15-day Comment

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STATE OF CALIFORNIA
AIR RESOURCES BOARD
RECEIVED 4-19-93
BY BOARD SECRETARY

ATTN: PAT HUTCHINS

FAX CORRESPONDENCE

TO: ARB BD. SEC. DATE: 4-19-93

FROM: FNA ANS/FAX # 209-431-7382

Revision of ECR's To Mitigate Impact of Transported Pollutants on Ozone in Downwind Areas

Number of pages including cover sheet = 2 Pages

MESSAGE: On March 4, 1993, Fresno Neighborhood Alliance opposed an increase in emissions of air pollutants from stationary sources in "severe" ozone Non-attainment areas (except in LA. Basin)

This letter reiterates that position (see attach) and adds the name of

Clarence Hamilton
521 W. Hatch Rd.
Modesto, Ca 95351

to that position.

Mr. Hamilton suffers from emphysema and has asked us to be sure to let you know he opposes relaxation of the pollution standards based on his health concerns.

The General Public has the right to breathe clean air. We sincerely appreciate your assistance in securing this right.

On behalf of the FNA Board of Directors
Joni Johnson, Secretary

FRESNO NEIGHBORHOOD ALLIANCE
Protecting Life Quality
P.O. Box 5966
Fresno, CA 93755
(209) 431-7362

DATE: MARCH 4, 1993

TO: CALIFORNIA AIR RESOURCES BOARD

FROM: FRESNO NEIGHBORHOOD ALLIANCE

RE: OPPOSE ACY ACTION BY CARB TO INCREASE EMISSIONS OF AIR POLLUTANTS FROM STATIONARY SOURCES IN "SEVERE" (OZONE) NON-ATTAINMENT AREAS

FRESNO NEIGHBORHOOD ALLIANCE OPPOSES A REQUEST TO INCREASE EMISSIONS OF AIR POLLUTANTS FROM STATIONARY SOURCES IN "SEVERE"(OZONE) NON- ATTAINMENT AREAS(EXCEPT IN THE L.A. BASIN).

WE DO NOT FEEL THAT RAISING THE TRIGGER LEVEL FROM 0 TO 10 TONS PER YEAR FOR EACH NEW SOURCE IS BENEFICIAL TO THE GENERAL PUBLIC'S HEALTH, SAFETY & WELFARE. THE DETRIMENTAL EFFECTS ON HUMAN HEALTH ARE WELL DOCUMENTED AND NOT OPEN TO DEBATE.

IN THE LONG RUN, ANY RELAXATION OF AIR POLLUTANTS FROM NEW SOURCES WILL ALSO ADVERSELLY IMPACT ALL BUSINESS AND THE PUBLIC SECTOR- PERHAPS FORCING CLOSURES OF ALL BUSINESSES & OR SUSPENDING VEHICLE TRANSPORT OVER LARGE AREAS BECAUSE OF DANGEROUS HEALTH & LIFE THREATENING POLLUTION JUST AS HAS OCCURRED PERIODICALLY IN MEXICO CITY, MEXICO AND FLORENCE, ITALY. AGRICULTURE & FORRESTRY WOULD BE TWO ECONOMIC SECTORS WHICH WOULD BE ESPECIALLY HARD HIT BY POLLUTION RELAXATION, BUSINESS CLOSURES & OR SUSPENSION OF VEHICULAR TRANSPORT . THE ECONOMIC IMPACTS OF THE ABOVE DESCRIBED CONDITIONS WOULD BE FAR WORSE THAN ANYTHING EXPERIENCED UNDER TIGHT "O" TRIGGER LEVEL CONTROLS.

FOR DOCUMENTATION OF THE ABOVE CLAIMS, WE INCORPORATE BY REFERENCE THE STUDIES MADE BY CARB AND THE ATTACHED LIST OF SOURCES ON THE EFFECTS OF OZONE ON HUMAN HEALTH AND VEGETATION.

THE GENERAL PUBLIC HAS THE RIGHT TO BREATHE CLEAN AIR. WE SINCERELY APPRECIATE YOUR ASSISTANCE IN SECURING THIS RIGHT.

FRESNO NEIGHBORHOOD ALLIANCE
BOARD OF DIRECTORS

JONI JOHNSON
GREG KLINE
SELMA LAYNE
BLANCHE MILHAHN
JOAN WEEKS
WES WELSON

FNA ATTACH- OPPOSE AIR POLLUTION INCREASES FROM STATIONARY SOURCES IN SEVERE NON-ATTAINMENT AREAS

Effect of air-pollution on:

People

- Hall, J. V. 1992. Valuing health benefits of clean air. Science 255: 812-817. (Exhibit 14)
- Associated Press. 1991. Smog increases risk of cancer, study finds. Fresno Bee 25 October.
- Clemings, R. 1991. Valley's most damaging pollutants. Fresno Bee, 5 May.

Agriculture

- Olszyk, D. M. et al. 1988. Crop loss assessment for California: Modeling losses with different ozone standard scenarios. Environm. Pollution 53:303-311.
- Retziaff, W. A. et al. 1991. The effect of different atmospheric ozone partial pressures on photosynthesis and growth of nine fruit and nut tree species. Tree Physiol. 8:93-105.
- Retziaff, W. A. et al. 1992. Photosynthesis and growth response of almond to increased atmospheric ozone partial pressures. J. Environ. Quality 21:208-216.
- Grantz, D.A. and P. M. McCool. 1992. Effect of ozone on Pima and Acala cottons in the San Joaquin Valley. Proc. Beltwide Cotton Conf. 3: 1082-1084. Natl. Cotton Council of America.

Forests

- Peterson, D. L. et al. 1987. Evidence of growth reduction in ozone-injured Jeffrey pine (Pinus jeffreyi Grev. and Balf.) in Sequoia and Kings Canyon National Parks. APCA J. 37:906-912.
- Peterson, D. L. and M. J. Arbough. 1988. An evaluation of the effects of ozone injury on radial growth of ponderosa pine (Pinus ponderaosa) in the southern Sierra Nevada. APCA J.: 38:921-927.]

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STATE OF CALIFORNIA
AIR RESOURCES BOARD
RECEIVED 4-20-93
BY BOARD SECRETARY

Kern Council of Governments

April 20, 1993

TO: Ms. Slyvia Oey
California Air Resources Board

FROM: Ronald E. Brummett,
Executive Director

SUBJECT: REVISION OF THE TRANSPORT MITIGATION REGULATION

Please consider the attached letter to Ms. Jan Sharpeless, dated March 30, 1993, as official comments from the Kern Council of Governments regarding the revision of the Transport Mitigation Regulation. The letter details the undesirable impacts this revision would have on Kern County and the entire San Joaquin Valley. Please reconsider this revision.

reb
attachment

Post-it™ brand fax transmittal memo 7671	# of pages ▸ 2
To Sylvia Oey	From Ron Brummett
Co. ARB	Co. KERN COG
Dept.	Phone # 805 861 2191
Fax # 916-322-3646	Fax # 805 324 8215

Kern Council of Governments
1401 19th St., Suite 200, Bakersfield, CA 93301 (805) 861-2191 FAX (805) 324-8215

Kern Council
of Governments

March 30, 1993

Ms. Jan Sharpeless, Chairman
California Air Resources Board
2020 L Street
Sacramento, California 95814

Dear Ms. Sharpeless:

The Kern Council of Governments (Kern COG) has reviewed the March 11th, 1993 decision of the Air Resources Board concerning the revision of the Transport Mitigation Regulation. The Kern COG Board of Directors is concerned that the revision of this regulation is premature. This decision should not have been made until the results of the San Joaquin Valley Air Quality Study was completed and evaluated.

The transport of emissions into the San Joaquin Valley Air Basin has an additive effect on the level of pollution within the basin. This decision will make it more difficult for the San Joaquin Valley Unified Air Pollution Control District (APCD), local and regional transportation agencies to meet air quality goals and reductions.

As the metropolitan planning organization for Kern County, Kern COG is responsible for assisting the San Joaquin Valley Unified APCD in the development of transportation control measures. The revision of this regulation places local agencies in the San Joaquin Valley Air Basin at a significant disadvantage in meeting air quality standards.

The change in this regulation will provide an economic advantage to the San Francisco and Sacramento areas. Business and industry consider air pollution control regulations in their site selection process. Granting an increase in emissions to upwind air basins provides an economic advantage. The shift in the jobs/housing balance will require the implementation of added control measures. The San Joaquin Valley would receive a double blow: the loss of employment opportunities, and significantly reduced air quality.

Kern COG requests that the California Air Resources Board, at the earliest possible date, reconsider the revision of the Transport Mitigation Regulation.

Sincerely,

Cathy L. Prout

Cathy Prout
Chairperson

Kern Council of Governments
1401 19th St., Suite 200, Bakersfield, CA 93301 (805) 861-2191 FAX (805) 324-8215

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STATE OF CALIFORNIA
AIR RESOURCES BOARD
RECEIVED 4-19-93
BY BOARD SECRETARY

April 12, 1993

Board Secretary
Air Resources Board
Post Office Box 2815
Sacramento, CA 95812

RE: Amendments to 17CCR 70600, 70601

Dear Air Resources Board:

The Monterey Bay Clean Air Coalition is united with the Monterey Bay Unified Air Pollution Control District in our concern for the serious issue of transported pollution from upwind districts that migrate into this district.

Since past Long Range Transport into this region will be continuing under AB2783, the proposed ARB regulations should provide a transport component to the Monterey Bay AQMP which adequately accounts for past and present transport values.

The ARB should be prepared to approve future amendments to the Monterey Bay AQMP that provide reasonable accounting of transport in the Design Value, and allow for adjustment if upwind districts are permitted to relax the Clean Air Act; therefore, increasing levels of ozone precursors transported to this region.

Sincerely,

Lee Haskin

Lee Haskin
Monterey Bay Clean Air Coalition

MONTEREY BAY CLEAN AIR COALITION ROSTER

PRIVATE SECTOR

Associated General Contractors
California Strawberry Board
Growers Shippers Vegetable Association
Monterey Board of Realtors
Monterey County Farm Bureau
Monterey County Hospitality Association
Monterey Peninsula Builders Exchange
Monterey Peninsula Chamber of Commerce
Monterey Peninsula Property Owners Association
Monterey/Carmel Council Of Realtors
Moss Landing Chamber of Commerce
Pajaro Valley Chamber of Commerce
Salinas Area Chamber of Commerce
Salinas Valley Builders Exchange
San Benito County Chamber of Commerce
Santa Cruz Area Chamber of Commerce
Scotts Valley Chamber of Commerce
Watsonville Food Processors Association

PUBLIC SECTOR

City of Carmel
City of Capitola
City of Gonzales
City of Hollister
City of King
City of Marina
City of Monterey
City of Pacific Grove
City of Salinas
City of Seaside
City of Scotts Valley
City of Watsonville

Salinas Valley Memorial Hospital

15-day-comment

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STATE OF CALIFORNIA
AIR RESOURCES BOARD
RECEIVED 4-12-93
BY BOARD SECRETARY

MONTEREY BAY
Unified Air Pollution Control District
serving Monterey, San Benito, and Santa Cruz counties

ABRA BENNETT
Air Pollution Control Officer

24580 Silver Cloud Court • Monterey, California 93940 • 408/647•9411 • FAX 408/647•8501

April 8, 1993

Board Secretary
Air Resources Board
P. O. Box 2815
Sacramento, CA 95812

Re: Amendments to 17 CCR 70600, 70601

Dear Air Resources Board:

The following information is submitted regarding the legality of the above proposed amendment.

1. The new regulation is inconsistent with Health and Safety Code Sections 39610, 40912, 40911, 40913, 40921, and 41503. That statutory scheme originally called for a higher standard of control for upwind districts than for downwind districts. AB 2783 did not expressly change or eliminate that scheme. No evidence has been presented that it was the legislative intent of AB 2783 to change this scheme.

2. The new regulation is not the most environmentally superior alternative. "No change" in the regulation is the only option which is environmentally acceptable. No creditable evidence has been submitted which would justify a finding of impracticability. (Citizens of Goleta Valley v. Board of Supervisors (2d Dist. 1988) 197 Cal.App.d 1167, 243 Cal.Rptr.339).

3. Neither the ARB staff report nor the ARB Board at the hearing evaluated the impact that the changed regulation will have on small businesses in Monterey, Santa Cruz, and San Benito counties. The regulation may lead to significantly higher costs to small businesses in this air district due to:

a. the projected emissions increase in the San

DISTRICT BOARD MEMBERS

Supervisor Barbara Shipnuck, Chair, *Monterey County*
Supervisor Ruth Kesler, Vice Chair, *San Benito County*
Supervisor Sam Karas, *Monterey County*
Supervisor Tom Perkins, *Monterey County*
Supervisor Judy Pennycook, *Monterey County*
Supervisor Fred Keeley, *Santa Cruz County*
Supervisor Walter Symons, *Santa Cruz County*
Supervisor Richard Scagliotti, Alternate, *San Benito County*

Francisco Bay Area of 27 tons per day of ozone precursors, i.e. nitrogen oxides and reactive organic hydrocarbons. The North Central Coast Air Basin (NCCAB) is a nonattainment area for the California Ozone Ambient Air Quality standards. The NCCAB is seriously impacted by air pollution transported from the San Francisco Bay Area (Table 1 of the ARB staff report). Even a 10% transport of the additional pollution from the Bay Area to Monterey could increase ozone precursor emissions in the NCCAB by 2.7 tons per day. This figure is significant in that the schedule of required control measures in the 1991 Air Quality Management Plan for the Monterey Bay Area includes measures in the hundredths of a ton per day. These additional Bay Area emissions would represent a very substantial increase in Monterey's air pollutant burden, and could result in additional mandatory controls in the NCCAB.

b. the impact of higher ozone levels on agriculture, particularly on small farmers (reference chapter 5, 1991 AQMP for the Monterey Bay Area, attached, as well as the references in that chapter.) The economy of the NCCAB is heavily dependent on agriculture, and crop loss due to additional transported pollution would affect farmers and food processors adversely.

c. the impact of higher ozone levels on public health, with the potential for a resultant rise in health care premiums. Is the Bay Area's interest in having more gas stations and dry cleaners of higher value then the detriment to public health in the Monterey Bay and San Joaquin air basins?

d. the economy is worse in Monterey and San Benito County than in the Bay Area. The February, 1993 unemployment rate is 19.2 percent in Monterey County and 24.3 percent in San Benito County (Labor Information, Employment Development Department, Monterey County April 7, 1993, personal communication.) Fort Ord will be closed by September and two other military bases are potentially targeted for closure. The City of Monterey has stated that this will lead to unemployment levels similar to those in the depression era.

4. The staff analysis is not sufficient to support a finding of overriding considerations. There is inadequate evidence that the economy is significantly worse than when

the regulation was first adopted, justifying a relaxation on the basis of economic considerations. There is no evidence that the economy has deteriorated more in upwind areas than in downwind areas, and employment statistics indicate that the opposite may be true. There is no analysis of how much regulatory relief is necessary to achieve the required economic relief.

5. The assessment regarding the relative contribution of upwind emissions to downwind ozone has not been changed. There is no data to support a finding that there has been a change in the relative contribution.

6. The ARB staff's and the ARB Board's rejection of the "no change" alternative was not supported by sufficient evidence.

7. ARB staff indicates that one intent of AB 2783 was to protect downwind areas. The proposed regulation is inconsistent with that intent. The Monterey Bay and San Joaquin districts will in fact be damaged, not protected.

Because the regulation was not appropriately adopted, we request that the proposed regulation be returned to the full Air Resources Board for its reconsideration.

Sincerely,

Abra Bennett

Abra Bennett
Air Pollution Control Officer

cc: MBUAPCD Board Members
SJVUAPCD Board Members
D. Crow, SJVU APCO
D. Schott, MBUAPCD District Counsel
P. Jay, SJVUAPCD District Counsel

Attachment (ARB only)

5.0 EFFECTS OF AIR POLLUTION ON HEALTH AND PROPERTY

5.1 FEDERAL AND STATE AIR QUALITY STANDARDS

National Ambient Air Quality Standards (NAAQS) are established to protect public health and welfare and, in general, consist of primary and secondary standards. Primary standards are to protect the public health, while secondary standards are intended to protect the public welfare, e.g., plants, crops, and materials. The public health standards are to include an "adequate margin of safety" (Clean Air Act Amendments of 1990, Sec. 109[b]) which in part accounts for uncertainties in scientific knowledge related to setting the standards. Standards are set by the Administrator of the Environmental Protection Agency who is advised by a seven member independent scientific review committee.

State Ambient Air Quality Standards are established "in consideration of the public health, safety, and welfare, including, but not limited to, health, illness, irritation to the senses, aesthetic value, interference with visibility, and the effects on the economy" (California Health and Safety Code, Sec. 39606 [b]). A distinction is not made between standards to protect public health and welfare, i.e., primary and secondary standards. State standards are set by the California Air Resources Control Board.

Studies related to health effects of pollutants are based on differing research methods. Epidemiological surveys (the distribution and incidence of disease affecting a community rather than an individual), clinical studies, industrial research, laboratory experiments and accidents or disasters are used in assessing levels at which health effects from airborne pollutants can occur within the population.

5.2 OZONE

Ozone and other photochemical oxidants are air pollutants produced in complex photochemical reactions involving sunlight and emissions of hydrocarbons and nitrogen oxides from motor vehicles and stationary sources of pollution. Ozone can have adverse effects on human health, crops, forests and other vegetation and materials.

Health Effects

A report prepared by the California Air Resources Board (ARB) in 1987 documents and describes relevant studies related to the health effects of ozone.[1] The report states that "ozone damages living cells and tissues by altering their protein, lipid and carbohydrate components or products. Such changes have been shown to lead to cell damage and cell death. Cell death and dysfunction occur in cell types necessary for such essential functions as respiration and defense against microbial pathogens after brief low-level exposures to ozone."

Short-term exposure to ozone results in injury and damage to cells lining the air spaces of the lung, decreases in pulmonary function and impairment of host defense mechanisms. The following results from studies summarized in the ARB report demonstrate the health effects specifically attributed to ozone exposure.

- Studies involving exposures of six hours or less have shown that injury to cells which act to transfer respiratory gases to and from the blood occurs in animals exposed to 0.5 ppm ozone and less. These effects occur in rats exercised in 0.20 ppm ozone for 3.75 hours.

- Studies using vitamin E deficient weanling rats continuously exposed to 0.1 ppm for seven days reported injury to respiratory cells.

- An increase in lung permeability occurs in human subjects exposed to 0.40 ppm for two hours with intermittent exercise. Increases in the permeability of the lung lining occur after a one day exposure at 0.11 ppm in rats.

- Averaged decreases in pulmonary functions for "an entire group have been reported at concentrations as low as 0.30 ppm for subjects exposed for two hours while resting (Kagawa and Tsura, 1974a). As the exercise level increases, more individuals respond to lower levels of ozone. Thus, after light exercise during a two-hour exposure, responses were seen at levels as low as 0.20 ppm.... After moderate exercise during a two-hour exposure, decrements occur at levels as low as 0.15 ppm.... Studies at still higher levels of exercise confirm the observation that as exercise level increases there is a greater response at lower levels of ozone and more individuals who respond."

- "Controlled studies of exercising children also found decrements in pulmonary function at levels as low as 0.12 ppm. Children are at greater risk of exposure because of their activities and activity levels since they are more likely to exercise outdoors throughout the day than adults."

- "Impairment of disease resistance mechanisms also occurs after brief, low-level ozone exposures. Increased mortality from pneumonia occurs in animals exposed to 0.09 ppm ozone for three hours and subsequently infected."

- "Results from studies of animals exposed three to eight hours per day for durations of one week to one month indicate that continued ozone exposure results in continued alterations in lung cells, function and structure."

Studies indicate that effects found after short-term exposure are also observed after longer-term exposures and that these changes have been implicated in the development of chronic lung disease.

The Environmental Protection Agency reports that ozone produces short-term, transient changes in lung functions often resulting in coughing, shortness of breath, nose and throat irritation and discomfort or even pain on breathing deeply. If the ability to take a deep breath is sufficiently impaired, ozone exposure may interfere with normal activities.[2]

Vegetation and Materials

In agricultural crops the effects of ozone can be seen in reduced yield and quality. The growth of ornamental plants can also be affected in an adverse manner. In addition, ozone effects on native plant communities can result in irreversible changes in ecosystems. Damage to materials caused by ozone results in an economic loss, as well, by causing surface corrosion, corrosion of metals and electrical components, discoloration of paint, fading and reduction of tensile strength of fabrics, and soiling and spalling of nonmetallic building materials.[3]

Ozone enters plant leaves through the stomatal openings in the leaf surface, thus gaining access to the spaces in the inside of the leaf. Ozone is then thought to attack the cell membrane, disrupting its permeability and allowing leakage of cell contents. Following biochemical disruption of the cell membrane, ozone is thought to alter the ultrastructure of the chloroplast. The resulting damage to the chloroplast causes an inhibition of photosynthesis. Ozone exposure is also thought to alter plant respiration, metabolism of amino acids, proteins, carbohydrates, and fatty acid and lipid metabolism.

A variety of factors influence the plant response to ozone. These factors include the full range of environmental variables including photoperiodicity, light intensity, humidity, and air movement. Of particular interest is the indication that plants appear to be more sensitive to equivalent ozone concentrations during shorter days than longer. This is important to Monterey

County as year round farming of various vegetable crops is prevalent in the Salinas Valley.

Exposure of vegetation to air pollution is rarely, if ever, limited to ozone. Exposure to multiple phytotoxic pollutants may result in synergistic, additive, or antagonistic effects. Synergism is defined as the occurrence of an effect larger than the expected sum of the individual components; antagonism is opposite. Not only will these effects vary across the range of species exposed, but they will often vary with concentration regimes applied to individual species.

The interaction of ozone and sulfur dioxide in causing foliar injury was estimated for a limited number of crops. As can be noted from the following table, interactions will vary depending on the concentrations of pollutants present.(3)

TABLE 5-1
Interaction of Ozone and Sulfur Dioxide in Causing Injury

	Synergistic	Additive	Antagonistic
Alfalfa	X	X	X
Apple	X		X
Bean	X		X
Broccoli	X	X	
Cabbage	X	X	
Onion		X	
Tomato		X	X

Effects on Natural Vegetation

The range of sensitivity of natural vegetation to short-term ozone injury is similar to that seen for agricultural crops; however, the cumulative effects of multiple years of exposure can have consequences unseen in crops. Effects observed in California include reduced aggregate growth of marketable wood volume, reduction of reproductive capacity, increases in weed and pest infestations, and severe alteration of total ecosystems.

The evidence of ozone injury to natural vegetation is strongest for coniferous forests, in part because of the great ozone sensitivity of some conifers, and in part due to the great concern, and consequent research commitment, of foresters and public land managers charged with protecting these important economic resources. Other vegetation types have not been so fully studied, but the limited evidence available indicates that ozone sensitivity is common among native plants throughout California and that ozone stress contributes to ecosystem decline in diverse vegetation types.

There is not sufficient data to develop a quantitative statewide estimate of current ozone damage to natural ecosystems; however, important noneconomic resources, such as watershed quality, recreational amenity, wildlife habitat, and overall ecological stability are at risk.

A long-term ozone standard to fully protect natural vegetation in California would be in the range of 0.02 to 0.05 ppm.(3) It is thought that the high end of the range would provide for limited damage to natural vegetation during the growing season, but would not prevent cumulative injury occurring over many years.

Crops

The California Air Resources Board recently concluded a statewide Crop Loss Assessment Program using 1984 air quality and crop data. For the most part this study did not focus on air quality data and farming in the Monterey, Santa Cruz and San Benito Counties; however, several conclusions of the report are germane to this plan.

The report states that of the limited crop data evaluated, it is estimated the yield of alfalfa and grapes was depressed one to ten percent in Monterey and San Benito Counties due to ambient ozone concentrations. Using gross 1989 dollar values, losses from these two crops alone are estimated between $680,000 to $6,800,000. It should be emphasized that this report did not attempt to evaluate the majority of even the major crops in the three counties but selected for study those crops prevalent in the more severely polluted air basins in the State.

5.3 FINE OR INHALABLE PARTICULATES (PM_{10})

State and national standards address inhalable particulates, i.e., less than 10 microns in diameter (PM_{10}). Particles are classified as primary or secondary depending on their origin. Primary particles are unchanged after being directly emitted, e.g., road dust. Secondary particles are formed in the atmosphere largely by chemical reactions involving gases, e.g., sulfate from directly emitted sulfur oxides. Natural sources of particulates include sea salt, forest fires, volcanic debris, etc. Other sources include fuel combustion and industrial processes, industrial and non-industrial fugitive sources and transportation.

Health Effects

Exposure to particulate matter can have a variety of toxic effects depending on type and size of particle, site of particle in the body and degree of exposure. [4] Toxics effects include:

1. Decreased pulmonary function due to irritation of tissues or nerve receptor at the site of deposition. Decreased pulmonary function results when the respiratory tract is hindered in providing the gaseous exchange of oxygen, carbon dioxide and other substances between the external atmosphere and the blood.

2. Altered mucociliary clearance. Clearance of foreign substances from the respiratory tract may be decreased upon inhalation of particles.

3. Morphological cell damage or death at the site of deposition. Cell damage may occur at all levels of the respiratory tract upon exposure to particles.

4. Systemic Toxicity. Soluble particles such as sulfate, salts and lead may be absorbed into the blood at all levels of the respiratory tract where they may then be carried to various locations within the body perhaps resulting in systemic toxicity.

5. Cancer. Deposition of certain particles within the respiratory tract are thought to lead to cancer.

Animal toxicology studies, human clinical studies and epidemiology studies have all been evaluated in establishing the ambient air quality standards for inhalable particles. ARB reports, "Epidemiological data demonstrates that exposure to particulate matter is associated with increased incidence of respiratory illness, chronic bronchitis, bronchoconstriction, decrease in pulmonary function and increased mortality rates".

Visibility Effects

Reduced visibility is the result of gases or particles suspended in the atmosphere. Fine particles (0.1 to 2 microns) are the primary contributors to reduced visual range. Effects of reduced visibility include loss of aesthetic qualities and hindrance to aviation and military experimental work. New regulations for assessing visibility have been adopted by the California Air Resources Board. The new standards consist of revising visibility standards conducted by eyesight to the use of a combination of data collected by an integrating nephelometer, coefficient of haze instrument and a hygrometer.

5.4 CARBON MONOXIDE

Motor vehicles are the major source of carbon monoxide, contributing approximately 85 percent to total statewide emissions. Remaining sources include industrial and combustion processes, wild fires and open burning.

When carbon monoxide combines with hemoglobin in the blood, the oxygen-carrying capacity of the blood is reduced and the release of oxygen is inhibited or slowed. Reduced oxygen-carrying capacity of the blood places angina patients, persons with other cardiovascular diseases or with chronic obstructive lung disease, persons with anemia and fetuses at risk. At higher levels carbon monoxide also affects the central nervous system including decreases in vigilance (ARB 1982).[5]

5.5 OXIDES OF NITROGEN

Oxides of nitrogen (NOx) are a product of combustion. Motor vehicles and stationary sources are the major contributors in California. Nitrogen oxide emissions contribute to increased concentration of nitrogen dioxide, ozone and suspended particulate matter and to visibility impairment and acid deposition.

Nitrogen Dioxide

Nitrogen dioxide (NO_2) has been identified by the EPA and the ARB as one of the pollutants requiring ambient health-based standards. The primary health problems associated with nitrogen dioxide are respiratory; there are also indications that systemic effects may occur. Short-term exposures can result in breathing difficulties for some sensitive individuals, and it is possible that long-term exposures may eventually result in scarring of the lung and loss of functional lung tissue.[6]

Nitrogen dioxide also affects visibility. NO_2 at atmospheric concentrations does not actually obscure scenes but rather contributes to discoloration and is primarily responsible for the brown appearance of urban haze.[6]

Short-term exposures (1-8 hours) to NO_2 can result in reduced photosynthesis at low concentration and plant injury at higher concentrations. Long-term exposures of NO_2 at low concentrations may result in altered physiological or biochemical processes, inhibition of photosynthesis, reduced growth and plant injury with increasing dosage. (7)

Particulate Nitrates

Particulate nitrates have been shown to have potentially serious respiratory effects. Particulate nitrates and other particulate compounds also contribute significantly to reduced visibility. In the South Coast Air Basin, it has been estimated that approximately 35 percent of the visibility impairment may be caused by particulate nitrates.[4]

5.6 SULFUR DIOXIDE AND SULFATES

Sulfur dioxide (SO_2) is emitted from stationary sources (e.g., power plants), motor vehicles and marine, terrestrial and volcanic activities. Stationary sources account for the overwhelming majority of emissions of SO_2. Sulfur dioxide in the atmosphere is oxidized to sulfate particles by liquid and gas phase reactions. Sulfates may settle out of the air, or they may be washed out by rain, fog or mists.

Health Effects [10]

The health effects of sulfur dioxide are summarized in a report by the California Air Resources Board as follows:

"Persons with asthma are more sensitive to sulfur dioxide than normal, healthy individuals. This increased sensitivity has been demonstrated in multiple studies where human subjects were exposed to sulfur dioxide.

"Sulfur dioxide is highly soluble in water. In persons at rest (low ventilation rate) sulfur dioxide is largely absorbed by the moist tissues of the nose and upper respiratory region. Exercise or other daily activity increases a persons' ventilation rate. With increasing ventilation rate, sulfur dioxide penetrates further into the respiratory tract. A greater dose is delivered to the trachea and beyond.

"Sulfur dioxide causes bronchoconstriction, a narrowing or constricting of a person's respiratory airways. Bronchoconstriction results from a tightening of the smooth muscle surrounding the airways. A large enough increase in bronchoconstriction, measured as airway resistance, is accompanied by symptoms such as wheezing and shortness of breath.

Airborne sulfates affect the respiratory rate, aggravate symptoms of those with respiratory and cardiovascular diseases and affect the respiratory function in children. An ARB report prepared in 1977 states, "Because of the continually emerging scientific evidence that substantiates the possibility that ambient sulfate is one of the more toxic pollutants, every effort should be made to limit the levels of atmospheric sulfates before more serious harm to human health can occur."

Effects on Vegetation and Ecosystems

Short-term exposure to sulfur dioxide can result in foliar injury, inhibition of photosynthesis, and reduction in yield. Long-term exposure (daily exposure over an indefinite period of time) may have chronic effects even at every low concentrations resulting in reduced yield and/or visible injury.

Atmospheric sulfates can adversely affect vegetation and ecosystems depending upon the sensitivity of the plants and ecosystems and other environmental factors. Adverse effects to plants include foliar injury and leaching of essential plant nutrients. (See discussion on Acid Deposition, below, for more information on the effects of sulfates.)

5.7 ACID DEPOSITION

In California acid deposition is caused mainly by emissions of sulfur and nitrogen oxides from fossil fuel combustion sources that are converted to sulfuric and nitric acids in the atmosphere. Acid deposition may occur in either wet (rain, snow, fog, mist, hail) or dry (gases, particles) form. (11)

Health Effects

Results of five years of research and monitoring by the California Air Resources Board indicate the following:

"A significant number of California's one million asthmatics may suffer reduced lung function during air pollution episodes characterized by elevated acidity.

"Exposure to acids affects the ability of the lung to cleanse itself. This effect may increase the risk of developing chronic bronchitis or other respiratory diseases.

"Exposure to nitric acid and ozone together is more harmful to the lungs than exposure to ozone alone. This is particularly significant since we have also learned that high levels of nitric acid and ozone commonly occur together in polluted areas of southern California."

Epidemiological studies indicate that acid rain may be linked to elevated rates of cancer. The studies which are subject to further evaluation show very good geographical association "between increased cancer and cancer mortality rates and levels of sulfates in the atmosphere". The studies were conducted by the Memorial Sloan - Kettering Cancer Institute.(12)

Effects on the Natural Environmental, Crops and Materials [11]

The Air Resources Board study on acid deposition also noted the following effects of acid deposition on the natural and human environment:

"High-elevation lakes and streams of the Sierra Nevada are being temporarily acidified during spring snowmelt and following acidic summer storms."

"Short-term experimental acidification of lake and stream water kills aquatic insects and microscopic animals (zooplankton) which serve as food for sport fish."

"Exposure of tree seedlings to acid fog followed by exposure to ozone hastens the damage caused by ozone. This could reduce forest productivity in California."

"Acid rain and fog at current levels do not appear to affect California crop yields."

"A variety of materials, especially exterior paint, has been damaged by acidic pollutants."

5.8 TOXIC AIR CONTAMINANTS

The differentiation between the criteria pollutants and toxic air contaminants is established primarily through the promulgation of the federal Clean Air Act. Essentially, toxic air contaminants are those pollutants that the Act does not address specifically through the setting of National Ambient Air Quality Standards. Airborne toxic materials are addressed to a limited degree at the national level through the National Emission Standards for Hazardous Air Pollutants program. Although not true in every case, criteria pollutants are generally of concern throughout an air basin while toxic air contaminants are a localized phenomena.

Toxic air contaminants can be separated into carcinogens and noncarcinogens based on the nature of the physiological degradation associated with exposure to the pollutant. Carcinogenesis is defined as a self replicating process in which a change induced in a cell is transmitted to successive generations of cells descended from it, including specifically, cellular changes leading to the formation of carcinomas (malignant tumors of epithelial cells), sarcomas (malignant tumors of connective tissue), lymphomas and leukemias (cancers of the lymphatic and blood systems).

For regulatory purposes, carcinogens are assumed to have no safe threshold below which health impacts will not occur. This assumption is based upon projections of low dose extrapolation models. Such models are necessary in determining the risk from these pollutants because direct data is not easily obtained at the concentrations reflecting ambient conditions. Other characteristics of carcinogens include a multiplicity of causes and a latency period.

Noncarcinogenic toxic air contaminants cause a wide variety of diseases. This category of pollutants differs from carcinogens primarily in that there is generally assumed a safe level of exposure below which no negative health impact is

believed to occur. These pollutants are often of concern at low levels, but not generally as low as carcinogens due to the assumption of threshold effects.

Under the federal Clean Air Act of 1990, the Environmental Protection Agency is required to establish emission standards for hazardous air pollutants. EPA's regulation has been limited to establishing standards for selected industries. In California the regulation of toxic air contaminants is delegated to the Air Resources Board (ARB), the State Department of Public Health (DHS), the Department of Food and Agriculture and local districts. Once toxic air contaminants are identified and the need for regulation established, model control measures are developed and adopted by the ARB. Rules and regulations implementing these control measures are then adopted at the district level. Districts may adopt more stringent regulations than those required by the state, but they may not adopt less stringent ones. At the beginning of 1991, fourteen substances had been identified as toxic, nine substances were in the identification phase and eight model control measures had been developed under this process.

Sources which have the potential to emit toxic air contaminants within the North Central Coast Air Basin are regulated under District Rule 1000, Permit Guidelines and Requirements for Sources Emitting Toxic Air Contaminants. The rule regulates new or modified sources of noncarcinogenic toxic contaminants and suspected carcinogenic compounds. Twenty three compounds are identified as carcinogenic toxic air contaminants and over 130 substances are identified as toxic air contaminants.

For the purposes of this document, discussion of the health effects of pollutant-specific toxic air contaminants is limited to benzene which is the only substance for which a control measure has been developed by the State with a subsequent rule adopted by the District, Rule 1002, Transfer of Gasoline into Vehicle Fuel Tanks. Also, benzene is a reactive hydrocarbon and plays a significant role in the formation of ozone. Thus, controls aimed at controlling toxic benzene emissions will also help in the reduction of ozone.

Health Effects of Benzene

Benzene depresses the central nervous system. A brief exposure (5 to 10 minutes) to 20,000 ppm is usually fatal. Exposure to hundreds of ppm of benzene, produces initial euphoria and giddiness followed by dizziness, nausea, staggering, and irregular heart beat and unconsciousness. Delayed effects may persist long after an acute exposure. Pneumonitis and bronchitis may occur by the direct action of benzene as it is excreted from the lungs.

Chronic exposure to low doses (10 to 100 ppm) has been associated with chromosomal abnormalities in marrow and white cells and bone marrow toxicity years after exposure. A typical result of this toxicity is aplastic anemia characterized by a decrease in marrow cells and a decrease in circulating red cells, while cells and platelets. More serious cases of aplastic anemia die within three months of infection or hemorrhage. Early, mild blood changes may be reversed if the victim is removed from the source of benzene exposure. Leukemia may follow aplastic anemia.

Case studies and epidemiologic studies have established the relationship between benzene exposure and the development of leukemia. The route of exposure is inhalation, and exposure is cumulative over the individual's lifetime.

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(2) Health Effects of Tropospheric Ozone, U.S. Environmental Protection Agency Research Triangle Park, Environmental Science Technology, Vol. 23, 1989.

(3) Effect of Ozone on Vegetation and Possible Alternative Ambient Air Quality Standards, Staff Report, State of California Air Resources Board, March, 1987.

(4) Information Relating to Development of a State Ambient Air Quality Standard for Fine or Inhalable Particles, Air Resources Board, December, 1981.

(5) California Ambient Air quality Standards for Carbon Monoxide (Sea Level), Air Resources Board, August, 1982.

(6) Short Term Ambient Air Quality Standard for Nitrogen Dioxide, Staff Report, Air Resources Board, September, 1985.

(7) The Effects of Oxides of Nitrogen on California Air Quality, Air Resources Board, March 1986.

(8) Supplemental EIR, Examining Air Quality Impacts of Proposed New NOx and SO_2 Emission Limits for Lone Star Industries' Cement Plant in Davenport, California, Monterey Bay Unified APCD, July 28, 1986.

(9) Public Hearing to Consider Amendment Regarding the Short-Term State Ambient Air QUality Standard for Sulfur Dioxide and Measurement Method, Air Resources Board, September 1983.

(10) Review of the Sulfate Ambient Air Quality Standard, Air Resources Board, September 29, 1977.

(11) Acid Deposition Research and Monitoring Program Report to the Governor and the Legislature, Air Resources Board, December 1983.

(12) The Health and Welfare Effects of Acid Deposition in California: An Assessment, Draft Report, Air Resources Board, September 1988.

(13) Journal of the Air Pollution Control Association, April, 1988.

(14) Sources and Health Effects of Specific Toxic Air Pollutants, Dr. Lucille Saloum, paper presented to ARB Air Toxics Training Seminar, June, 1987.

15-day Comment

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STATE OF CALIFORNIA
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BY BOARD SECRETARY

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April 9, 1993

Lynn Terry
AIR RESOURCES BOARD
P.O. Box 2815
Sacramento, California 95812

RE: *REVISION TO TRANSPORT REGULATIONS*

Dear Ms. Terry:

This is just to confirm our conversation of April 7, 1993 concerning the noticing on the above referenced matter.

As indicated by you, the deadline for receipt of public comments is April 20, 1993, not the April 13, 1993 date contained in page 2 of the Notice of Public Availability. You had also indicated that your agency would be sending out a corrected version of the Notice.

If my understanding of this is incorrect in any way, please contact me immediately.

Sincerely,

SAN JOAQUIN VALLEY UNIFIED
AIR POLLUTION CONTROL DISTRICT

By: Philip M. Jay
District Counsel

PMJ:ml
cc: David L. Crow

15-day Comment

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STATE OF CALIFORNIA
AIR RESOURCES BOARD
RECEIVED 4-20-93
BY BOARD SECRETARY

San Joaquin Valley Unified Air Pollution Control District

April 19, 1993

Secretary
California State Air Resources Board
2020 "L" Street
Sacramento, California 95812

RE: REVISIONS TO TRANSPORT REGULATIONS

Dear Air Resources Board:

In response to the "Notice of Public Availability of Modified Text" dated April 5, 1993, the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) submits the following comments in opposition to the proposed amendments to 17 CCR section 70600. These are in addition to the testimony given by the District on December 1, 1992 and on March 11, 1993 and the written materials previously submitted. These comments are based on an analysis by SJVUAPCD's technical and legal staff.

The San Joaquin Valley Unified Air Pollution Control District was supportive of the original ARB proposal which would have allowed all districts (except South Coast) to adopt a 10 ton/year offset threshold for permitting programs. It remains adamantly opposed to the current proposal which would allow districts upwind of the San Joaquin Valley to allow a threshold that is 50% less stringent, i.e., 15 tons per year.

This is inequitable, contrary to both the letter and spirit of the California Clean Air Act (CCAA), and will have a significant adverse environmental and socio-economic impact on the San Joaquin Valley. It represents a complete abandonment of the ARB's duty to protect downwind areas, such as the San Joaquin Valley, from transported pollution from upwind areas. We urge the ARB to reconsider its decision and adopt the version of the rule that would allow a 10 tons/year threshold for all districts.

I.

THE PROPOSED AMENDMENT TO 17 CCR 70600 AND 70601 IS INCONSISTENT WITH AND VIOLATES THE MANDATORY DUTY CREATED BY HEALTH & SAFETY CODE SECTION 39610 REQUIREMENTS THAT MITIGATE TRANSPORT OF POLLUTANTS

The California Clean Air Act (CCAA) of 1988 was enacted to ensure attainment of existing health-based ambient air quality

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standards that are necessary to protect the public health. Furthermore, the CCAA specifically states that these standards are to be attained at the earliest practicable date. Health & Safety Code section 40910 clearly states legislative intent that "priority shall be placed upon expeditious progress toward the goal of healthful air."

A major legal requirement of the CCAA is the inclusion of specific mandates detailing the legal responsibility of upwind districts to mitigate ozone precursor emissions which are transported into downwind areas.

Thus, Health & Safety Code section 39610(b) states that the ARB "shall, in cooperation with the districts, assess the relative contribution of upwind emissions to downwind ambient pollutant levels to the extent permitted by available data, and shall establish mitigation requirements commensurate with the level of contribution." This determination is to be made "based upon the preponderance of available evidence." (Health & Safety Code § 39610(a).)

The above sections clearly establishes the seriousness of the transport problem and set forth legislative intent that the ARB take expeditious action designed to resolve the impact of transported pollutants on downwind areas.

This mandatory duty is further reflected in the sections outlining requirements to be included in attainment plans. Those sections universally require that "districts responsible for or affected by air pollutant transport shall provide for attainment and maintenance of the state and federal standards in both the upwind and downwind district". (Health & Safety Code §§ 40912; 41503.)

The ARB recognized its mandatory duty regarding transport when, on August 10, 1990, it adopted Resolution 90-53 (attached as Exhibit 1). Said resolution outlines the actions to be taken by upwind districts to meet CCAA requirements and also identifies transport "couples" that are affected by the transport mitigation regulations. Moreover, in said resolution the ARB makes a finding that transport to downwind areas significantly contributes to, and, in some instances, is the cause of, violations of the state ambient air quality standard for ozone in the downwind area. Based on a preponderance of available evidence, the ARB concluded that transported pollutants from the broader Sacramento area and San Francisco Bay areas "cause or contribute to some exceedances of the state ozone standard" in the San Joaquin Valley and that the impact on the Valley of transport from these areas is "significant". (ARB resolution 90-53, para 2; 6a; 7a).

The transport regulation adopted in 1990 reflected these findings and required a "no net increase" permitting program. This action was (1) found to be commensurate with the relative

contribution of upwind emissions to downwind pollutant levels ; (2) based on evidence; and (3) uniform. While stringent, it established a "level playing field" between upwind and downwind regions and did not give unfair advantage to either.

Currently, in complete derogation of its mandatory legal duty under the CCAA and contrary to its own findings in Resolution 90-53, the ARB proposes amendments to amend 17 CCR 70600-70601 in a manner which would allow upwind districts (specifically the Bay area and broader Sacramento area), to relax their permitting thresholds to 15 tons per year while keeping downwind districts (specifically San Joaquin Valley) under more stringent requirements, i.e., 10 tons per year. This action by ARB, if allowed, will increase the quantity of pollutants currently transported to the Valley. This not only has the potential to increase the well documented health and economic problems caused by air pollution, but seriously affects the ability of the SJVUAPCD to meet its federal and state mandates. Moreover, due to the inequitable manner in which the regulation is being proposed, small business downwind will be more seriously affected than business in the upwind areas.

Absolutely no credible evidence has been presented that would allow ARB to disregard its duty to deal with transport. Similarly, there has been no evidence presented that would contradict the evidence cited in Resolution 90-53 that transported pollutants adversely affect the air quality in the San Joaquin Valley. Nor is there any credible evidence that would refute the contentions made by downwind districts concerning the potential adverse environmental and economic impact from this scheme.

Nothing has changed since the adoption of Resolution 90-53 and its findings. No additional studies have been presented by the ARB that downgrade the significance of transport to the San Joaquin Valley from the Bay Area and broader Sacramento. Nothing would indicate that in 1993 transport is no longer a problem. If anything, the transport problem from the Bay area to the San Joaquin Valley is even more serious than when Resolution 90-53 was adopted. This is evidenced by the impending action by the ARB to reclassfy the contribution from the Bay area from "significant" to "overwhelming."

There is a complete lack of any evidence that would justify permitting districts upwind of the Valley to allow more pollution to flow to the Valley. No measures have been imposed on upwind districts to counter balance the increase in transported

pollution. There is simply no rational or legal basis upon which ARB could conclude the proposed amendments are consistent with its duty under the CCAA to regulate and control transported pollutants. This proposed action is in clear violation of the above referenced requirements and should be modified to provide an equitable transport control mechanism while providing sufficient permitting relief.

II.
THE AMENDMENTS TO HEALTH & SAFETY CODE SECTIONS 40918 TO 40920 DO NOT RELIEVE ARB FROM ITS MANDATORY DUTY TO ADOPT MITIGATION REQUIREMENTS FOR TRANSPORTED POLLUTANTS

The impetus for the changes to the transport regulation appears to be recent amendments to Health & Safety Code sections 40918 to 40920. (AB 2783.) The ARB apparently interprets these recent amendments as relaxing their duty to protect downwind regions. As set forth below, the amendments do not relieve the ARB of its duty in that regard.

In 1992, pursuant to Statutes 1992, Chapter 945, Health & Safety Code sections 40918 to 40920 were amended to allow some relaxation of offset thresholds for ozone precursor emissions. The ARB staff proposal of January 22, 1993 would have allowed an across the board 10 ton/day relaxation for all areas (except South Coast). This proposal served the dual purpose of allowing permit relief for small sources while not allowing upwind districts to gain an unfair advantage.

However, the amendments allowing some permitting relaxation did not repeal those other provisions of the CCAA pertaining to mitigation of transported pollutants nor did they relax the duty placed on the ARB to mitigate said transport. In fact, The contrary is true. In that same bill, AB 2783, the Legislature reconfirmed the importance of the transport requirements and the mandatory duty placed on the ARB by amending section 39610 to change the word "district" to "air basin or subregion thereof."

Thus, it is clear that the Legislature did review the transport issue and determined to leave it intact, and, in fact, intended to add strength to the language by assigning the responsibility for transport control to air basins, rather than to individual districts within those basins.

The ARB's own staff recognizes the importance and continued requirement that the transport mandate be complied with. The January 22, 1993 staff report (considered March 11, 1993) states

that the intent of the Legislature in passing AB 945 was to provide permitting relief and to protect downwind areas. (Staff Report, p. 1.)

The current action taken by the ARB ignores the statutory mandate that downwind areas are to be protected from upwind pollution and disregards the clear intent of AB 945. The proposed amended regulation will allow a greater level of permitting relief for two major air basins upwind of the San Joaquin Valley Air Basin, both of which are responsible for "significant transport" into the San Joaquin Valley Air Basin. In fact, the Bay Area is currently under consideration by the ARB to be reclassified to the "overwhelming" category in regards to its transport of pollutants to the San Joaquin Valley.

The action proposed is in conflict with the above Health & Safety Code sections; is contrary to law; is inconsistent with ARB's own staff findings; and ignores previous findings concerning the transport issue. These defects are so pervasive as to render the proposed regulation fatally flawed. This requires full reconsideration by the ARB governing board of the proposed rule to cure these glaring defects.

III.

THE PROPOSED ACTION BY THE ARB WILL HAVE AN ADVERSE IMPACT ON THE SAN JOAQUIN VALLEY'S AIR QUALITY AND WILL HINDER EFFORTS TO COMPLY WITH STATE AND FEDERAL CLEAN AIR ACT DEADLINES

The regulation being adopted will have a significant adverse impact on San Joaquin Valley air quality and will hamper efforts to achieve federal and state clean air act mandates.

Failure to maintain the same level of permitting stringency between regions will encourage greater emissions growth in upwind areas, thus undermining the more stringent reductions required downwind. The SUVUAPCD's 1991 California Air Quality Attainment Plan includes all feasible control measures and an expeditious rule development calendar to implement those measures. Even with this most aggressive approach, the SJVUAPCD does not project attainment of the state ozone standard. This situation will be

exacerbated by the amendment which will allow two large upwind districts to adopt offset levels less stringent than those in the San Joaquin Valley.

It is indisputable that with additional emissions permitted upwind, continued or increased quantities of transported emissions will flow into the Valley. Any increase in transported emissions will be significant and will hinder the District's ability to reach mandated standards. Additionally, the District will be required to adopt even more stringent emission reduction rules on industry which will further impact its residents.

In addition, SJVUAPCD is currently preparing its mandated Rate of Progress Plan required by the Environmental Protection Agency. The Federal Clean Air Act Amendments of 1990 mandate a 15% emission reduction from 1990 to 1996. Present calculations indicate the District may fall substantially short of that mandate.

If the 15% emission reduction or federal waiver requirements are not met, the District will be faced with more stringent offset limits, loss of highway and sewer funds, and/or imposition of a Federal Implementation Plan (FIP). Any increase in transported pollutants will contribute to the inability of SUVUAPCD to achieve mandated air quality goals, the results of which would have a devastating impact on the region.

It is well documented that ozone has a significant adverse impact to agriculture and public health in the San Joaquin Valley. This is supported by the ARB's own studies. Children, persons with respiratory disorders, the elderly, and healthy people who exercise strenuously are especially sensitive to the impact of ozone on human respiratory systems. The increase of transported pollutants will prolong nonattainment in the San Joaquin Valley and the associated adverse health and economic effects.

IV.

THE PROPOSED ACTION FAILS TO CONSIDER THE ADVERSE SOCIO-ECONOMIC IMPACT ON THE SAN JOAQUIN VALLEY

The ARB has taken a measure intended to provide economic relief to small business and turned it into just the opposite: a measure that will have a significant adverse impact on the economy of the San Joaquin Valley. The intent of AB 945 was to provide regulatory relief to small businesses. Its intent was not to give upwind districts more relief at the expense of

downwind areas.

The adverse impacts which will result from the ARB's actions are summarized as follows:

- Source Migration: The negative socioeconomic impact on adjacent areas due to allowing less stringent regulation in the Bay Area and Broader Sacramento Area has not been considered in the action by ARB. Allowing facilities to emit 50% more pollution before they have to pay for offsets will attract all new businesses which are not dependent on local customers. New light manufacturing jobs will not locate in areas with more stringent regulations. No consideration or evaluation of the socioeconomic cost of this consequence has been made. The economic impact of constraining light industry job growth in the San Joaquin Valley by giving both the Bay and Sacramento Areas a 50% advantage has not been considered.

- Jobs/Housing Balance: The existing jobs/housing imbalance between the San Joaquin Valley and the Bay Area is encouraging an increase in interregional vehicle miles travelled (VMT). In addition, existing Bay Area-oriented commute traffic is currently experiencing stop and go conditions on I-205 and Altamont Pass at peak periods which compounds the increase in emissions in VMT. The inequity in the jobs/housing balance will be further worsened with the new transport policy, thus increasing VMT, congestion, and congestion-related emissions.

Existing congestion levels on I-205 and I-580 over Altamont Pass result in peak hour Level of Service (LOS) E conditions. This represents stop and go driving. Such stop and go driving produces increased emissions of NOx and ROG compared to free-flow travel speeds. An increase in ozone precursors will add to the quantity of emissions in the San Joaquin Valley which is currently nonattainment for ozone. Such an increase in emissions will lessen its ability to reach attainment and further subject the San Joaquin Valley's population to increased health risks.

- Increased Costs For Congestion Relief Due To VMT Increases: The increase in the jobs/housing imbalance and the resulting increase in VMT and congestion on major roads into the Bay Area will require the use of limited highway funds to construct congestion relief projects. Currently, there is a lack of construction monies to fund improvements needed today such as the widening of I-205 between I-580 and I-5, SR-120 between I-5 and SR-99, SR-152 between US 101 and SR-156, and US 101 between Morgan Hill and San Jose. Future widenings are already

anticipated for I-5 south of I-580 and I-580 from I-5 into the Livermore area. In addition, future trips from the San Joaquin Valley will further worsen existing congestion on I-580 in Pleasanton and I-680 throughout the Tri-Valley area.

The ARB action will cause modification to the NSR rules in upwind areas to occur immediately, and the possibility for an increased jobs/housing imbalance will begin to occur soon afterwards when the job creation potential for the 15 tons/year NSR takes hold. However, there is presently a lack of adequate infrastructure to accommodate an increased growth rate in VMT. Most of the freeway modifications listed above will not result in new capacity until 1998 or later. As a result, congestion will worsen and the need for new congestion relief will be required. Where will this money come from? Who is ultimately responsible for these costs? It is most likely that the residents in the northern counties of the San Joaquin Valley will be required to fund these extra highway improvements out of local sales tax revenues or through the reallocation of state and federal transportation monies from other necessary projects to these new ones. Thes increased costs will be exacerbated by the shortfall in sales tax revenue that will result from tighter business restrictions imposed in the San Joaquin Valley.

- Unemployment Rates:

The action taken provides an economic advantage to the Bay Area and the Broader Sacramento Area, at the economic disadvantage to the downwind districts that their emissions impact. The San Joaquin Valley counties have an average unemployment rate of nearly 18%, while the Bay Area and Broader Sacramento Area have rates of 7.0 % and 8.8%, respectively.[1] This is illustrated as follows:

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San Joaquin Valley

[1] Unemployment data is based on a weighted average of each county's 1992 population and February 1993 unemployment rates within the air basin.

San Joaquin Valley		
County	January 1, 1992 Air Basin Population	February 1993 Unemployment Rate
San Joaquin	502,031	16.8%
Stanislaus	393,398	19.3%
Merced	187,116	20.9%
Madera	97,155	16.1%
Fresno	713,719	17.9%
Kings	107,485	19.2%
Tulare	329,999	17.8%
Kern (P)	501,482	16.7%
WEIGHTED AVERAGE (%)	2,832,385	17.9%

Broader Sacramento Area		
County	January 1, 1992 Air Basin Population	February 1993 Unemployment Rate
Sacramento	1,099,058	8.2%
Sutter (P)	14,000	23.9%
Solano (P)	105,356	9.8%
El Dorado (P)	106,121	9.7%
Placer (P)	159,487	8.6%
Yolo	149,162	12.0%
WEIGHTED AVERAGE (%)	1,633,186	8.9%

(P) - Indicates partial county within air basin

San Francisco Bay Area		
County	January 1, 1992 Air Basin Population	February 1993 Unemployment Rate
Napa	114,813	9.2%
Sonoma (P)	340,626	7.6%
Marin	237,022	5.5%
Solono (P)	259,335	9.8%
Contra Costa	836,871	6.8%
Alameda	1,313,332	6.8%
San Francisco	728,730	7.1%
San Mateo	670,084	5.6%
Santa Clara	1,531,796	7.2%
WEIGHTED AVERAGE (%)	6,032,609	7.0%

(P) - Indicates partial county within air basin

- Cost Of More Stringent Regulations To Meet Air Quality Goals In Downwind Areas Due To Increased Transport: The increase in ozone precursor emissions will require an increase in rule-making in the Valley to compensate. It has been suggested that the 0.2 tons/day of emissions increase is insignificant. Even if one assumes this estimate is accurate, five rules are required in the Valley to mitigate the impacts of 0.2 tons/per day, as shown below.

Control Measures for ROG: Maximum Cost For 15 TPY Sample Source		Reductions
Aircraft Storage & Refueling	0.04 tons/day	$2,850
Aircraft & Aerospace Ext. Coatings	0.04	$210,000
Plastic Parts Coatings	0.01	$30,000
Petroleum Solvent Dry Cleaning	0.02	$30,000
Polyester Resin Operations	0.11	$720,000
TOTAL	0.22 tons/day	

This increase in rule-making activity is hardly insignificant and the cost to affected industries is considerable. More stringent rules will need be to be developed above and beyond those already identified in the SJVUAPCD air quality plan. These more stringent rules will have an economic cost which will further hurt small industries since these rules will require additional controls and costs on existing stationary sources or controls on new sources.

The cost for implementing the 5 rules identified ranges from $2,850 to $720,000 for a 15-ton per year facility. More stringent regulation will be even more expensive. The costs for off-set may in fact be less than complying with additional regulations. Relieving the off-setting requirement will not provide any economic advantage if additional regulations need to be adopted.

- "Netting Out" to avoid transport impacts: Economic costs to all business in the Districts may be incomplete and drastically underestimated if increases caused by the higher threshold must be "netted-out" to avoid increasing pollution transport. In other words, if a District must impose additional or more stringent regulations on other sources to compensate for the emissions increases allowed by raising the offset threshold, there will be additional undetermined costs for regulatory compliance. All businesses may find that tighter regulations will adversely affect their businesses to support the advantage being given to new business. ARB has not considered the increased cost of operation and the effect on existing businesses that this will create.

The total lack of any meaningful research, evidence, or discussion of the above socio economic impacts requires this proposed amendment be returned to the governing board for reconsideration and modification. In fact, as indicated above, the action taken by ARB will hurt, not benefit, industry in the San Joaquin Valley.

V.

THE FAILURE OF THE ARB TO CONSIDER SOON TO BE AVAILABLE DATA WAS ARBITRARY AND CAPRICIOUS

The action taken by the ARB governing board on March 11, 1993 was not only inappropriate, it was premature. There is absolutely no rational reason why the ARB is in such a hurry to amend rules without adequate data. It is patenely unfair to adopt an amendment to the transport mitigation regulation when

crucial evidence that should be considered in such a decision is only a few months away from completion.

As stated in the ARB's own staff report, "the technology needed to quantify the transport impact of increased emissions is being developed for most areas, but it is not yet available". (Page 11.)

What the staff report does not say is that a six-year long $17,000,000 San Joaquin Valley Air Quality Study will be completed in late 1993, and will provide the technical data necessary to determine the effects of transported pollutants from the San Francisco Bay area and Sacramento area on air quality in the San Joaquin Valley. The ARB recognizes the importance of the scientific study and has contributed $3,000,000 to this effort. It seems incredible that ARB would contribute money, time and effort to a major study and then arbitrarily make a decision without considering the very evidence needed to make a reasoned decision. Not waiting for the results of a major multi-million dollar study further evidences the capriciousness of ARB's action.

In addition, the ARB disregards the fact that its own agency is currently reassessing the issue of transport couples. ARB staff began the process with a public workshop less than two weeks after the board action to relax the transport mitigation regulation. There is a very strong potential that the San Francisco Bay Area is going to be found to be an "overwhelming" contributor of transport to the SJVAB during this reassessment. With this information before them, how could the ARB possibly be considering to allow the broader Sacramento and Bay areas, both upwind contributors to the San Joaquin Valley, to emit 50% more ozone precursors than the downwind air basin that they both affect? The only answer is that the action taken on March 11, 1993 was not only inappropriate and inequitable, but was premature and lacks any evidentiary support.

Approving the change in offset thresholds at this time is arbitrary and capricious. Approving a change at this time when better information is only a few months away is precipitous and wasteful, particularly when preliminary analysis suggests that transport from the Bay Area is more significant than previously established.

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VI.

THE DECISION TO AMEND THE TRANSPORT REGULATION IS BASED ON INACCURATE AND NON EXISTENT DATA

Rather than wait for the results of the multi-million dollar air study currently underway, the ARB attempts to provide a "scientific analysis" of its conclusion that there will be minimal impact on downwind districts. The methodology and data used by ARB staff to assess the impact of the changes to the transport regulation is faulty and inaccruate. This further indicates the action by the ARB is not supported by substantial evidence.

First of all, the analysis relies on assumptions derived from data that has nothing to do with the Bay Area, Sacramento or San Joaquin Valley. There is absolutely no reason given as to why the data borrowed from the South Coast District has any relation or correlation to conditions as they exist in the Bay Area, Sacramento or San Joquin Valley.

The linchpin of the staff analysis, i.e. the the "assumptions" contained in page D-10 of the report, have no basis in fact. These assuptions are that the percentage of emissions from small sources correlates to those in the South Coast area; that the makeup of South Coast's inventory can be applied to other areas; and that the rate of growth in small source emissions occurs at the same rate as the overall emissions growth in the planning inventory.

That these "assumptions" are faulty is admitted in that same analysis. Page D-15 discusses the bias and uncertainty in the calculations. The conclusion to be reached, based on the ARB staff's own discussion is that small sources are probably underestimated in the calculations; South Coast data is probably not relevant; and that most of the data relied on is speculative.

Nor is there any discussion on how ARB determines what the number of small sources will be in the future. The ARB analysis boldly concludes that the impact to the San Joaquin Valley will be 2.6 tons/day by the year 2000. There is no indication that any accurate data was used to determine the number of small sources that will exist upwind of the Valley in the year 2000.

Further, the methodology fails to take into account the futher increase in upwind sources due to the regulation change itself. How many sources will move or locate upwind due to the

more lenient thresholds? Why is there no discussion of this effect on estimate of impact? The growth inducing impacts of the regulation change should be considered in the staff analysis.

It would be much more accurate for the ARB to simply admit that its action is unsupported by any evidence. Instead, it engages in the fiction of a scientific analysis based on faulty and irrelevant data. This methodology is highly suspect. The ARB should go "back to the drawing board" and conduct an anlysis based on evidence, not unfounded assumptions.

VII.
THE IMPACT OF THE DIFFERENTIAL BETWEEN 10 AND 15 TONS/YEAR IS MUCH GREATER THAN DETERMINED BY ARB STAFF

As set forth above, the use of data from the South Coast District as a basis for ARB's analysis is faulty. In addition, even if one assumes some validity to the data and methodology used, it grossly underestimates the impact of the regulation change.

First of all, instead of describing the incremental increase of the Bay Area's transport impact on the San Joaquin Valley by an additional .5 ton/day (which is an unsubstantiated guess) one should examine the measured data that quantifies the atmospheric loading of pollutants which ARB meteorologist and modelers agree upon.

At this time, Bay Area's transport to the San Joaquin Valley is deemed "significant" by the Air Resources Board. By their own staff's calculations, 7 parts per hundred million ozone translates into 158.4 tons/hour being transported in the San Joaquin Valley (ARB staff report dated June 1990 page V.44 attached as Exhibit 2). Further, there is a recent staff recommendation based on new air monitoring data and analysis which identifies the Bay Area as an "overwhelming" transporter of ozone into the San Joaquin Valley which translates into:

203.4* tons of ozone per hour
4,881.6 tons of ozone per day
1,781,784 tons of ozone per year

(This assumes 9 parts per hundred million of ozone - which violates the State standard - the total amount of transport consists of stationary and mobile source emissions from the Bay Area).

It is incredible that the ARB can justify adding any increment of air pollution to the already "overwhelming" load that the San Joaquin Valley residents must carry for Bay Area industry. This does not account for the increased activity in the zero to 15 tons/day sources that are going to be flocking to the Bay Area due to the 5 tons/year windfall from the Air Resources Board.

Secondly, if one applies the same methodology set forth in the ARB January 22, 1993 staff report to previous ARB studies, it is obvious that the ARB has grossly underestimated the environmental impact from the differential allowed in the transport requlation.

The analysis is as follows:

According to the ARB staff report (June 1990) concerning transport, 88 pounds of ozone was flowing into the San Joaquin Valley from the San Francisco Area per second. This is 3,801 tons per day. 1,254 tons per day comes from stationary sources (Bay Area '91 Clean Air Plan), the remaining emissions are from mobile sources. The ARB staff report (March 11, 1993) states that 0-10 t/y sources accounts for 8.7% of the emissions and that 0-15 t/y sources accounts for 10.7 of the emissions. (page D-11). This implies that 10-15 t/y sources account for 2.0% of the emissions. Therefore, 10-15 t/y sources account for 25 t/d (1,254 x .02) of ozone transported to the Valley due to the failure of the ARB to adopt an equitable standard.

This is hardly a "small" increase in transport. It represents an additional 9,125 tons of additional pollutants per year flowing into the Valley.

In fact, this amount is a conservative estimate. If one assumes a conservative growth rate of 2-3% per year for 8 years, they would expect an additional increase of 4 to 6 t/d for these sources, rather than the ARB estimate that there will be a 2.6 t/d (1.3% per year) increase in emissions in the same time period because of the new offset trigger levels.

Again, these are conservative figures. In 1991 for example, in the San Joaquin Valley, 25.3% of increases of permitted emissions came from sources that are 15 t/d or less. That rate is much higher than the 1987 rate developed for the South Coast methodology which at 10.7%. This indicates an impact even greater than calculated above.

Finally, the accuracy of emissions calculations for any size profile below 25 tons is extremely suspect. The emissions estimates prepared by ARB to quantify the increased emissions in the 10 to 15 ton range are based on emissions inventories where reporting of sources below 25 tons is optional. Much of the emissions for this size operation are either contained in area source estimates or are completely unquantified. Even if this problem could be solved, the bias and uncertainties acknowledged in the staff report are sufficient to render the analysis unreliable.

Basing the estimate on a source profile that exists currently by chance, rather than regulatory pressures to be under a fifteen ton threshold, is meaningless. New sources have historically redesigned facilities to avoid offset requirements when thresholds were tightened from 250 pounds per day (45.6 tons per year) to 150 pounds per day (27.4 tons per year). The restriction focused the size of most new applications for permits to be submitted at the new threshold. A better estimate of emissions change would be to calculate the difference in emissions if all new permits are approved at 10 or 15 tons. The number of new permits issued each year historically should be multiplied by 10 tons and by 15 tons, the difference in these two numbers is a more realistic estimate of the potential effect of approving the 15 ton offset level.

Since the analysis of impact used by the ARB is incorrect, and since the above discussion indicates that the emissions increase has been grossly underestimated, this regulation should be rescinded and modified.

This also requires the entire matter be referred back to the ARB for further study and consideration. This is also required by CEQA, specifically Public Resources code section 21166. The above information and analysis is new information that should be considered by ARB prior to allowing this matter to go any further.

VI.

THE PROPOSED ACTION BY ARB IS INEQUITABLE AND LACKS ANY RATIONAL BASIS

It is San Joaquin Valley Unified Air Pollution Control District's position that any decision made by a public agency should be founded in fairness, even-handedness, and equity to the fullest extent possible. The action taken by ARB on March 11, 1993 was none of these.

The ARB staff saw the need for equity as it evaluated the issue and provided a lengthy discussion of it in their staff report. Apparently, the ARB governing board decided that equity is not important, as it determined to provide the two air basins upwind of the San Joaquin Valley Air Basin a relaxation of the transport mitigation regulation of 50% more than it granted the San Joaquin Valley Air Basin. As stated in the ARB staff report, "for rural areas overwhelmed by transport, any emissions increase (or rather, foregone reductions) is considered to be too much." As stated by ARB staff, any increase in emissions in upwind districts can only exacerbate an already "severe" ozone problem in the SJVAB.

For the ARB to arbitrarily provide an additional 50% relaxation to the two upwind districts is irresponsible, especially in the face of all the detrimental effects that were cited by the SJVUAPCD at the March 11 public hearing and reiterated in this document.

The inequity of the ARB's actions is further illustrated throughout this document in our discussions of air quality impacts, socio-economic impacts, lack of accurate data, legislative intent, etc. A full reading and understanding of the entire text of this document can only lead to the conclusion that the ARB action was premature, capricious, unfounded, and inequitable.

VIII.

THE ENVIRONMENTAL ANALYSIS IS INADEQUATE UNDER CEQA AND THE ARB'S CONCLUSIONS ARE NOT SUPPORTED BY SUBSTANTIAL EVIDENCE

The California Environmental Quality Act (CEQA) dictates that agencies shall not approve projects with significant adverse impacts when feasible alternatives or feasible mitigation measures can substantially lessen such impacts. Public Resources section 21002; 21081; Sierra Club v. Gilroy city Council (1990) 222 Cal.App.3d 30, 41; Kings County Farm Burea v.City of Handford (1990) 221 Cal.App.3d 692, 711.

The staff report relied upon by the ARB in this matter is inadequate both under CEQA and the certified regulatory program applicable to that agency. In fact, it is so cursory and contradictory as to be valueless to the ARB as a CEQA information document.

For example, at some parts of the January 22, 1993 report it is stated that there is insufficient data to accurately

assess the environmental impact this proposal will have on downwind districts. (Page 9, 11). At other places in the report staff concludes there could be significant adverse environmental impacts due to the rule change.(page 9, 11, 13). Still at other places in the report staff concludes the emissions impact on downwind districts is "small". (p.9).

The bulk of the environmental "analysis" is summed up on page 13, where the staff again admits there is no data to justify their conclusions but speculates that the impact on downwind districts is in a range of 0.1 to 2.1 tons per day of total ozone precursors. (A spread of 2000%). To cover all the bases, staff then recommends a statement of overriding considerations which outweighs the "unavoidable" significant adverse impact.

Arguably, the use of a certified regulatory program under Public Resources section 21080.5 relieves the ARB from some procedural aspects of CEQA. It does not, however, give the ARB the unfettered discretion to simply ignore the environmental consequences of its decisions. Nor does it allow the ARB to ignore feasible alternatives and mitigation measures.

In light of the evidence in the record, adopting a statement of overiding considerations constitutes an abuse of discretion and a clear violation of CEQA. An agency is prohibited from approving a project which indentifies significant environmental affects unless mitigation measures have been required which mitigate or avoid the environmental effects. Public Resources section 21081; 21002; 21080.5(d)(2)(i). Further, under section (c) of 21081, a statement of overriding considerations (even assuming this is available to the ARB), requires that "specific economic, social, or other considerations make <u>infeasible</u> the mitigation measures or project alternatives" being presented.

Statements of overriding considerations must be supported by substantial evidence in the record. <u>Sierra Club v. Contra Costa County</u> (1992) 10 Cal.App.4th 1212, 1222-1224. CEQA mandates that the agency's analysis must explain the reasons and facts supporting its conclusion of infeasibility. <u>Marin Municipal Water District v. KG Land Corporation Califonia</u> (1991) 235 Cal.App.3d 1652, 1664.

There is no substantial evidence to support the ARB statement of overiding considerations. No evidence shows the areas upwind of the San Joaquin Valley require more permitting relief. Nor is there any evidence that would show the upwind economies need more permitting relaxation than those downwind.

In the instant matter, the ARB was clearly presented with feasible and reasonable alternative measures that would mitigate the adverse effect of the current proposal on downwind districts. The superior alternative was to follow their own staff's recommedation which would allow all areas permitting relief at the 10 ton/year threshold. Rather than proceed on a level playing field, the ARB arbitrarily chose the worst course which favors upwind districts. By completely ignoring the evidence of adverse impact and mitigation presented, the ABR has abused its discretion and not proceeded in the manner required by law.

The course of action being undertaken by ARB also violates its own regulations. Title 17 CCR 60006 specifically prohibits ARB from approving any action or proposal for which significant environmental impacts have been identified if there are feasible mitigation measures or feasible alternatives available which would substantially reduce such adverse impact. This is also a requirement of Public Resources section 21080.5 (d)(2)(i), dealing with certified regulatory programs.

There has been no evidence presented that the reasonable alternatives (i.e., 10 ton/year) are infeasible, nor has there been any attempt to mitigate the adverse impact that will be caused to downwind districts. This action by the ARB violates both the letter and the spirit of CEQA. We strongly urge the ARB to reconsider its present course of action.

IX.

THE ARB HAS FAILED TO CONSIDER THE CUMULATIVE IMPACT OF THE PROPOSED RELAXATION OF THE TRANSPORT REGULATION

The staff report presented on the relaxation of the transport issue concludes, after admitting there is insufficient data, that any increase of pollution to downwind districts would be "small". (Page 9.) The report then concludes the increase in pollution due to allowing upwind areas to have a 15 ton/day threshold while leaving the downwind areas at 10 tons/day is even "smaller still". Rather than deal with the potential long term and cumulative impacts of the regulation change, staff concludes that other unspecified measures will protect downwind districts "for the near to mid-term." (p.9). The gist of the approach is that the air is already dirty, so a little more pollution won't hurt. The impact should be examined before the decision is made.

The accuracy of the ARB emissions calculations, as set forth above, is extremely suspect. Nor has there been any analysis of

the cumulative impact caused by relaxing the standards for numerous small pollution sources in upwind areas. Nor is there any indication in the staff report that emissions from the Sacramento area are considered in the analysis.

The staff's solution is a recommendation that the ARB "revisit" the assessment periodically. This is insufficient under CEQA. The analysis should cover long term and cumulative impacts associated with the regulation change. CEQA Guidelines 15130(a). Explanation should be given to justify the present, short term solution rather than other alternatives. CEQA Guidelines 15126(e).

X.

REQUESTED ACTION

The ARB action conflicts with the CCCA and CEQA. The ARB has exceeded its authority in this matter, and their decision is not supported by substantial evidence. The San Joaquin Valley Unified Air Pollution Control District requests the ARB to fully reconsider the action taken at the March 11, 1993 public hearing. As the above discussion indicates, the action is illegal under the California Clean Air Act and under CEQA. The ARB should consider the material presented in these comments and hold a full re-hearing on the amendments to the transport regulations.

Sincerely,

SAN JOAQUIN VALLEY UNIFIED
AIR POLLUTION CONTROL DISTRICT

DAVID L. CROW
Executive Director/APCO

DLC:ml

a:trans.reg

15-day Comment

Xc: MHS
EO
Legal

STATE OF CALIFORNIA
AIR RESOURCES BOARD
RECEIVED 5-10-93
BY BOARD SECRETARY

Donna M. Lewis
940 Tornoe Road
Santa Barbara, California 93105-2229
(805) 569-7039

5 May 1993

Board Secretary
Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

Re: Comments on Proposed Revision of Transport Regulation (17 CCR 70600)

Dear ARB,

This letter is to provide comments on the changes to the transport regulation proposed by the Board. "These changes will allow [contributing] districts ... to exempt facilities from the no net increase requirement if emissions fall below the specified stationary source thresholds."[1] The thresholds are then set between 10 and 25 TPY (except for SCAQMD, which is zero). These thresholds are too high to meet the purpose of the transport regulation (i.e. reducing the emission reduction burden on downstream districts). The thresholds should be set at 5 TPY for serious and severe nonattainment areas and at 10 TPY for moderate areas.

Given 1) Districts' assessments that with the best of efforts, they cannot meet statutory emission reduction requirements (e.g. 15% O_3 precursor), 2) the increased impracticality of meeting such requirements with pollutants blowing in from districts held to a lower standard, and 3) the fact that those emission reduction requirements must be satisfied by squeezing stationary sources of severe districts that already have strict regulations in place, the thresholds proposed will not enable districts to reduce transport to give downwind districts a fighting chance to clean their air.

Also, it may be that the thresholds above 10 TPY are based to some extent on a belief that a 10 TPY threshold is likely to result in exacerbation of the recession in the CA economy. This is probably based on the prevailing political wisdom that environmental regulation hinders economic growth and prosperity. This was disproven by a recent study done by Prof. Meyer of MIT[2]. "Those who live in states that have vigorously pursued environmental quality and are now contemplating rolling back environmental standards ... to ... [help] their economies out of recession should reconsider."[3] Therefore, the thresholds should not be set higher than 10 TPY for a reason that is based, either in part or in whole, on concern for a detrimental effect on CA business or the economy.

Thank You,

Donna M. Lewis

Donna M. Lewis

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1 Public Notice (re extension of comment period for 17 CCR 70600 Revision), CARB, April 1993

2 Environmentalism and Economic Prosperity: Testing the Environmental Impact Hypothesis, S. Meyer, Massachusetts Institute of Technology, 5 October 1992

3 Environmentalism and Economic Prosperity: An Update, Meyer, MIT, 16 February 1993

ENVIRONMENTAL DEFENSE CENTER

STATE OF CALIFORNIA
AIR RESOURCES BOARD
RECEIVED 5-11-93
BY BOARD SECRETARY

15-day Comment
XC: MHS
EO
Legal

May 11, 1993

Board Secretary
California Air Resources Board
P.O. Box 2815
Sacramento, California 95812

BY FAX AND MAIL
916 323-0764

RE: Proposed Adoption of Amended Regulations Regarding Transported Pollutants

Honorable Members of the California Air Resources Board:

The Environmental Defense Center (EDC) is a public interest environmental law firm active in California air quality issues. The EDC's service area includes Santa Barbara, Ventura and San Luis Obispo Counties. These comments are submitted on behalf of EDC as well as the Citizens to Preserve the Ojai (CPO), an Ojai citizens group that is plaintiff in Citizens to Preserve the Ojai v. Environmental Protection Agency, C.D. Cal. CV-88 00982 HLH, a federal action which resulted in an order requiring preparation of a federal implementation plan in Ventura County.

As the Staff Report notes, one party, the EDC, did not receive notice of the amendments advanced by the Board. We appreciate the opportunity to respond which has been provided by the additional comment period.

Unfortunately, EDC feels that CARB has taken no action to address the original concerns identified in EDC's letter dated March 10. The direct and cumulative impacts on ambient air quality remain unquantified. The economic benefit is illusory, and when the effect of the federal implementation plans on the South Coast, Sacramento and Ventura are considered, this action will exacerbate both air quality attainment planning and economic revitalization. *See infra.*

Since the amended regulations have no accompanying discussion or analysis, EDC has little choice but to restate here its original objections and reiterate our conviction that the proposed action violates the California Environmental Quality Act, the California Clean Air Act and the federal Clean Air Act.

1. California Clean Air Act

EDC believes that this proposal will substantially impede efforts to improve air quality and thereby violate the California Clean Air Act. Most regions in the state have been unable to meet the 5 % annual emissions reductions required under the California Clean Air Act, even with the employment of "all feasible control measures". Any further relaxation of the state air quality program requirements will cause decreased regulation of ozone precursors and thus increase ambient ozone concentrations.

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(805)963-1622 FAX(805)962-3152 ECONET ADDRESS: EDC

There has been no effort to reconcile the proposal with the goals of the California Clean Air Act. The proposed changes will significantly extend the period of time that California residents will be exposed to air quality exceeding the California and national ambient air quality standards. These proposed changes defy the Act in causing a significant relaxation of the regulatory framework in many portions of California which are having difficulty meeting air quality goals.

2. California Environmental Quality Act

EDC believes that CARB staff have seriously understated the effects of the proposed regulatory revision upon ambient air quality, upon the state-wide program of air pollution regulation, and upon economic vitality. This misrepresentation taints the CEQA review and the policy decision that has led to the proposed action. We request that CARB direct staff to reconsider the proposal after completing legally adequate CEQA review and considering alternatives and mitigation measures and circulating the proposal for additional public input.

The environmental review document is facially inadequate. A five paragraph environmental impact analysis hardly complies with CEQA's mandates of demonstrating to an apprehensive citizenry that impacts have been fully disclosed and feasible mitigation measures and alternatives duly considered. CARB has failed to accurately specify and describe the ramifications of the proposed action and its adverse environmental impacts. In so doing, it has caused a prejudicial abuse of discretion that is subject to reversal in court. EDC implores CARB to reconsider its decision once it has prepared a legally adequate environmental review document.

CARB's environmental review process is defective for failing to identify the following as significant adverse environmental impacts:

(a) Conflicts with adopted environmental plans and goals of the community where the project is located. CARB has failed to analyze conflicts with either Air Quality Management Plans, the Air Quality Element of affected County and City General Plans, other elements of various General Plans, visibility plans in Class 1 visibility areas, the California State Implementation Plan, etc.

(b) A substantial, demonstrable negative aesthetic effect in the form of additional smog and other air pollution. While a superficial air quality analysis is included in the staff report addressing ozone formation issues, no consideration is given to other emissions that will increase if the thresholds are lifted.

(c) The project has potential to induce substantial growth or concentration of population, in fact, this is one of the goals of the project. No consideration is given to the growth inducing effect of the proposed action. CARB is required to evaluate all project related emissions. Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692, 270 Cal.Rptr. 650, mod. 222 Cal.App.3d 516a. This includes consideration of the emissions of attainment pollutants as well as indirect and secondary emissions caused by the economic growth the Board feels it is facilitating by relaxing the New Source Review program offset thresholds. The cumulative impacts analysis is inadequate.

(d) The project will cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system should the project prove effective at stimulating substantial new growth. *Supra.*

(e) No analysis is undertaken evaluating the potential public health hazard to people or animal or plant populations in the area affected. Ozone is a respiratory irritant and ozone precursors themselves have various adverse health effects. The entire national air pollution control program is developed with the goal of attaining health based ambient air quality standards. CARB fails to

articulate the effect of extended adverse air quality upon the health of the affected populations, in particular children, individuals with respiratory ailments, and other sensitive receptors.

(f) While the "environmental review document" acknowledges that approval of the project will cause continued violation of ambient air quality standards, there is no discussion of how the weakened protection for public health will contribute to existing or projected air quality violations or to what degree it will expose sensitive receptors to substantial pollutant concentrations.

Each of the above issues represents a significant adverse environmental impact and cumulative impacts which must be discussed in an environmental review document prepared in conformity with CEQA. See, Citizens To Preserve The Ojai v. County of Ventura (1985) 176 Cal.App.3d 421, 222 Cal.Rptr. 247.

Further, EDC believes that there are alternative approaches which CARB should consider to provide relief to small businesses without gutting the regulatory program and causing a series of additional impacts. The problem as described by Ventura County staff and in the CARB staff report is the exhaustion of community banks from which small businesses formally obtained offsets. Why not examine a method of replenishing the community banks through emissions reductions methods that may provide economic opportunities, or at least shift the economic burden onto those that can better bear them? For example, Santa Barbara County recently initiated a gross emitting vehicle buy-back and repair program. Emissions reductions obtained through the subsidized repair of gross emitters may replenish a community bank while providing business opportunities to vehicle air pollution specialists. Alternatively, since each of the most affected areas contains significant agricultural activities, a series of "Best Management Practices" for air quality purposes could be developed for agricultural operations to create additional emissions reductions that could be employed in a bank. While the feasibility of these ideas, and the potential for others, has not been tested, they suggest that alternatives and/or mitigation measures may exist to accomplish the project's stated purposes which reducing the significance of the environmental impact. CARB has a duty to undertake such an exercise before it decides to simply weaken this regulatory program.

On the "benefits" side of the equation, CARB must recognize that the FIP may well reintroduce rulemaking of the type weakened herein, as it has been demonstrated to have application to the applicable inventories, eliminating any asserted benefits. The environmental plaintiffs desire to develop FIPs which avoid severe economic impacts and secure other sources to bear the economic impacts of enhanced air quality protection, but cannot understand the wisdom of the proposed approach. Should CARB succeed in this effort, the contents of the FIPs could be substantially more stringent than otherwise required.

The ramifications of the proposed change requires a statement of overriding consideration, but this avoids examination of the significance of the proposed action on Californian air quality. EDC believes that the significance of this rule for affected areas is very grave, and that CARB should examine the effect of the action on nonattainment throughout the state. EDC asserts that in fact, the cumulative effect of this rule change, when combined with various other legislative and administrative modifications to air quality programs, is extremely significant to air quality planning and is far more environmentally adverse than the environmental review document indicates.

CARB knows well the need for a strong state presence to force local APCDs to aggressively address air quality issues. The vicarious effects of the rollbacks included in this amendment will have disastrous effects on the "political will" of local Districts to aggressively address the air quality issues that have proven insurmountable in the past. The testimony from the San Joaquin Air Pollution Control District displays this impact.

3. Federal Clean Air Act Requirements

EDC notes that the federal Clean Air Act, as amended in 1990, impose substantive new requirements for many of the areas affected by the instant action. The New Source Review program assumes additional stature under the 1990 amendments. By amending the regulations as proposed, many districts are invited to relax standards and create additional conflicts with federal law. No analysis of this effect is undertaken. Since conflicts with federal law are beyond the scope of this matter and subject to independent exhaustion requirements, no further time will be spent performing this analysis which CARB has the resources to undertake itself.

EDC perceives that the proponents of this measure are employing economic interests as a guise for the simple rollback of environmental standards in an important public health issue. EDC contends that this proposal is inconsistent with state goals of attaining the health-based ambient air quality standards, and notes that any beneficial impacts from relaxing this rule may be overcome when the state fails to submit a legally adequate State Implementation Plan under the 1990 Amendments to the Clean Air Act. The federal statute requires demonstration of a 3 % annual reduction in air pollution emissions, a task that most Districts have demonstrated their inability to accomplish under existing standards. If CARB further reduces the legal mandate for Districts by excluding from regulation a large portion of the emissions inventory, attainment will be further delayed, subjecting many areas in the state to federal sanctions and federal implementation plans. Efforts to "catch up" from the delays facilitated by this action will be even more difficult to obtain.

Further, EDC reminds CARB that the EPA is required to promulgate a federal implementation plan (FIP) for two of the areas directly affected by the proposed regulatory amendments. Our case, Citizens to Preserve the Ojai v. Environmental Protection Agency, affects Ventura County. Sacramento is in a similar situation. The Supreme Court's recent denial of cert in this case reinstates the decision of the Ninth Circuit mandating that EPA prepare FIPs as expeditiously as practicable, considering that substantial progress had been made in 1990 in this effort. Coalition for Clean Air v. Environmental Protection Agency, 971 F.2d 219 (9th Cir., 1992). Plaintiffs in these actions, as well as the South Coast action, have consented to EPA's request that the FIPs build upon the best efforts of the local and state regulatory agencies. Citizens to Preserve the Ojai (CPO) interprets the actions of the CARB as an indication that they are unwilling to maintain, much less advance, the state of air quality regulation necessary to protect California air quality.

The policy proposed by the Board sacrifices long-term improvements in air quality to political expediency. CARB must stand tall and provide backbone to Districts, each of which is having difficulty meeting their legal requirements. Offering this gratuitous relaxation of state regulations penalizes Districts that are striving to develop adequate plans and promises to confound necessary advances in air pollution control.

Sincerely,

Marc Chytilo
Chief Counsel
Environmental Defense Center

CC: David Howekamp, US EPA, Region 9
Assemblyman Jack O'Connell
Senator Gary Hart
Citizens to Preserve the Ojai