the point of intersection with the range line common to Range 16 West and Range 17 West, San Bernardino Base and Meridian; north along the range line to the point of intersection with the Rancho El Tejon Land Grant boundary; then southeast, northeast, and northwest along the boundary of the Rancho El Tejon Grant to the northwest corner of Section 3, Township 11 North, Range 17 West; then west 1.2 miles; then north to the Rancho El Tejon Land Grant boundary; then northwest along the Rancho El Tejon line to the southeast corner of Section 34, Township 32 South, Range 30 East, Mount Diablo Base and Meridian; then north to the northwest corner of Section 35, Township 31 South, Range 30 East; then northeast along the boundary of the Rancho El Tejon Land Grant to the southwest corner of Section 18, Township 31 South, Range 31 East; then east to the southeast corner of Section 13, Township 31 South, Range 31 East; then north along the range line common to Range 31 East and Range 32 East, Mount Diablo Base and Meridian, to the northwest corner of Section 6, Township 29 South, Range 32 East; then east to the southwest corner of Section 31, Township 28 South, Range 32 East; then north along the range line common to Range 31 East and Range 32 East to the northwest corner of Section 6, Township 28 South, Range 32 East, then west to the southeast corner of Section 36, Township 27 South, Range 31 East, then north along the range line common to Range 31 East and Range 32 East to the Kern – Tulare County boundary.

South Coast Air Basin

Los Angeles County (part) - that portion of Los Angeles County which lies south and west of a line described as follows:

Beginning at the Los Angeles – San Bernardino County boundary and running west along the Township line common to Township 3 North and Township 2 North, San Bernardino Base and Meridian; then north along the range line common to Range 8 West and Range 9 West; then west along the Township line common to Township 4 North and Township 3 North; then north along the range line common to Range 12 West and Range 13 West to the southeast corner of Section 12, Township 5 North and Range 13 West; then west along the south boundaries of Sections 12, 11, 10, 9, 8, and 7, Township 5 North and Range 13 West to the boundary of the Angeles National Forest which is collinear with the range line common to Range 13 West and Range 14 West; then north and west along the Angeles National Forest boundary to the point of intersection with the Township line common to Township 7 North and Township 6 North (point is at the northwest corner of Section 4 in Township 6 North and Range 14 West); then west along the Township line common to Township 7 North and Township 6 North; then north along the range line common to Range 15 West and Range 16 West to the southeast corner of Section 13, Township 7 North and Range 16 West; then along the south boundaries of Sections 13, 14, 15, 16, 17, and 18, Township 7 North and Range 16 West; then north along the range line common to Range 16 West and Range 17 West to the north boundary of the Angeles

National Forest (collinear with the Township line common to Township 8 North and Township 7 North); then west along the Angeles National Forest boundary to the point of intersection with the south boundary of the Rancho La Liebre Land Grant; then west and north along this land grant boundary to the Los Angeles-Kern County boundary.

Orange County

Riverside County (part) - that portion of Riverside County which lies to the west of a line described as follows:

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; then east along the Township line common to Township 8 South and Township 7 South; then north along the range line common to Range 5 East and Range 4 East; 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; then north along the west boundaries of Sections 34, 27, 22, 15, 10, and 3, Township 6 South, Range 4 East; then west along the Township line common to Township 5 South and Township 6 South; then north along the range line common to Range 4 East and Range 3 East; then west along the south boundaries of Sections 13, 14, 15, 16, 17, and 18, Township 5 South, Range 3 East; then north along the range line common to Range 2 East and Range 3 East; 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:

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; then west along the Township line common to Township 3 North and Township 2 North to the San Bernardino - Los Angeles County boundary.

Antelope Valley

Los Angeles County (part) - that portion of Los Angeles County which lies north and east of a line described as follows:

Beginning at the Los Angeles - San Bernardino County boundary and running west along the Township line common to Township 3 North and Township 2 North, San Bernardino Base and Meridian; then north along the range line common to Range 8 West and Range 9 West; then west along the Township line common to Township 4 North and Township 3 North; then north along the range line common to Range 12 West and Range 13 West to the southeast corner of Section 12, Township 5 North and Range 13 West; then west along the south boundaries of Sections 12, 11, 10, 9, 8, and 7, Township 5 North and Range 13 West to the boundary of the Angeles National Forest which is collinear with the range line common to Range 13 West and Range 14 West; then north and west along the Angeles National Forest boundary to the point of intersection with the Township line common to Township 7 North and Township 6 North (point is at the northwest corner of Section 4 in Township 6 North and Range 14 West); then west along the Township line common to Township 7 North and Township 6 North; then north along the range line common to Range 15

West and Range 16 West to the southeast corner of Section 13, Township 7 North and Range 16 West; then along the south boundaries of Sections 13, 14, 15, 16, 17, and 18, Township 7 North and Range 16 West; then north along the range line common to Range 16 West and Range 17 West to the north boundary of the Angeles National Forest (collinear with the Township line common to Township 8 North and Township 7 North); then west along the Angeles National Forest boundary to the point of intersection with the south boundary of the Rancho La Liebre Land Grant; then west and north along this land grant boundary to the Los Angeles-Kern County boundary.

Western Mojave Desert

San Bernardino County (part) - that portion of San Bernardino County which lies north and east of a line described as follows:
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; 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: latitude 35 degrees, 10 minutes north and longitude 115 degrees, 45 minutes west.

Coachella Valley

Riverside County (part) - that portion of Riverside County which lies to the east of a line described as follows:
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; then east along the Township line common to Township 8 South and Township 7 South; then north along the range line common to Range 5 East and Range 4 East; 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; then north along the west boundaries of Sections 34, 27, 22, 15, 10, and 3, Township 6 South, Range 4 East; then west along the Township line common to Township 5 South and Township 6 South; then north along the range line common to Range 4 East and Range 3 East; then west along the south boundaries of Sections 13, 14, 15, 16, 17, and 18, Township 5 South, Range 3 East; then north along the range line common to Range 2 East and Range 3 East; 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; then northwest along that line to the intersection with the range line common to Range 2 West and Range 1 West; then north to the Riverside-San Bernardino County line, and that portion of Riverside County which lies to the west of a line described as follows: beginning at the northeast corner of Section 4, Township 2 South, Range 5 East, a point on the boundary line common to Riverside and San Bernardino Counties; then southerly along section lines to the centerline of

the Colorado River Aqueduct; then southeasterly along the centerline of said Colorado River Aqueduct to the southerly line of Section 36, Township 3 South, Range 7 East; then easterly along the Township line to the northeast corner of Section 6, Township 4 South, Range 9 East; then southerly along the easterly line of Section 6 to the southeast corner thereof; then easterly along section lines to the northeast corner of Section 10, Township 4 South, Range 9 East; then southerly along section lines to the southeast corner of Section 15, Township 4 South, Range 9 East; then easterly along the section lines to the northeast corner of Section 21, Township 4 South, Range 10 East; then southerly along the easterly line of Section 21 to the southeast corner thereof; then easterly along the northerly line of Section 27 to the northeast corner thereof; then southerly along section lines to the southeast corner of Section 34, Township 4 South, Range 10 East; then easterly along the Township line to the northeast corner of Section 2, Township 5 South, Range 10 East; then southerly along the easterly line of Section 2, to the southeast corner thereof; then easterly along the northerly line of Section 12 to the northeast corner thereof; then southerly along the range line to the southwest corner of Section 18, Township 5 South, Range 11 East; then easterly along section lines to the northeast corner of Section 24, Township 5 South, Range 11 East; then southerly along the range line to the southeast corner of Section 36, Township 8 South, Range 11 East, a point on the boundary line common to Riverside and San Diego Counties.

APPENDIX C

BOARD RESOLUTION APPROVING RECOMMENDED DESIGNATIONS AND BOUNDARIES

New

State of California
AIR RESOURCES BOARD

Board Resolution 00-10

March 23, 2000

Agenda Item No.: 00-3-3

WHEREAS, the Legislature in Health and Safety Code section 39602 has designated the Air Resources Board (ARB or Board) as the air pollution control agency for all purposes set forth in federal law;

WHEREAS, section 109(b)(1) of the Clean Air Act requires the U.S. Environmental Protection Agency (U.S. EPA) to set a primary air quality standard at a level that protects public health with an adequate margin of safety;

WHEREAS, section 109(b)(2) of the Clean Air Act requires U.S. EPA to set a secondary air quality standard at a level requisite to protect public welfare;

WHEREAS, on July 18, 1997, the U.S. EPA promulgated a new eight-hour ozone primary standard and an identical eight-hour ozone secondary standard at a level of 0.08 parts per million, based on the need to protect against daylong exposures to lower levels of ozone;

WHEREAS, on May 14, 1999, a three-judge panel of the U.S. Court of Appeals for the District of Columbia Circuit stated that the factors U.S. EPA used in determining the degree of public health concern associated with different levels of ozone were appropriate, but found U.S. EPA did not clearly articulate the rationale for selecting a level for the new ozone standard;

WHEREAS, the Court did not strike down the eight-hour ozone standard, but remanded the case to U.S. EPA to develop further clarification on how it selected the level of the new ozone standard;

WHEREAS, the Court noted that U.S. EPA is still authorized to designate areas under a revised ozone standard, and U.S. EPA has indicated that it intends to proceed with designations this year;

WHEREAS, section 107(d)(1) of the Clean Air Act requires states to submit to U.S. EPA a list designating areas as nonattainment, attainment, or unclassifiable for a new or revised national ambient air quality standard no later than one year after the promulgation of the standard and requires U.S. EPA to finalize the designations within two years of the promulgation of the new standard;

WHEREAS, section 6103 of the Transportation Equity Act for the 21st Century modified the timeline in section 107(d)(1) of the Clean Air Act to require states to submit area designation recommendations for the July 1997 ozone standards by July 1999 and U.S. EPA to promulgate final designations by July 2000;

WHEREAS, on June 25, 1999, U.S. EPA issued guidance asking states to submit only ozone monitoring data by July 1999, with recommended designations to follow;

WHEREAS, on August 12, 1999, ARB transmitted to U.S. EPA a list of California air quality monitors that violate the eight-hour ozone standard;

WHEREAS, section 107(d)(1)(A) of the Clean Air Act provides that any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national ambient air quality standard for a pollutant shall be designated nonattainment;

WHEREAS, section 107(d)(1)(A) of the Clean Air Act also provides that any area (other than an area identified as nonattainment) that meets the national ambient air quality standard for the pollutant shall be designated attainment;

WHEREAS, section 107(d)(1)(A) of the Clean Air Act also provides that any area that cannot be classified on the basis of available information as meeting or not meeting the national ambient air quality standard for the pollutant shall be designated unclassifiable;

WHEREAS, it is appropriate to consider factors such as population density, traffic congestion, commercial development, industrial development, meteorological conditions, and pollution transport in determining nonattainment boundaries;

WHEREAS, ARB has developed recommendations for area designations and boundaries in consultation with local air districts and transportation agencies, U.S. EPA, and the public;

WHEREAS, a notice of public meeting to consider the recommendations for area designations and nonattainment area boundaries for the federal eight-hour ozone standard was published on February 22, 2000;

WHEREAS, a Staff Report which lists recommendations for area designations and nonattainment area boundaries for the federal eight-hour ozone standard was made available for public comment on February 29, 2000;

WHEREAS, staff has made recommendations based on the most recent available air quality data from 1997 to 1999, which will be updated to reflect the complete, quality assured data set for the 1999 ozone season; and

WHEREAS, the National Park Service has requested that Joshua Tree National Park be included in a nonattainment area for the eight-hour standard and ARB staff has determined that available monitoring data in the Park are inadequate to support this action.

NOW, THEREFORE, BE IT RESOLVED that the Board approves staff's recommended area designations and nonattainment boundaries for the federal eight-hour ozone standards with the amendments presented by staff at this Board meeting.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to forward the recommendations to U.S. EPA, and to work with U.S. EPA to resolve any issues that may arise regarding the approval of the recommendations.

BE IT FURTHER RESOLVED that, to the extent possible, ARB, local air districts, and transportation agencies should evaluate and consider the impact of future rules, plans, and projects on attaining and maintaining the eight-hour ozone standard.

BE IT FURTHER RESOLVED that ARB staff and the districts should continue to pursue technical work to develop State Implementation Plans for the eight-hour ozone standard, including air quality monitoring, improving emission inventories, conducting the Central California Ozone Study, and incorporating the results into expanded air quality models.

BE IT FURTHER RESOLVED that the Board directs staff to work with the Mojave Desert and the South Coast Air Quality Management Districts and the National Park Service to initiate special purpose monitoring for ozone in the eastern portions of Riverside and San Bernadino Counties (including Joshua Tree National Park) to assess the extent of ozone pollution in these areas.

Resolution 00-10

March 23, 2000

Identification of Attachment to the Resolution

Attachment A: Staff Report: Recommended Area Designations for the Federal Eight-Hour Ozone Standard, Released Date February 29, 2000.