**CHAPTER 7** 

# **PUBLIC PARTICIPATION**

Introduction Community Advisory Council Comments 2004 Plan Public Workshop Written Comments and Responses on the 2004 Plan ARB Transport Analysis

#### 7. PUBLIC PARTICIPATION

#### 7.1 INTRODUCTION

The public participation process used in the development of this 2004 Clean Air Plan (2004 Plan) was implemented to assure that the demands of clean air placed on us by the plan are reasonable and capable of being achieved. Also, it is important that members of the public, the regulated industry, and government agencies, have an opportunity to provide input into shaping our present and future strategies to clean the air.

A specific group of people has been organized to serve the goal of providing input on the development of clean air plans. They are known as the **Community Advisory Council**. On May 24, 1994, the Air Pollution Control District Board of Directors (Board) formed the Community Advisory Council (CAC). The purpose of the CAC is to provide advice to the Air Pollution Control Officer (APCO) and the Board in matters relating to attainment planning, development and promulgation of air pollution control rules and other associated policy issues. The CAC considers and renders advice on subjects submitted to them by the APCO, the Board, CAC members, and the public. The CAC is chartered to consider issues related to air pollution planning for which the Air Pollution Control District (APCD) has jurisdiction.

The CAC's deliberations and recommendations are to consider, to the extent feasible and reasonable, the effects of APCD planning and rulemaking actions upon public health, the economy, the costs to industry, and the public, along with conformance with the mandates of all applicable local, state, and federal laws. The recommendations of the CAC are advisory in nature and neither the APCO, nor the Board, are bound by CAC recommendations.

Each Board member can appoint two representatives to the CAC. The Board was directed to select CAC members who contain a background related to community interest, professional business, or technical experience. For example a CAC member could have a working knowledge of land use planning, agriculture, petroleum production, medicine, engineering, transportation, environmental conservation, public health, business, or education.

Table 7-1 lists all thirteen Board members and each of their appointed CAC representatives.

# Table 7-1

# SANTA BARBARA COUNTY

#### AIR POLLUTION CONTROL DISTRICT BOARD

#### **BOARD APPOINTED COMMUNITY ADVISORY COUNCIL (CAC) APPOINTEE(S)**

Board Member	Title	CAC Appointee(s)
Naomi Schwartz	Supervisor, First District	Bill Peitzke & John Robinson
Susan Rose	Supervisor, Second District	Larry Rennacker & Marc Chytilo
Gail Marshall	Supervisor, Third District	Dave Pierce & Norvell Nelson
Joni Gray	Supervisor, Fourth District	George Croll & Patrice Surmeier
Joe Centeno	Supervisor, Fifth District	John Deacon & Kevin Wright
Bill Traylor	Mayor, City of Buellton	John Gilliland & Jayne Brechwald
Richard Weinberg	Mayor, City of Carpinteria	Tom Banigan & Doug Marsh
Carlos Aguilera	Councilmember, City of Guadalupe	Bob Kober
Dewayne Holmdahl	Councilmember, City of Lompoc	Bea Kephart & Ramzi Chaabane
Dan Secord	Councilmember, City of Santa Barbara	Lee Moldaver
Marty Mariscal	Councilmember, City of Santa Maria	Michael Johnson & Gary Winters
David Smyser	Councilmember, City of Solvang	Laura Kranzler
Cynthia Brock	Mayor, City of Goleta	Dr. Ingeborg Cox

The APCD has specifically sought out input from the CAC on each element of the 2004 Plan as it was being developed over the past year. Starting in January of 2004, APCD staff presented specific portions of the 2004 Plan for the CAC to review and comment on. The CAC also provided recommendations regarding policy and other key issues that altered the direction, and ultimately enhanced the plan's contents. The highlights of these CAC meetings and the recommendations that occurred are listed in Section 7.2.

As part of the APCD's continuing commitment to solicit public participation and input into plan development, public workshops were also conducted to present the concepts of the 2004 Plan and the implications of its proposed control measures on the residents and business community of Santa Barbara County. The focus of the public workshops was to allow public commentary on the plan while allowing APCD and Santa Barbara County Association of Governments (SBCAG) staff the opportunity to address concerns and answer questions regarding the plan and its contents. The public comments received verbally during the workshops were responded to at that time and are included in Section 7.4. Public notices announcing the date, time, and location of the public workshops were published in area newspapers, including the Santa Barbara News Press, the Santa Maria Times, and the Lompoc Record. A copy of the public notice can be can be found at the end of this chapter.

The public notice announced that the 2004 Plan was available for public review. The public comment period was from August 25, 2004 to September 24, 2004. A copy of all written comments on the 2004 Plan that have been submitted by the public, along with the written responses to these comments, is provided in Section 7.3.

Public presentations of the 2004 Plan were conducted at workshops, before the Board at public hearings, and before the Community Advisory Council. A complete listing of all public workshops and plan presentations is contained in Table 7-2.

#### **Table 7-2**

SANTA BARBARA COUNTY AIR POLLUTION CONTROL DISTRICT CLEAN AIR PLAN PUBLIC PRESENTATIONS						
Presentation Location Date						
Public Workshop	Days Inn, Buellton	September 15, 2004				
APCD Monthly Board Meeting	Board of Supervisors Hearing Room Santa Barbara	October 21, 2004				
APCD Monthly Board Meeting	Board of Supervisors Hearing Room Santa Barbara	December 16,2004				

#### 7.2 COMMUNITY ADVISORY COUNCIL COMMENTS

This section summarizes the highlights of the CAC meetings pertaining to the 2004 Plan. The date of each CAC meeting and the Chapter or Plan element that were presented and discussed is listed in the following table. In addition, primary questions, comments, suggestions, and policy direction that staff received from the CAC members are included.

Community Advisory Council Meetings to Discuss 2004 Clean Air Plan				
Meeting Date	Item(s) Presented			
January 14, 2004	Chapter 1 (Introduction) & Chapter 2 (Local Air Quality)			
March 10, 2004	Chapter 3 (Emission Inventory) & Activity Indicators for Future Year Inventories			
April 14, 2004	Chapter 4 (Emission Control Measures) & Chapter 5 (Transportation Control Measures)			
May 12, 2004	Chapter 7 (Land Use Strategies)			
July 14, 2004	Executive Summary & Chapter 6 (Emission Forecasting)			
August 11, 2004	Chapter 7 (Land Use Strategies and Indirect Source Review)			
September 15, 2004	Plan Overview/Public Workshop			
October 13, 2004	Chapter 8 (Public Participation)			
November 10, 2004	Plan Revisions and CAC Approval			

# January 14, 2004 Chapter 1: Introduction Chapter 2: Local Air Quality

The APCD presented Chapter 1 (Introduction) and Chapter 2 (Local Air Quality) to the CAC. There were no action items related to Chapter 1. The CAC made the following suggestion for Chapter 2 that was incorporated in the draft Plan:

• The CAC recommended that Figure 2-2, which shows the number of state ozone exceedances since 1988, also include a graphic showing trends in population and vehicle miles traveled. This would provide an indication that while population and vehicle miles are increasing, air quality is continuing to improve. See Figure 2-26 for added graphic.

# March 10, 2004Chapter 3: Emission InventoryDiscussion of Future Year Activity Indicators

The APCD presented the base year emission inventory (Chapter 3) to the CAC. The CAC recommended the following:

Under emissions summary categories, only present source types that are that are
consistent with facilities that we have in our county. The CAC suggested that it is not
necessary to provide facility types as examples if those types of businesses do not exist in
the county.

In addition, activity data used in emission forecasting were presented to the CAC so that the activity factors could be discussed and refined prior to the development of Chapter 6 (Emission Forecasting). The CAC provided the following comments and suggestions related to the activity indicators:

- The CAC suggested that the activity indicator of irrigated acres is not a good proxy for emission sources tied to agricultural operations. After further research, it was determined that irrigated acres is a reasonable indicator for determining trends in agricultural related activities.
- Two separate trends for the petroleum production indicator were presented to the CAC.

One trend showed a fairly rapid decline in production while the other showed a slower decline in production over time. After some discussion, it was decided that the slower declining trend in oil production represents the best scenario due to current trends in the oil industry.

# <u>April 14, 2004</u> <u>Chapter 4: Emission Control Measures</u> Chapter 5: Transportation Control Measures

After an overview of both emission and transportation control measures, the CAC asked staff to address the following items:

- Determine the current status on regulatory progress on pesticides and pesticide emissions inventory in Santa Barbara County. In addition, the CAC requested that the APCD determine the effectiveness of the statewide pesticide program.
- As part of a review of the external combustion lime/cement kiln further study measure, the CAC suggested that staff look into work that was done by the state of Texas. Information from the state of Texas was found not to apply to Santa Barbara County. Additionally, staff will continue to research whether any applicable lime or cement kilns are located in Santa Barbara County. If none are found, this further study measures will be removed from consideration.
- Determine whether emission reduction credits from incentive programs such as Carl Moyer are being incorporated in the OFFROAD and EMFAC models. Staff research determined that neither EMFAC nor OFFROAD account for emission reductions from incentive programs - ARB does not incorporate the reductions into these models.
- There should be greater detail in the Plan on the VMT growth rate and how to address growth. In addition, state law requires public input on transportation control measure (TCM) development. It was suggested that the planning process does not allow for public participation of the TCM's that are included in the Plan. SBCAG staff briefed the CAC on 101 in Motion, a project with the objective of developing long-term solutions for improving traffic congestion along the 101 corridor in the south coast of Santa Barbara County. SBCAG suggested that input on TCM's could be provided at 101 in Motion

workshops. The CAC asked staff to return with a report on the overall process for developing the TCM's.

#### May 12, 2004 Chapter 7: Land Use Strategies

For Chapter 7, the CAC made the following suggestions:

- Add a glossary of terms to the chapter.
- Provide a definition for "traditional neighborhood development."
- Consider deleting sentence with Centers of Disease Control, which may be controversial.
- The policies of density should also include a discussion that densification requires that there is enforcement of policies and ordinances such as noise and nuisance, and that there is protection of privacy and affordability.
- There should be a more regional approach to the challenges of land use strategies by bringing together representatives from air quality, water quality, agriculture, LAFCO among others.
- There should be a focus on how to enhance implementation of land use concepts. This should be done through collaboration with other planning agencies to incorporate these concepts into their own planning programs.
- It was suggested by the CAC that an Indirect Source Review (ISR) subcommittee be formed to address ISR challenges and build CAC consensus. A five-member CAC subcommittee was formed and will meet with the APCD to discuss ISR issues and to develop conceptual language for discussion with the entire CAC.

# July 14, 2004Executive SummaryChapter 6: Emission Forecasting

• In the Executive Summary, add a question/answer section that explains how attainment of the state 1-hour ozone standard is determined.

For Chapter 6, the CAC comments resulted in the following changes to the draft Plan:

- Added a discussion in the Chapter specifying that 90% marine shipping fleet that transited the Santa Barbara coastline in 2000 was foreign flagged.
- The CAC recommended that mobile sources be broken-out in the emissions graphics to show that marine vessels comprise a majority of the emissions.

In addition, the CAC made the following recommendations:

- It was suggested that a representative from Lois Capps' office attend the 2004 Plan adoption hearing to bring more attention to the challenges controlling emissions from marine shipping.
- A recommendation was made that the APCD should look into forming a partnership with UCSB's remote sensing group to investigate the impacts of marine shipping on Santa Barbara County.

# August 11, 2004Chapter 7: Land Use Strategies (ISR Program and RegulationConcept)

• The CAC recommended that the APCD assess and develop as warranted and Indirect Source Review Program/Regulation to minimize and mitigate air pollution from discretionary land use entitlements. A section on Indirect Source Review will be included in Chapter 7. In addition, under the goals of the ISR Program/Regulation, the CAC suggested that the term "Smart Growth" be removed from the text since it is confusing and its deletion would make the text more readable.

#### September 15, 2004 Plan Overview

A brief overview of the draft Plan was provided at this meeting. Comments received from CAC members during the meeting are provided in the next section.

• *Bill Peitzke*: Asked the APCD to provide more information regarding marine shipping emission estimates.

The APCD will provide an overview of the marine shipping emissions estimation methodology to the CAC.

• *Kevin Wright (Entrix)*: Stated that he is not comfortable with moving Rules 342 and 333 from further study to proposed rules. Kevin suggested that the stringency of the rules are due to the attainment status of both South Coast and San Joaquin Valley where significant reductions are needed and that this level of stringency should not be applicable to Santa Barbara County. Kevin recommended that the entire Chapter 4 be brought back to the CAC for further analysis. He is interested in having the emission reductions for Rule 342 and Rule 333 presented to the CAC.

Staff indicated that Rule 342 will apply to 10 boilers with reductions estimated to be around 5 tons per year and agreed to bring back to the CAC specific analyses for both boilers (342) and IC engines (333).

Staff have refined the preliminary data used at the CAC meeting for revised Rule 342. Currently the analysis indicates that there are approximately 4 tons per year of NOx emission reductions for calendar year 2015.

Tables R342 and R333 provide the emission reduction estimates for amended Rule 342 and Rule 333, respectively. As these are long term amendments, calendar year 2015 is the first CAP forecasting year we expect to see reductions.

COMPANY	FACILITY	FID <sup>1</sup>	FDN <sup>1</sup>	DEVICE NAME	2015 NOx EMISSION REDUCTIONS (TPY)
ExxonMobil Production Company	Las Flores Canyon	01482	0074	CPP: Cogen: HRSG Only Mode	0.2863
ExxonMobil Production Company	Platform Harmony	08018	0004	Ext Comb: Central Process Heater	0.4698
ExxonMobil Production Company	Platform Heritage	08019	0005	Ext Comb: Central Process Heater	0.2445
ExxonMobil Production Company	РОРСО	03170	0002	Boiler: B-801A	0.6734

# Table R342. EMISSION REDUCTIONS ANTICIPATED FROM MODIFIED RULE 342 (≥ 5 MMBtu/hr, Long-Term)

<sup>1</sup> "FID" stands for *Facility Identification Number* and "FDN" standards for *Facility Device Number*. These are numbers assigned by the APCD for tracking devices in the permitting and inventory programs.

COMPANY	FACILITY	$FID^1$	FDN <sup>1</sup>	DEVICE NAME	2015 NOx EMISSION REDUCTIONS (TPY)		
ExxonMobil Production Company	РОРСО	03170	0003	Boiler: B-801B	0.6385		
Nuevo Energy Company	Lompoc Oil and Gas Plant	03095	0026	Heater Treater: (B)	0.1619		
The Okonite Company	The Okonite Company	01900	0003	Boiler #3 (#23127)	0.3941		
United States Penitentiary	United States Penitentiary (Power House)	02785	0006	Boiler: Hurst #1	0.2286		
UNOCAP	Santa Maria Pump Station	03915	0003	Boiler: B-1	0.0819		
Venoco, Inc.	Ellwood Onshore Facility	00028	0003	Process Heater (H-204)	0.6809		
	Total NOx Reductions (TPY) 3.8599						
				Total NOx Reductions (TPD)	0.0106		

 Table R333.
 EMISSION REDUCTIONS ANTICIPATED FROM MODIFIED RULE 333 (Long-Term)

COMPANY	FACILITY	FID <sup>1</sup>	FDN <sup>1</sup>	DEVICE NAME	2015 NOx EMISSION REDUCTIONS (TPY)
ExxonMobil Production Company	Platform Harmony	08018	0001	IC Engine: Pedestal Crane East	0.3033
ExxonMobil Production Company	Platform Heritage	08019	0002	IC Engine: Pedestal Crane East	0.6758
ExxonMobil Production Company	Platform Hondo	08009	0001	IC Engine: Pedestal Crane West	0.0234
ExxonMobil Production Company	Platform Hondo	08009	0002	IC Engine: Pedestal Crane East	0.1301
Lash Construction	Lash Construction (110 S. Salsipuedes)	01685	0001	IC Engine	No ERs - already in compliance
Lash Construction	Lash Construction (110 S. Salsipuedes)	01685	0002	IC Engine	No ERs - already in compliance
Plains Exploration & Production Company	Platform A	08003	0002	IC Engine: North Crane	0.0120
Plains Exploration & Production Company	Platform B	08004	0002	IC Engine: North Crane	0.0135
Plains Exploration & Production Company	Platform Habitat	08012	0001	IC Engine: South Crane	0.0094
Plains Exploration & Production Company	Platform Habitat	08012	0002	IC Engine: North Crane	0.0355
Plains Exploration & Production Company	Platform Henry	08007	0002	IC Engine: North Crane	0.0143

COMPANY	FACILITY	$FID^1$	FDN <sup>1</sup>	DEVICE NAME	2015 NOx EMISSION REDUCTIONS (TPY)
Plains Exploration & Production Company	Platform Hillhouse	08005	0002	IC Engine: North Crane	0.0172
Plains Exploration & Production Company	Platform Irene	08016	0002	IC Engine: South Crane	0.0100
Purisima Hills LLC	H.P. Boyne Lease	03777	0012	IC Engine: Natural Gas: #68680	0.1310
Purisima Hills LLC	H.P. Boyne Lease	03777	0013	IC Engine: Natural Gas: #87437- 12	0.1310
Purisima Hills LLC	H.P. Boyne Lease	03777	0014	IC Engine: Natural Gas: #87437- N	0.1310
Purisima Hills LLC	H.P. Boyne Lease	03777	0015	IC Engine: Natural Gas: #484-U	0.1310
Purisima Hills LLC	H.P. Boyne Lease	03777	0016	IC Engine: Natural Gas: #77560	0.1310
Purisima Hills LLC	H.P. Boyne Lease	03777	0020	IC Engine: Natural Gas:	0.4841
Santa Barbara Sand & Top Soil Corp.	Ellwood Ranch (SB Sand & Top Soil)	03695	0006	IC Engine: Diesel IC Engine	0.0258
Santa Maria Refining Company	Armelin Lease	03736	0014	IC Engine: Mm 283: Well #2	0.8628
Santa Maria Refining Company	Armelin Lease	03736	0015	IC Engine: Mm 403: Well #8	0.8628
Santa Maria Refining Company	Armelin Lease	03736	0016	IC Engine: Mm 605: Well #1	0.8628
The Point Arguello Companies	Platform Harvest	08013	0003	IC Engine: Crane (801)	0.0202
The Point Arguello Companies	Platform Harvest	08013	0001	IC Engine: Crane (800a)	0.3053
The Point Arguello Companies	Platform Harvest	08013	0002	IC Engine: Crane (800b)	0.3229
The Point Arguello Companies	Platform Hermosa	08014	0002	IC Engine: East Crane	0.3472
The Point Arguello Companies	Platform Hermosa	08014	0001	IC Engine: West Crane	0.3712
The Point Arguello Companies	Platform Hidalgo	08015	0002	IC Engine: East Crane	0.1882
The Point Arguello Companies	Platform Hidalgo	08015	0001	IC Engine: West Crane	0.3335
•	•			Total NOx Reductions (TPY)	6.8865
				Total NOx Reductions (TPD)	0.0189

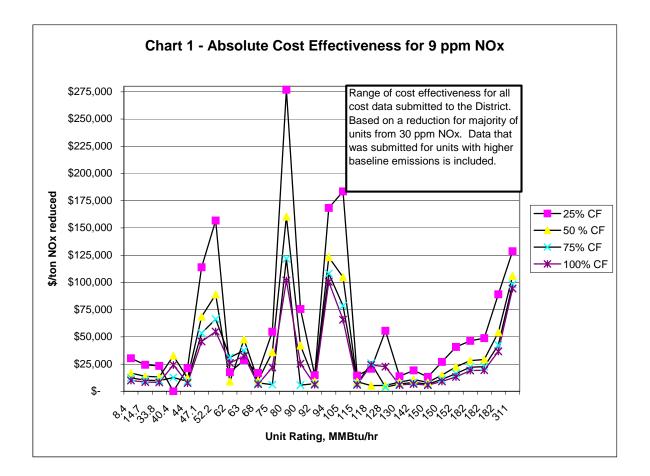
There may be additional emission reductions from rich-burn engines currently limited to 50 ppmv being required to meet 25 ppmv NOx at 15 percent oxygen under the revised rule. Similarly, there may be additional emission reductions from lean-burn engines currently limited to 125 ppmv being required to meet 65 ppmv NOx at 15 percent oxygen under the revised rule.

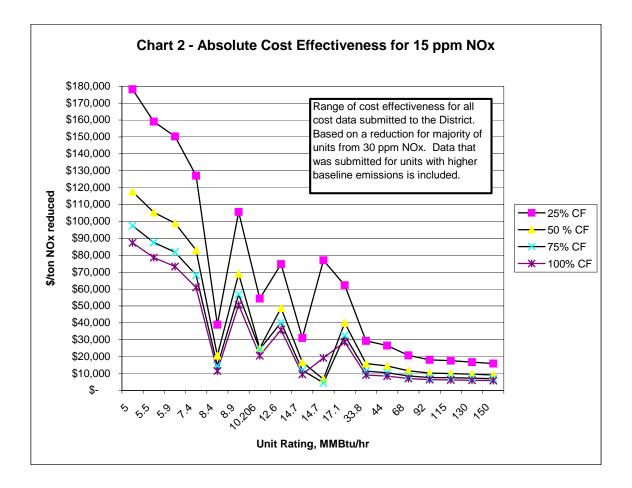
#### Rule 342 Control Measure Cost-Effectiveness:

The San Joaquin Valley Unified APCD September 18, 2003 Final Draft Staff Report for Rule 4305 (Boilers, Steam Generators, and Process Heaters – Phase 2) and Rule 4351 (Boilers, Steam Generators, and Process Heaters – Phase 2) New Rule 4306 (Boilers, Steam Generators, and Process Heaters – Phase 3) included, in part, the following cost effectiveness data:

Absolute cost effectiveness of a control option is the added annual cost (in \$/year) of a control technology or technique, divided by the emission reduction achieved (in tons reduced/year). The costs include capital equipment costs, engineering design costs, labor and maintenance costs.

The analysis shows that the cost effectiveness values improve for larger units, higher operating capacity factor, and more restrictive NOx limits relative to the current 30 ppmv limit. A summary of the analyses is shown in Charts 1 to 2.





#### Rule 333 Control Measure Cost-Effectiveness:

According to the San Joaquin Valley Unified APCD August 21, 2003 Staff Report for Proposed Amendments to Rule 4701 (Internal Combustion Engines – Phase 1) and Rule 4702 (Internal Combustion Engines – Phase 2), the cost-effectiveness is as follows:

- 1. 6,901 dollars per ton of NOx reduction for rich-burn cyclic engines retrofitted with non-selective catalytic reduction systems, in the lower brake horsepower range and operating seventy-five percent of the time (6,570 hours per year).
- 2. 267 to 8,415 dollars per ton of NOx reduction for rich-burn non-cyclic engines retrofitted with non-selective catalytic reduction systems.
- 3. 497 to 14,470 dollars per ton of NOx reduction for rich-burn non-cyclic engines with upgraded non-selective catalytic reduction systems.
- 4. 1,467 to 24,593 dollars per ton of NOx reduction for lean-burn engines retrofitted with a selective catalytic reduction system.
- 5. 2,093 to 40,494 dollars per ton of NOx reduction for lean-burn engines with upgraded selective catalytic reduction systems.

The San Joaquin Valley Unified APCD July 31, 1996 Cost Effectiveness Analyses of the Proposed Amendments to Rule 4701 (Internal Combustion Engines) indicates the cost effectiveness range for diesel engines meeting the 600 ppmv NOx at 15 percent oxygen limit is 330 to 6,001 dollars per ton of NOx reduction.

• *George Croll (VAFB)*: Asked the APCD to break the reduction analysis for Rule 342 down by boiler size and determine the reductions if the exemption is from 5MMBtu to 2MMBtu.

For a breakdown on the reductions anticipated from modifying Rule 342, see the previous response, Table R342. The question mentions combustion units in the 2 to 5 MMBtu/hr range. Rule 342 covers boilers that are 5 million British thermal units per hour (MMBtu/hr) and greater. Proposed Rule 361 will regulate combustion equipment rated greater than (>) 2 but less than (<) 5 MM Btu/hr. Therefore, it appears that the request may have been meant to apply to Rule 361. Before presenting the breakdown for Rule 361, a quick summary of the combustion rules may be helpful.

Combustion units are, or will be, governed by the following APCD Rules based on the combustion equipment heat input rating:

- Rule 352: Below 75,000 Btu/hr
- Rule 360: 75,000 Btu/hr up to and including 2 MMBtu/hr
- Rule 361: > 2 MMBtu/hr to < 5 MMBtu/hr
- Rule 342: 5 MMBtu/hr and greater

The APCD rules currently have a gap for combustion units > 2 MMBtu/hr and < 5 MMBtu/hr. Rule 361 is intended to close this gap so there will be regulations for combustion units in all size ranges.

Table R361 provides a breakdown of the point source inventory combustion units in the range of 2 to 5 MMBtu/hr. The rule is scheduled for adoption in the mid-term (2007 - 2009). Using a conservative approach, assuming the rule is adopted late 2009 with a one-year compliance deadline, calendar year 2015 is the first CAP forecasting year that we would expect to see a full year of emission reductions from the Rule 361.

#### Table R361. POINT SOURCE EMISSION REDUCTIONS ANTICIPATED FROM RULE 361 (>2 MMBtu/hr to < 5MM Btu/hr)

		FID <sup>1</sup>		2015 NOx EMISSION REDUCTIONS (TPY)	
COMPANY	FACILITY		DEVICE NAME	POINT OF SALE RULE	RETROFIT RULE
ExxonMobil Production Company	РОРСО	03170	Sulfinol Teg Reboiler (B-251)	0.0058	0.1156
Gato Corporation	Tognazzini Lease (Gato)	03200	Boiler	0.0091	0.1823
Gato Corporation	Tognazzini Lease (Gato)	03200	Heater Treater	0.0021	0.0412
Grayson Service, Inc.	Peshine Lease/Tompkins	04129	Boiler	0.0079	0.1581
Greka SMV, Inc.	Bell Lease (Cat Canyon)	03211	Boiler: H-117	0.0093	0.1869
Greka SMV, Inc.	Bell Lease (Cat Canyon)	03211	Boiler: H-118	0.0093	0.1869
Greka SMV, Inc.	Bradley Lands/Bradley Consolidated Lease	04103	Boiler	0.0038	0.0755
Greka SMV, Inc.	Bradley Lands/Bradley Consolidated Lease	04103	Heater Treater / Desander	0.0053	0.1069
Greka SMV, Inc.	Bradley Lands/Bradley Consolidated Lease	04103	Heater Treater	0.0088	0.1756
Greka SMV, Inc.	Chamberlin Lease	03000	Tank Heater #2	0.0025	0.0497
Greka SMV, Inc.	Chamberlin Lease	03000	Tank Heater #3	0.0025	0.0497
Greka SMV, Inc.	Chamberlin Lease	03000	Heater Treater	0.0050	0.0995
Greka SMV, Inc.	Davis Lease	03002	Tank Heater #2	0.0058	0.1152
Greka SMV, Inc.	Davis Lease	03002	Tank Heater #3	0.0058	0.1152
Greka SMV, Inc.	Davis Lease	03002	Heater Treater	0.0115	0.2303
Greka SMV, Inc.	Greka - Los Flores Lease	04008	Boiler/Tank Heater	0.0042	0.0835
Greka SMV, Inc.	Greka - Los Flores Lease	04008	Heater Treater	0.0028	0.0567
Greka SMV, Inc.	Morganti Lease	03303	Boiler #2	0.0151	0.3016
Greka SMV, Inc.	Union Sugar Lease	03083	Heater Treater	0.0158	0.3157
Greka SMV, Inc.	United California Lease	03040	Boiler	0.0058	0.1158
Greka SMV, Inc.	United California Lease	03040	Heater Treater: UCAL2	0.0035	0.0704
Greka SMV, Inc.	United California Lease	03040	Heater Treater / Desander	0.0056	0.1114
Greka SMV, Inc.	United California Lease	03040	Heater Treater / Desander	0.0138	0.2755
Santa Maria Refining Company	Fullerton Lease	03325	Boiler	0.0095	0.1906
Santa Maria Refining Company	Santa Maria Refining Company	00037	Boiler: (B-4) Standby	0.0056	0.1116
Santa Maria Refining Company	Santa Maria Refining Company	00037	Boiler: (B-3) Standby	0.0078	0.1556
Santa Maria Refining	Santa Maria Refining	00037	Asphalt Heater: (Ah-3)	0.0832	1.6635

<sup>&</sup>lt;sup>1</sup> "FID" stands for *Facility Identification Number*. This is a number assigned by the APCD for tracking devices in the permitting and inventory programs.

COMPANY		$FID^1$		2015 NOx EMISSION REDUCTIONS (TPY)	
COMPANY	FACILITY	FID	DEVICE NAME	POINT OF SALE RULE	RETROFIT RULE
Company	Company				
Santa Maria Refining Company	Santa Maria Refining Company	00037	Asphalt Heater: (Ah-1)	0.0918	1.8366
Santa Maria Refining Company	Santa Maria Refining Company	00037	Asphalt Heater: (Ah-2)	0.1158	2.3160
Soladino Energy Partners	Soladino Lease	03031	Steam Boiler	0.0117	0.2332
Southern California Gas Company	La Goleta	01734	Heater: Hot Oil (Plant #14)	0.0035	0.0709
United States Penitentiary	Federal Correctional Inst. (Sign Shop)	03965	Fci Boiler #2	0.0098	0.1951
United States Penitentiary	Federal Correctional Inst. (Sign Shop)	03965	Fci Boiler #1	0.0159	0.3177
Venoco, Inc.	Carpinteria Gas Plant	00027	Therminol Heater H-101 (C-81)	0.0110	0.2195
Venoco, Inc.	Ellwood Onshore Facility	00028	Heater Treater (H-201)	0.0066	0.1328
	0.5331	10.6623			
Total NOx Reductions (TPD)				0.0015	0.0292

In addition to point sources, area source combustion units will be subject to Rule 361. The following summarizes the total anticipated NOx emission reduction from a Rule 361 as a point of sale and as a retrofit type rule.

Point of sale type	rule
	2015 Dt So

2015 Pt Source ERs (TPD)	0.0015
2015 Area Source ERs (TPD)	0.0005
Total (TPD)	0.0019
Retrofit type rule	
2015 Pt Source ERs (TPD)	0.0292
2015 Area Source ERs (TPD)	0.0093
Total (TPD)	0.0385

#### Rule 361 Control Measure Cost-Effectiveness:

According to a May 11, 1993 Ventura County APCD Final Staff Report for Rule 74.15.1, Boilers, Steam Generators, and Process Heaters, the cost-effectiveness ranges from a cost savings of roughly 5,800 dollars per ton of  $NO_x$  reduced to a cost of about 21,000 dollars per ton of  $NO_x$  reduced.

The 1992 Santa Barbara County APCD staff report for Rule 342 indicates cost estimates for retrofitting and maintaining low-NO<sub>x</sub> systems, guaranteed to meet the 30 ppmv standard for a 5 MMBtu per hour unit, is 26,000 dollars.

According to information from the Vandenberg Air Force Base ENVVEST program for two 4.25 MMBtu/hr boiler retrofits, the cost-effectiveness was about 6,000 dollars per ton of NO<sub>x</sub> reduced. In addition, data from the APCD's Innovative Technology Group's work on retrofitting nursery boilers in the 4 to 5 MMBtu/hr range indicates the cost-effectiveness ranged from about 3,000 to 4,000 dollars per ton of NO<sub>x</sub> reduced.

Note that the movement of amended Rules 333 and 342 from "Further Study" to "Rules Scheduled for Adoption" was based on direction from ARB (see letter from Robert Fletcher to Tom Murphy dated September 24, 2004 in Section 8.4). At the November 10, 2004 CAC meeting, a motion was made by the CAC to approve the Plan with the stipulation that the APCD contact the ARB to determine whether moving the rules back to further study would jeopardize ARB approval of the Plan. After discussion with the ARB, amended rules 333 and 342 will be moved back to "Further Study" from "Rules Scheduled for Adoption." The information and analyses provided above on these rules is being retained in this chapter, however, for historical continuity of CAC and public input.

• *Marc Chytilo*: Suggested that the APCD should prioritize rules by looking at the emission inventory to see where emissions are greatest and propose rules based on where reductions are needed. Marc also suggested that we should look beyond what other districts are doing and more at available technologies.

Terry responded that all feasible measures are based on the most stringent rules throughout the state and that the South Coast AQMD rules are the most stringent in the nation. Additionally the South Coast AQMD has staff who can investigate new technologies.

• *Marc Chytilo*: Raised concerns that were expressed in his September 24, 2004 letter to Jim Kemp (SBCAG) and Terry Dressler (APCD) regarding TCM's, land use, and the general planning process (see section 8.4).

See APCD Response to Public Comments

• *General CAC Discussion*: A general discussion on potential TCMs took place that focused on alternative forms of transportation and transportation incentive programs. Suggested forms of alternative transportation included rail from north county to south county, van pools, shared cars, employer and self-propelled buses.

Jim Damkowitch said the alternative transportation control measures discussed by the CAC are currently being examined through the 101-in-Motion process.

• *Dr. Inga Cox*: Asked the APCD to provide Holzclaw's reference in bibliography and to provide a better explanation of the term "holistic", which is included in Chapter 7.

The Holzclaw reference has been provided to Dr. Cox and "holistic" will be changed to "comprehensive" on page 7-1 of the plan.

#### November 10, 2004 Plan Revisions and CAC Approval

• *Marc Chytilo*: Suggested that ISR was not to be brought to the Board as a specific part of the Plan but more as a rule.

ISR was intended to be part of the Plan as guidance and was never intended as a rule.

• *Tom Banigan (NuSil)*: "Why have baseline ROC emissions increased from that last draft version of the Plan?"

The increase in ROC emissions from 39.46 tons per day to 41.84 tons per day is due to adding area source degreaser emissions that were inadvertently left out of previous estimates.

• John Gilliland (URS): "Why are there no VAFB boilers listed on pages 8-9 and 8-15?"

The APCD will review its inventory to determine which boilers should be included in Table R342 and Table R361.

• *Glenn Oliver (Plains Exploration)*: Some of the measures will affect sources that already provide emission reduction credits. Requiring more controls would then upset the offset efforts. Additionally, since emissions from certain sources are already low, further emission controls are not feasible.

The Planning process utilizes the current inventory in conjunction with the latest air quality monitoring data to determine whether we are making progress toward meeting air quality standards. If we don't meet the standards, then we need to implement all feasible measures. The net air quality benefit is then accounted for in the emissions inventory through the permitting process.

• *Doug Marsh*: "Since rule 361 is currently proposed as a mid-term measure, how do we know which boilers will in existence by the time the rule is implemented?"

As a currently proposed mid-term rule, it is not possible to know which boilers will still be in existence at the time the rule is implemented. It will be necessary to wait until the next plan update to determine the population of devices that will be affected by the proposed rule.

• *Larry Rennacker*: "Did the APCD do cost-effectiveness analyses for Rule 342 and Rule 333?"

Cost effectiveness calculations are presented in the responses to comments made at the October 13, 2004 CAC meeting.

• *George Croll (VAFB)*: "Can banked ERC's be discounted?"

Yes. The RACT offset discount applies if a rule is made more stringent.

• *Doug Marsh:* "Will proposed rules be going through the rulemaking process?"

Yes. These rules will go through the standard rulemaking process including workshops and CAC discussion.

• *Kevin Wright (Entrix)*: "If Rule 333 is proposed, how will RACT discounting apply and does the surplus go away once the Plan is adopted?"

ERC's are available until the time a rule is adopted. As any ERCs derived from proposed rules could only generate short-term ERC's, the APCD would not allow for their use in long-term projects. RACT discounting applies to available ERC's if a rule becomes more stringent at a later date.

• *Patrice Surmeier*: "Doesn't the diesel ATCM control internal combustion engines and if so why is Rule 333 needed?"

The diesel ATCM is particulate matter based and targets carcinogenic diesel exhaust, not criteria pollutants.

• *General CAC Discussion*: A motion was made to approve the Plan with the caveat that Rule 342 and Rule 333 be moved from "Rules Scheduled for Adoption" back to "Further Study", and to provide the Board with a "Statement of Concern" written by CAC members regarding Chapter 7 and the significance of including TCM's in the Plan.

The APCD has contacted the ARB to determine the ramifications of moving Rules 342 and 333 back to "Emission Control Measures for Further Study" from "Proposed Emission Control Measures." Based on discussions with ARB, Rule 333 and Rule 342 will be moved back to "Emission Control Measures for Further Study Measures", and doing so will not jeopardize ARB's approval of the Plan. In addition, Marc Chytilo and Kevin Wright were nominated by the CAC to provide a "Statement of Concern" to the Board regarding Chapter 7 and the significance of Transportation Control Measures.

#### 7.3 2004 PLAN PUBLIC WORKSHOP

This section summarizes all public comments and staff responses from the public workshop. The public workshop was held on September 15, 2004 in Buellton in conjunction with the normally scheduled CAC meeting. There were no members of the public present at the workshop and all comments came from CAC members. Comments from the workshop/CAC meeting and the responses to these comments are provided below.

### Comments Received During September 15<sup>th</sup> Community Advisory Council Meeting

- *General CAC Discussion*: A discussion ensued regarding the presentation of air quality exceedance data and the appropriate time scale to use for the data. Some CAC members suggested that it may be more appropriate to only present exceedance data for the past five years to provide a snapshot of our recent trends while others felt that the current presentation of exceedance data is sufficient and gives a good overall indication of exceedance trends and air quality improvement.
- *Lee Moldaver*: "How did we get the message out to the regulated community regarding the Plan workshop and the opportunity to provide comment on the draft Plan?"

The APCD informed the public of the workshop and of the opportunity to comment through mailing lists and through a public notice in local newspapers. In addition, the plan was provided to a number of sites, including local libraries, where the document could be reviewed by the public.

• *Bill Peitzke*: "CO2 emissions should be shown in the Plan, and what is the APCD doing to address CO2 emissions?"

The 2004 Plan is an state ozone attainment plan and does not cover CO2 emissions. The APCD will provide more information to the CAC on CO2 emissions at a future CAC meeting.

• *John Gilliland (URS)*: "Will ERC's from control measures be lost if a rule comes into place after the Plan is approved?"

If the APCD implements a rule that requires controls on equipment that were controlled to create ERCs, the emission reductions are no longer surplus. If the control technique employed for ERCs over-controls emissions (e.g., has a higher control efficiency than the efficiency required by the rule), then Rule 806 would consider the emission reductions that go beyond the rule requirements as surplus emissions available for emission reduction credits.

• *Dr. Inge Cox:* "Why has the list of 22 potential further study measures that was provided at the April 14, 2004 CAC meeting been reduced to 12 measures in the Plan, and what was the process utilized to determine which further study measures are included in the Plan itself?"

Staff provided the two lists of further study measures at the April 14, 2004 CAC meeting to show the broad number of measures that are being considered as potentially "all feasible measures." At this CAC meeting, we discussed which ones out of the overall population of *all feasible measures* actually had sources with enough emissions to make it worthwhile to list them as a further study measure.

Staff reduced the initial *further study* lists by reviewing the control measure category inventory and potential emission reductions. If a control measure had the potential to reduce NOx or ROC emissions by 10 tons per year or greater then we kept it in as a further study measure.

• *George Croll (VAFB)*: Regarding increased NOx emissions from marine shipping: "Does the net increase in NOx emissions from marine shipping have an impact on air quality?"

Intuitively, any net increase in emissions will have an adverse impact on air quality. Without photochemical modeling analyses, the extent of the impact due to the net increase in NOx emissions from marine shipping is difficult to determine.

• *John Robinson*: Suggested that the APCD should provide more information to the Board of Directors highlighting the impacts of marine shipping on air quality.

We have provided the Board information regarding marine shipping emissions and they are aware of the magnitude of the challenge of controlling emissions from this significant source. We also plan to invite representatives of Lois Capps and Elton Gallegly to the December Plan adoption hearing so that they can further hear of the air quality challenges associated with marine shipping.

• *Tom Banigan (NuSil Technology)*: "Why can emissions from marine shipping be estimated, but potential emission impacts from the potential widening of 101 cannot be determined?"

SBCAG did provide an estimate of emissions from additional lanes to Route 101 as part of the 2001 Clean Air Plan (Appendix C). They estimate that by adding additional lanes on Route 101 will result in approximately .25 tons per day or 62 tons per year of ROC and NOx combined. This calculation is somewhat "crude" as it does not consider the possible negative impact of induced travel growth as a result of widening, nor the inevitable worsening of congestion and greater vehicular emissions that will occur over time if the freeway is not widened due to slower vehicle speeds under congested conditions. A more complete analysis on the impacts of widening or not widening the 101 freeway will be developed as part of the *101 In-Motion* process.

• *John Gilliland (URS)*: "The 2001 federal Clean Air Plan shows that future emissions are projected to be less than base year emissions. The 2004 state triennial update, however, shows that future year emission estimates of NOx are higher than base year levels. Will this jeopardize the 2001 Plan and the ability to maintain compliance with the federal 1-hour standard?"

The APCD has contacted EPA and they are aware of our recent emission projections as presented in the 2004 CAP. The primary reason that NOx emissions have increased from earlier estimates is that we were able to use actual horsepower data by individual ship rather than averages of horsepower by ship type in the emission calculations. This resulted in about a four ton per day increase in NOx emissions for the 2000 base year over the 1999 base year that was presented in the 2001 Plan. EPA, while concerned about net emission increases, did not indicate that the net increase in NOx emissions due to marine shipping would jeopardize the 2001 Plan. Additionally, there have been not violations of the federal 1-hour standard since 2000.

• *Bill Peitzke*: "Why not explore speed reduction to reduce emissions from marine shipping in the Santa Barbara Channel?"

While this is a good suggestion, there is argument among ship owners and operators about which speed is optimal for emission reductions. Additionally, the shipping industry is faced with a demanding schedule that involves precise coordination of several other industry types including port services, rail and trucking. Finally, it would be difficult to enforce mandatory reductions and non-compliant marine vessels would have an unfair economic advantage over those that would comply with such a rule.

• *Larry Rennacker*: "What is the emission factor NOx used to determine marine shipping emissions?"

The NOx emission factors range from 16.02 g/kWh for auto carriers and 17.09 g/kWh for container ships. These NOx emission factors assume that marine vessels meet International Maritime Organization (IMO) NOx emission standards.

• *Larry Rennacker*: "Did ARB look at the potential impacts of marine shipping during its recent transport analysis?"

Back trajectories performed by the ARB showed air parcels moving over the Santa Barbara Channel prior to advecting into the Los Angeles area. It is not possible to determine from the analyses, however, whether emissions from ships transiting through the Santa Barbara Channel had an adverse impact on air quality in the Los Angeles Basin.

• *Lee Moldaver*: "Representatives from the offices of both Lois Capp's and Elton Gallegly should be invited to the Board Plan adoption hearing so that they can take notice of the marine shipping problem, which may induce increased action at the state level."

The APCD will contact the offices of both representatives and invite them to the Board Hearing currently scheduled for December.

• *Dr. Inga Cox:* "Why is there a difference in the percentage of overall total NOx emissions between the 2001 Plan and the 2004 Plan?

NOx emission differences between the 2001 Plan and the 2004 Plan are primarily due to the differences in methods used to calculate marine shipping emissions. NOx emissions from marine shipping in the 2001 Plan were based on average horsepower by ship type (e.g., auto carrier, container ship, etc.) while NOx emissions from marine shipping that is presented in the 2004 Plan are based on ship-specific horsepower data.

- *Marc Chytilo (Law Offices of Marc Chytilo)*: Commented that there are technical deficiencies in the Plan that need to be addressed. These deficiencies are as follows:
  - 1. The Plan references two sections of the Health and Safety code, but not the appropriate section that pertains to state triennial updates.

The 2004 Plan references the appropriate sections of the Health and Safety code for this triennial update in the Executive Summary (H&SC Sections 40924 and 40925) and for our emission reduction strategy in Chapter 4 (H&SC Section 40914).

2. The Plan should address whether the San Joaquin Valley is a potential transport couple and whether emissions from Santa Barbara County impact the southern San Joaquin Valley.

Transport analyses conducted by the ARB have shown that emissions from the San Joaquin Valley can have an impact on the northern portion of the South Central Coast Air Basin (which includes Santa Barbara, San Luis Obispo and Ventura Counties), primarily in northern San Luis Obispo County. The ARB, however, has not identified a South Central Coast Air Basin to San Joaquin Valley transport couple. Additionally, emissions generated in the San Joaquin Valley are considerably higher than those generated in Santa Barbara County. Given the prevailing meteorology and relatively low emissions compared to San Joaquin Valley, it is not likely that Santa Barbara County emissions contribute significantly to San Joaquin Valley exceedances.

3. There a no contingency measures within the Plan.

The suite of further study measures presented in Chapter 4 of the Plan can be considered contingency measures by ARB, if needed. Also, Chapter 5 has been revised to list Enhanced I/M as a contingency measures for the on-road mobile source side of the inventory.

4. There should be a discussion of VMT growth versus population growth and whether VMT growth will be reduced as population increases.

A discussion of VMT with respect to population growth can be found in Section 5.2 of the Plan.

• *Kevin Wright (Entrix)*: "Will Rule 361 (Small Industrial and Commercial Boilers, Steam Generators and Process Heaters – 2 MMBtu/hr to < 5 MMBtu/hr) be a point-of-sale or retrofit rule?"

Rule 361 is a mid-term rule that is scheduled to take effect in the 2007 to 2009 timeframe. Credits are being taken in the Plan by assuming that Rule 361 will be a point-of-sale rule. If during rule development, however, it is determined that a retrofit approach to Rule 361 is cost-effective, staff will bring this issue back to the CAC for discussion.

• *Kevin Wright (Entrix)*: "Can ERC's be claimed for further study measures, and will the availability of ERC's go away once the Plan is adopted?"

Further study measures will remain available for ERC's after the Plan is adopted. Any ERC's from further study measures are available until the time the rule is adopted. For proposed rules, however, credit cannot be taken once the Plan is adopted

Point-of-clarification: With respect to proposed rules, once a Plan is adopted, the APCD may consider the possibility of creating short-term Emission Reduction Credits that may be used for only short term projects. For example, if a proposed rule in an adopted Plan is not scheduled for implementation until 2010, the APCD may consider allowing short-term ERCs to be created and used by a project whose shut-down date is prior to 2010. As any ERCs derived from proposed rules could only generate short-term ERCs, the APCD would not allow for their use in long-term projects.

• *Kevin Wright (Entrix)*: Commented that many of the further study measures proposed in the Plan are measures implemented by the San Joaquin Valley, which is classified as an "Extreme" area by EPA, whereas Santa Barbara is in attainment for the federal 1-hour ozone standard. Mr. Wright added that it is not necessary to be as aggressive as San Joaquin Valley since Santa Barbara County is a federal attainment area.

We are required to implement every feasible control measure. Generally, this means that control measures adopted by other air districts are cost-effective and feasible. The measures identified in Tables 4-4 and 4-5 are slated for further study. Staff will perform additional analysis on these control measures to determine if they should be moved into the *proposed control measure* category. Cost-effectiveness and the environmental benefits from implementing the control measure will be considered during the further study analysis.

## 7.4 WRITTEN COMMENTS AND RESPONSES ON THE 2004 PLAN

This section provides all written comments received on the 2004 Plan and accompanying APCD staff responses to these comments.

# March 18, 2004 e-mail From John Gilliland (URS) to Jim Damkowitch (SBCAG)

Jim.

I would like to express my appreciation to you for taking time out of yours schedule to meet with me to discuss the APCD 2004 Clean Air Plan (CAP), Chapter 5. You provided informed answers that clarified issues and assisted my further understanding. Following is a brief summary of our discussion.

1. Does the CAP take into account emission reductions resulting from the California Air Resources Board (CARB) revisions to the portable equipment registration program (PERP)? You indicated that emission reductions associated with the PERP revisions are not incorporated into the APCD CAP because these emission sources are typically handled in the CARB off road emission model. Tom Murphy suggested I contact Joe Petrini and confirm this (Joe: Your thoughts? Are the emission reductions associated with the 2010 deadline accounted for in the CAP?)

2. Does the departure from EMFAC2002 Defaults affect the EPA-approved 2001 APCD CAP? You indicated that additional verbiage would be added clarifying that these changes will not affect the basic assumptions applied to the EMFAC 2002 Model and the APCD 2001 CAP.

3. Are emission reduction from control of internal combustion engines (ICEs) following CARB codification of the mobile airborne toxic control measures (ATCMs) accounted for in the EMFAC2002 modeling? You stated that if the ATCMs were final regulations, they would be incorporated into the model. ATCMs not codified as a final regulation are not included and could be incorporated when the EMFAC model is revised. If this revision does not occur by the next APCD triennial review, these emission reductions could be accounted for in an off model calculation. I would suggest that language be added indicating this because you or I may not be around in three years.

4. EMFAC2002 Output Sheets - Are Diesel Oxidation Catalysts accounted for in the CAP? You stated you needed to research this question and would hopefully have an answer available by the next CAC meeting.-

Unfortunately, it appears that I have a scheduling conflict that may prevent my participation at the 14 Apr 04 CAC meeting. In the event that I am unable to attend, I would greatly appreciate it if you would inform members of the CAC of our discussion.

If you have any questions, please do not hesitate to contact me.

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## LAW OFFICE OF MARC CHYTILO

#### ENVIRONMENTAL LAW

April 15, 2004

Mr. Terry Dressler, Control Officer Air Pollution Control District 260 N San Antonio Road, Suite A Santa Barbara, California 93110

Mr. Jim Kemp, Executive Director Santa Barbara County Association of Governments 260 N San Antonio Road, Suite B Santa Barbara, California 93110

By E-mail DresslerT@sbcapcd.org, ikemp@sbcag.org

#### RE: 2004 CAP TCM Plan

#### **Dear Terry and Jim:**

At last night's APCD CAC meeting, I expressed concern that the draft TCM list proposed for the 2004 CAP was being developed without the benefit of an emissions reductions target. I further expressed concern that the District must undertake a specific TCM Planning process under State law. Finally, I stated that I supported a more extensive and expansive process for involving and including the public, transit operators, local municipalities, adjacent counties and other agencies in the process of identifying potential TCMs and scoping them so they would receive adequate consideration in the reasonably available control measure analysis process. The CAC was generally supportive of these concerns, so I write to describe more particularly the issues at hand.

Health and Safety Code § 40717 establishes a clear mandate for Districts to establish the quantity of emissions reductions necessary from transportation sources necessary to attain the state standard. § 40717(b)(1). This language unquestionably applies to the 2004 CAP. §§ 40717(a); 40717(b)(3)(C). Other portions of the California Clean Air Act require attainment demonstrations and emissions reductions goals. See, for example, Health and Safety Code § 41503(b), describing the standards by which ARB is supposed to assess the CAP's adequacy. The fact that there is an exemption for District that cannot feasibly predict an attainment date does not eliminate that requirement unless the District and its CAP demonstrate this on the basis of substantial evidence. I was led to believe that the data from SCOS would enable ARB and local Districts to predict attainment dates, and since the District was required to model attainment of the federal one hour standard, addressing the state standard should represent a limited increment of additional work.

MARC CHYTILO P.O. Box 92233 • Santa Barbara, California 93190 Phone: (805) 682-0585 • Fax: (805) 682-2379 Email: airlaw5@cox.net Mssrs. Dressler and Kemp April 15, 2004 Page 2

In any case, the Transportation Sources Plan must be developed and "adopted" by the COG, or SBCAG, and then submitted to the District on a schedule adopted by the District. § 40717(b)(2). The District has a mandatory obligation to review and reject that plan if inadequate to achieve the emissions reductions requirement. § 40717(b)(3).

In light of the broad public distrust in the ''101 in Motion'' process (many community representatives believe that the SBCAG Board of Directors has directed a particular outcome, a belief supported by the record), the TCM planning process is an important opportunity for public involvement in scoping potential TCMs. The APCD CAC had a lively discussion about potential transit measures, and staff recited that there are no shortage of creative ideas to address local congestion issues and different forms of transit. The California Clean Air Act recites that ''Districts shall focus particular attention on reducing the emissions from transportation sources and areawide emissions sources.'' Health and Safety Code § 40910.

I ask that the District and SBCAG create a robust public outreach process that includes the public, the various agencies that have expressed interest in public transit issues through the unmet transit needs process, transit operators and adjoining jurisdictions. Your agencies' duty is to consider all reasonably available transportation control measures, not simply adopt all feasible measures. § 40918(a)(3). The CAP must address means to achieve applicable performance standards. Id.

Thank you for considering these views on this important topic. I hope that this will result in a renewed effort to identify and adopt TCMs that can overcome the challenges our community faces in achieving the state standard and addressing transportation needs of our community.

Sincerely Marc Chytile

CC: Tom Murphy Jim Damkovich Bill Dillon

# July 15, 2004 Memorandum From John Gilliland (URS)

Memorandum: Santa Barbara County Air Pollution Control District (APCD) Community Advisory Counsel

From: John D. Gilliland, CAC Member

**Date:** 15 July 2004

Subject: 14 July 2004 Community Advisory Counsel Meeting Comments

1. I have reviewed the Executive Summary and Chapter 6, Emission Forecasting, to the Santa Barbara County Air Pollution Control District (APCD) State of California Clean Air Plan (SCCAP). The following comments and questions are provided:

2. Executive Summary:

a. Introduction:

(1) Request consideration from the APCD to include a discussion on the new federal 8-hour standard and its relationship to Santa Barbara County.

(2) Should this SCCAP add comments discussing the proposed California 8-hour standard?

b. Does This 2004 Plan Address any Federal Requirements:

(1) Please include the federal authority citation at the end of the paragraph.

3. Chapter 6

a. Section 6.1 – Introduction: The APCD indicates that emissions from natural sources are excluded from the Planning Emission Inventory (PEI) because they are unregulated. Is the APCD willing to consider including some biogenic sources such as oil and gas seeps, agricultural waste composting and range burning in APCD regulations and the PEI? Controlling these sources provides additional air quality improvement and provides industrial sources potential incentives to control emissions for the purposes of creating emission reduction credits.

b. Section 6.2.2 – Control Measures: Refer to the discussions regarding natural sources.

c. Section 6.2.3 – Vandenberg Air Force Base Airborne Laser Mission Growth Allowance: Can the APCD add a footnote to this discussion that indicates this requirement may be removed pending the revocation of the Federal one-hour standard.

d. Section 6.4 – Impacts of Marine Shipping Emissions: Is it possible for the APCD to determine the actual marine shipping for 2001, 2002, and 2003 to see how it tracks with the forecasted assumption? If the emissions are significantly different (either greater or less) is it possible to revise the forecast for this 2004 SCCAP or the 2007 SCCAP?

e. Section 6.4 – Impacts of Marine Shipping Emissions: The APCD stated that the burden of attaining or maintaining air quality improvement goals may fall disproportionately on onshore sources. Please add a discussion as to the ramifications to the APCD if the Board waives air quality improvement rules due to stakeholder input. Are state sanctions or other regulatory penalties mandated by CARB possible?

f. Table 6-5 - 2004 Clean Air Plan Activity Indicators and Factors for 2005, 2010, 2015 and 2020: Under the prescribed fires section, is the APCD willing to consider revising the baseline numbers to more accurately represent this section. Even though this very low activity took place in 2000, a review of previous years and post years indicates values more closely attuned to the 6,250 values. The value, as listed, provides an erroneous growth factor for this category.

g. Figure 6-11 - Santa Barbara County OCS NOx Emission Forecast Including Marine Vessels: This table clearly illustrates that the 2000 baseline year is less than the 2020-forecasted year. Is it possible for the APCD to receive Plan approval when the 2020 values are higher than the baseline year?

4. Thank you for the opportunity to provide comments.

JOHN D. GILLIAND

# LAW OFFICE OF MARC CHYTILO

#### ENVIRONMENTAL LAW

September 24, 2004

Mr. Terry Dressler, Control Officer Air Pollution Control District 260 N San Antonio Road, Suite A Santa Barbara, California 93110

Mr. Jim Kemp, Executive Director Santa Barbara County Association of Governments 260 N San Antonio Road, Suite B Santa Barbara, California 93110 By Fax: (805) 961-8801 And US Mail

By Fax: (805) 961-8901 And US Mail

RE: 2004 CAP Comments

#### Dear Terry and Jim:

As you know, I am gravely concerned that Santa Barbara County has proceeded headlong into the development of a `paper' state Clean Air Plan (CAP) *which fails to* address minimum legal requirements for this document and defers treatment of significant issues to a future time, at which point the problems will have become far more difficult to overcome. Please accept these comments on behalf of Our Children's Earth Foundation, an organization committed to improving air quality *throughout* California to meet the needs of all of our community, and in particular, the needs of children and other persons that are particularly sensitive to exposure to air pollution.

I strongly encourage your agencies to withdraw the 2004 CAP and commence the analysis and processes identified in this letter of comment. Residents of Santa Barbara County are entitled to the public health protection required by California law – attainment of the California ambient air quality standards "as expeditiously as practicable." As drafted, the 2004 CAP fails in that fundamental purpose, with substantial adverse human health effects as a result. We deserve better.

1. Transportation Control Measures

The CAP is deficient for failing to contain any transportation control measures, which the legislature intended should be a focus in each Clean Air Plan. The California Clean Air Act contains clear and express reference to a particular process that is required to identify and develop Transportation Control Measures (TCMs) in all air quality plans, including CAPS. The Santa Barbara County Air Pollution Control District (APCD) and. Santa Barbara County Association of Governments (SBCAG) have ignored that process entirely, and as a consequence, propose no new TCMs in the 2004 CAP. Your agencies' development of the 2004 CAP should be guided by the following admonition:

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Email: airlaw5@cox.net

Mssrs. Dressler and Kemp . September 24, 2004 Page 2

"In developing attainment plans and regulations to achieve this objective [of attainment by the `earliest practicable date'], districts shall consider the full spectrum of emission sources and **focus particular attention on reducing emissions from transportation and areawide sources.**"

Health and Safety Code § 40910 (emphasis added).

The planning emissions inventories in the 2004 CAP disclose that 81% of 2000 ROC emissions and 87% of NO,, emissions are from mobile and area sources. 3-17. The CAP, however, proposes only nominal progress in reducing emissions from these source categories, beyond the progress achieved by state tailpipe standards and a few rules developed by other Districts. The CAP fails to focus on these source categories, even though they are substantial elements of local emissions inventories. Further, growth in other sectors of the emissions inventory jeopardizes all emissions reductions contained in the plan. The 2004 CAP fails to "focus particular attention on reducing emissions from transportation and areawide sources."

Although several SBC APCD SIPS and CAPs have contained chapters addressing land use strategies, growth associated with land use activities is a significant factor in future emissions inventories. The <u>plans</u> pay lip service to the issue, but the APCD and SBCAG are failing to act aggressively enough to assert these issues in the land use planning process throughout the county. The jobs-housing balance remains at an all-time high, and VMT continues to skyrocket. Despite vigorous debates within the County and virtually every municipal jurisdiction, the APCD remains at the edges of any such discussion, if not absent entirely.

Further, the District and SBCAG have ignored the procedures required by Health and Safety Code § 40717 that would ensure that these issues are given proper focus. That statute is reproduced below, in its entirety.

Health and Safety Code § 40717. Adoption of plan for transportation control measures; Contents of plan

(a) A district shall adopt, implement, and enforce transportation control measures for the attainment of state or federal ambient air quality standards to the extent necessary to comply with Section 40918, 40919, or 40920.

(b) A district which has entered into an agreement with a council of governments or a regional agency to jointly develop a plan for transportation control measures shall develop the plan in accordance with all of the following:

(1) The district shall establish the quantity of emission reductions from transportation sources necessary to attain state and federal ambient air standards.

Mssrs. Dressler and Kemp September 24, 2004 Page 3

> (2) The council of governments or regional agency, in cooperation with the district and any other person or entity authorized by the council of governments or regional agency, shall develop and adopt a plan to control emissions from transportation sources which will achieve the emission reductions established under paragraph (1). The plan shall include, at a minimum, a schedule for implementing transportation control measures, identification of potential implementing agencies and any agreements entered into by agencies to implement portions of the plan, and procedures for monitoring the effectiveness of and compliance with the measures in the plan. The council of governments or regional agency shall submit the plan to the district for its adoption according to a reasonable schedule developed by the district in consultation with the council of governments or regional agency.

(3) Upon receipt of the plan submitted by the council of governments or regional agency, the district shall review and approve or disapprove the plan in the following manner:

(A) The district shall review, adopt, and enforce the plan if it meets the criteria established by the district pursuant to paragraph (1) and has been submitted pursuant to the schedule established under paragraph (2).

(B) If the district determines that the plan does not meet the criteria established pursuant to paragraph (1), the district shall return the plan to the council of governments or regional agency with comments which identify the reasons the plan does not meet the criteria established pursuant to paragraph (1). Within 45 days, the council of governments or regional agency shall review the district's comments, revise the plan to meet the criteria established under paragraph (1), and resubmit the plan to the district. The district shall review and approve the revised plan if it meets the criteria established by the district pursuant to paragraph (1) and has been resubmitted to the district within 45 days.

(C) If the plan is not submitted pursuant to the schedule established under paragraph (2), or if a plan revised by a council of governments or regional agency and resubmitted to a district pursuant to this subparagraph does not meet the criteria established under paragraph (1), the district shall develop, adopt, and enforce an alternative plan for transportation control measures.

(4) Whenever the district revises its establishment of the quantity of emission reductions from transportation sources necessary to attain state and federal ambient air standards, the plan shall be revised, adopted, and enforced in accordance with paragraphs (1), (2), and (3).

Mssrs. Dressler and Kemp September 24, 2004 Page 4

(c) Subdivision (b) shall not apply to the Sacramento district. Chapter 10 (commencing with Section 40950) shall govern preparation and enforcement of that plan for transportation control measures for the Sacramento district.

(d) Notwithstanding subdivision (b), a district located in a county of the third class shall develop a plan for transportation control measures as follows:

(1) The district, in consultation with the council of governments, shall develop, approve, and adopt criteria under which the plan shall be developed.

(2) The council of governments shall develop and adopt a plan for transportation control measures which meets the criteria established by the district, and shall submit the plan to the district for its review and adoption according to a reasonable schedule developed by the district in consultation with the council of governments.

(3) Upon receipt of the plan submitted by the council of governments, the district shall review and approve the plan if it meets the criteria established by the district pursuant to paragraph (1) and has been submitted pursuant to the schedule established under paragraph (2). If the district determines that the plan does not meet the criteria established pursuant to paragraph (1) or if the plan is not submitted pursuant to the schedule established under paragraph (2), the district shall develop and adopt an alternative plan for transportation control measures.

(e) A district may delegate any function with respect to the implementation of transportation control measures to any local agency, if all of the following conditions are met:

(1) The local agency submits to the district an implementation plan that provides adequate resources to adopt and enforce the measures, and the district approves the plan.

(2) The local agency adopts and implements measures at least as stringent as those in the district plan.

(3) The district adopts procedures to review the performance of the local agency in implementing the measures to ensure compliance with the district plan.

(4) Multiple site employers with more than one regulated worksite in the district have the option of complying with the district rule and reporting directly to the

district. Employers that exercise this option shall be exempt from the local agency trip reduction measure.

(f) A district may revoke an authority granted under this section if it determines that the performance of the local agency is in violation of this section or otherwise inadequate to implement the district plan.

(g) For purposes of this section, "transportation control measures" means any strategy to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions.

(h) Nothing in this section shall preclude a local agency from implementing a transportation control measure that exceeds the requirements imposed by an air pollution control district or an air quality management district if otherwise authorized by law.

The District and SBCAG have entered into an agreement for the joint development of a CAP, but have ignored the mandatory requirements of Health and Safety Code § 40717. For example, the District failed to develop an estimate of emissions reductions from transportation sources necessary for attainment. The California Clean Air Act does not necessarily require a complete, modeled attainment demonstration, but only an estimate. The CAP contains no estimate at all.

Having previously raised this issue with the District and SBCAG, Exhibit 1. The District and SBCAG responded that: "While § 40717 mandates that areas quantify the emission reductions from transportation sources to attain state and federal standards, we do not have the photochemical modeling analysis to identify the targets for the state standard. Therefore, we are technically unable to fulfill the process identified under § 40717 and must default to the every feasible measure approach outlined in § 40914." Letter, Terry Dressler and Jim Kemp to Marc Chytilo, May 21, 2004, attached as Exhibit 2. There is no authority for the conclusion that the general responsibility of every District to utilize the process mandated by HSC § 40717 is preempted by § 40914's supplemental requirement that each District achieve a 5% annual emissions reduction. HSC § 40914 is clearly a description of one necessary element of a CAP, and does not override all other requirements of the California Clean Air Act, such as HSC § 40717.

Further, it is difficult to determine that the District and SBCAG have employed all feasible transportation control measures in the absence of a meaningful and public effort to identify them. This office provided the District and SBCAG with an extensive list of reasonably available transportation control measures that have been employed in other parts of the country. See Exhibit 3, suggested TCMs to the 2001 maintenance plan. It is absurd to contend that the "101 in Motion" process serves as a surrogate for the 40717 process — the "101 in Motion" process is designed and intended to address traffic congestion on a single reach of highway, and was

authorized with the governing SBCAG Board's resolution and staff report referencing that lane widening w a s the project that the Board wanted to see as the outcome and product. Respectfully, the claims that the agencies are "unaware of a `broad public distrust' is disingenuous at best. SBCAG's board, controlled by a particular faction, was adamant as to the project that they expected to result and that they intended to approve from the "101 in Motion" process — widening of Highway 101. As evidence, on October 16, 2003, SBCAG staff revised the previously recommended policy concerning Highway 101 to read as follows, with strikethrough and italics in the original indicating stricken and added language:

"The implementation plan shall include *result* in a project or set of projects that will increase the capacity *by adding lanes* and reduce congestion on Highway 101."

SBCAG Staff Report, 10/16/2003, Agenda Item # 10, attached as Exhibit 4. The public testimony included numerous comments, including myself, decrying the mandating of a particular project as the outcome from this process. Lane widening is not a TCM, and no where else in the SBCAG Staff Report or "101 in Motion" process is the identification of TCMs specified as an objective.

The inadequacy of the agencies' TCM development process is evident in the result — not a single new TCM is proposed for adoption. Previously APCD staff expressed reservations about adding aggressive new TCMs to the federal SIP due to the requirement that these TCMs actually be implemented, regardless of changed circumstances. This argument does not apply to the State CAP, where there are apparently no consequences from a failure to implement. We note also that the District and EPA have each adopted guidance and/or rules allowing TCM substitution, and thus the nature of the commitment to adopt and implement a TCM is quite different from a stationary source control commitment.

It is apparent that the failure of the District and SBCAG to observe each of the § 40717 steps identifying an emissions reductions target by the District; SBCAG developing a transportation sources plan that could achieve those emissions reductions; conducting a public hearing where the adequacy of that plan is considered; and the District either guiding SBCAG's development, or assuming itself the responsibility of developing and implementing the transportation sources plan — robbed the CAP TCM process of legitimacy or effectiveness. The agencies were placed on notice early in the process that this was an applicable requirement, Exhibit 1, yet they chose to ignore it. The breathing public, the adequacy of the 2004 CAP, and the direction of transportation in our communities, are the victims of this defiance.

Reasonably available transportation control measures include the following:

<u>Commuter Choice:</u> Adopt and staff a Commuter Choice program. This is an obvious program to adopt. Recent changes in state and federal tax law allow employers to offer employees parking

and transportation benefits as tax-exempt compensation, with greater incentives for parking cash-out and alternative commute options. Employees can receive up to \$175 per month of their existing or new compensation tax free. This is truly "found money" for both employers and employees which offers a meaningful incentive to use alternative commuter options in a flexible and cohesive package. According to the International Council for Local Environmental Initiatives "[t]his simple act of uncovering parking subsidies and offering a choice can reduce solo car commuting by up to 22%." See http://www.iclei.org/cashout/. See also http://www.commuterchoice.com/.

<u>Community Car Programs</u>: A number of communities in the United States and Europe have begun "community car" programs. In essence, this is a low cost, cooperative subscription car rental system allowing families to avoid many of the expenses of auto ownership while maintaining access to a car when specifically needed. Communities must be designed and operated to allow most daily functions to occur without needing a car. In some European cities (e.g., Zurich), community cars enjoy preferential parking privileges, enhancing their attractiveness. San Francisco has recently initiated a community car cooperative program. Linked to new residential design features enhancing the quality of communities that are not designed with the car as the first priority, the community car concept may offer considerable benefits in encouraging more appropriate land uses

<u>Smart Growth Resources:</u> Smart Growth Resources to land use planning officials. Our sprawling land use patterns cost local government in increased *and* inefficient services, destroy open space, increase auto dependence, waste personal economic resources and degrade quality of life. See, for example, <u>Driven to Spend: How Sprawl and Lack of Transportation Choice Are Driving Up Family Transportation Costs</u>, http://www.transact.org/. Land use planners in the County and cities lack a regional perspective and are largely ignorant of the environmental and social ramifications of ignoring air quality impacts and transportation alternatives in their review and planning processes.. This is one essential ingredient of sprawl. Your agencies must tackle this issue aggressively, or else decisions made in coming years will preclude an efficient future public transportation system and create continuing problems for our communities. Only your agencies are positioned to assemble and provide effective materials on "smart" planning for air quality and transportation perspectives and make strong recommendations for appropriate land use development patterns and design. While your agencies lack direct regulatory control, you can serve both as an important source of information, training and expertise to cities and the county.

<u>Bike projects:</u> Design and implement a much more comprehensive bicycle system for the region. Develop and implement a continuous, connected bike lane system from each county line with an extensive bike lane network. Develop a bike lane network serving all medium and large schools to promote safe bike commuting to school. Complete a comprehensive network of bikeways,including: Class I (exclusive bike paths separated from roads), Class II (on-road striped bike lanes), Class III, (on-road shared, signed routes) and Bicycle Boulevards. Install bicycle route

numbering with maps. Maintain effective and continuing review and improvement of safety problems and maintenance of all bikeways. Review and maintain highway and street standards including surface standards, bridge access, bike lane cleaning, illegally parked car intrusion elimination, and bicycle sensitive traffic signals.

<u>Pedestrian Projects:</u> The region lacks a comprehensive sidewalk system, and continues to design new development prioritizing vehicular, rather than pedestrian access. Areas within existing communities where existing and future land uses are conducive to pedestrian use should be subject to a master planning process to be designed and shaped to become more pedestrian-friendly over time as redevelopment and other improvements occur and as these communities and developments mature.

<u>Recognize Induced Traffic and VMT:</u> SBCAG should require future project-level analysis (and analysis of all private projects which require transportation infrastructure improvements to accommodate traffic increases) to include additional modeling that incorporates the principle of latent (induced) demand in its design. Recalibrate the travel model, using actual VMT from completed projects.

<u>Comprehensive Public Transit Gap Analysis:</u> Gaps in the County's public transit system make the use of a car a necessity for many people who would otherwise use the bus. A number of residents simply forgo travel to these areas, as the car is not an option, The CAP should include a public transportation gap analysis and strive to implement a comprehensive public transit system. Once a complete transit system is in place, each portion of the entire system will experience increased ridership.

<u>Indirect Source Review:</u> for all permitting actions that induce traffic, as recommended by the CAC.

<u>Parking Management:</u> increase the cost of parking in all urban areas to subsidize and increase the attractiveness of public transit.

<u>TEA Restrictions to Enhance Transit and Smart Growth:</u> Some communities in California have considered restricting certain portions of TEA-21 funds to communities which adhere to certain land use and transit performance standards. For example, the following policies could have application in Santa Barbara County:

A) A RTP investment policy prioritizing transportation projects that are coupled with transit, bicycle and pedestrian oriented development along transit corridors and nodes, and conditioning capacity increasing highway projects on the adoption of growth management plans that embody provisions for open space preservation and subregional agreement on a growth budget that does not overload either transportation infrastructure or other forms of infrastructure.

B) Condition funding and approval of projects serving large new trip generating land uses on a major reduction in drive-alone access to those projects. Such reductions shall be based on providing parking for fewer than the number of spaces ordinarily required, parking charges, cashing out employer paid employee parking, developer subsidies for transit access to the project, and other similar transportation measures. The effectiveness of demand management shall be guaranteed by an enforceable agreement to meet performance standards for access that reduce by some figure (half?) the number of drive alone trips and mandate the addition of further transportation incentives to meet performance goals if they are not met.

C) Increased county-level transit ridership targets (necessitating increased investment in transit, increasing the cost effectiveness of transit investments, as well as encouraging land use jurisdictions to provide incentives to transit-supportive land use decisions). The TCM should reference achieving and maintaining a minimum modal split for transit, pedestrian and bike travel at specific milestone's, with If/Then consequences for each portion of the county at these points for not reaching the specified target.

D) Fund high way expansions only within cities or sub-regions of the county where 80 percent of employees in businesses with over 5 employees are offered parking cash-out or commuter choices, and where parking is unbundled from rental housing and business rental/lease agreements.

E) Allocate a certain percentage of discretionary funds exclusively to projects (both maintenance and capacity-expanding) in areas that meet specified smart growth criteria as is the practice in San Mateo (where transportation money is given to cities that approve dense housing near rail stations).

These policies build upon the use of TEA funds as incentives for smart growth principle utilization, as pioneered by Dr. John Holtzclaw, director of Sierra Club's Transportation Program. This approach has been determined to be legally appropriate upon scrutiny by the Air Resources Board. (K. Walsh, ARB General Counsel, to F. Chin, MTC, 10/26/1999).

EPA's Transportation Air Quality (TRAQ) Center provides state and local air quality regulators and transportation planners with access to critical information regarding transportation programs and mobile source incentive based programs, partnership opportunities, grant funding sources, useful contact names, and technical assistance. http://www.epa.gov/oms/transp.htm. Links from this page provide testimonials and experiences from other programs and references to EPA's emissions reductions quantification analysis for TCMs and land use strategies. See also The Surface Transportation Policy Project: http://www.transact.org/caldefault.htm.

Finally, there is no evidence to support the CAP'S apparent conclusion that none of the list of further study transportation control measures could be feasibly implemented more immediately.

## 2. VMT Growth

The California Clean Air Act imposes several mandatory elements of a CAP. As a "moderate" area, Santa Barbara County's CAP must include:

"(a)(3) Reasonably available transportation control measures sufficient to substantially reduce the rate of increase in passenger vehicle trips and miles traveled per trip if the district contains an urbanized area with a population of 50,000 or more."

Health and Safety Code §. 40918(a)(3).

As demonstrated by figure 2-2b, daily VMT is increasing at ever steeper rates. This reflects, although the CAP does not specifically address, increases in both trips taken and miles traveled per trip. The 2004 CAP is defective for posting gross VMT information and comparing it to population, rather than examining trip starts and trip length. Trip start data and average trip length are each available through the County's travel model, yet this information is omitted. The CAP should be revised to reflect the data that is relevant to addressing the standard imposed by the Act — trip starts and miles traveled per trip, and not merely VMT growth rates.

Notwithstanding the use of misleading and different units, with zero transportation control measures, the CAP is obviously incompetent to address this requirement. Far from a "substantial reduction" in VMT growth, the CAP simply endorses business as usual, and offers no substantive evaluation or analysis of the source of the problem, instead merely reporting on past trends and concluding "Santa Barbara County is clearly not meeting this State act performance standard." Rather than merely reporting on "historical trends" as the summand total of the analysis, the CAP should more fully develop and articulate the basis for this failure and propose strategies and alternatives that could address the problem. Were a more complete and robust TCM review and development process undertaken, potential solutions to this problem might be under consideration.

3. Contingency measures

The 2004 CAP lacks treatment of contingency measures as required by law. Health and Safety Code § 40915. Since the CAP predicts that emissions reductions will likely be overtaken by increased emissions from marine shipping, and revised estimates show increased marine shipping emissions than previously projected (in the 2001 maintenance plan) it is incumbent on the District to include a robust set of contingency measures to address the likely loss of progress towards attainment. Further, as the CAP reports the inability to achieve interim goals, such as control over VMT growth, contingency measures are necessary immediately to attempt to get the County back onto the path of attainment. Recent exceedences of both the state and federal 8 hour ozone standards is troubling, and may reflect a trend. If so, contingency measures should be

implemented according to the 180 day deadline in Health and Safety Code § 40915. Their omission in unacceptable and jeopardizes the adequacy of the CAP.

## 4. Transport

The 2004 CAP does not contain a complete analysis of air pollution transport to and from Santa Barbara County. It ignores the substantial effects of northern Santa Barbara County emissions on southern San Joaquin Valley air quality, in particular episodic emissions from Vandenberg Air Force Base activities. Previously, the APCD provided assurances that the SCOS data would allow an independent evaluation of transport to *and* from Santa Barbara County, but the CAP relies exclusively upon a canned ARB conclusion, then recites that it doesn't really matter since the state requirements for upwind Districts are so ineffectual that they mere require what is already required. Health and Safety Code § 40912 establishes the State's § 39610 "Transport Mitigation" control requirements as a floor, not a ceiling. Additional controls and emissions reductions are required of upwind Districts under state law "to reduce emissions originating in the District below the level at which violations of the state ambient air quality standards would occur in the absence of the transport contribution." Health and Safety Code § 40912. The 2004 CAP must use the SCOS data and ensure that Santa Barbara County meets this requirement.

5. Emissions Trends

The draft 2004 CAP recognizes that marine shipping emissions, if uncontrolled, will actually exceed the projections made *in* the 2001 CAP and maintenance plan. The 2004 CAP fails to either develop methods of controlling these emissions or identify other sources that can provide additional emissions reductions to overcome the growth. Given the trend line for the emissions inventory, the CAP is inadequate to ever improve air quality to the point of attainment, and thus fails to reach attainment "as expeditiously as practicable."

A number of new port projects in California threaten to further increase marine shipping emissions and impacts to Santa Barbara County. Ports in Long Beach are proposed to be expanded, and a series of new LNG terminals are under discussion. The District must become an active and forceful advocate in constraining these expansions and/or ensuring that air pollution impacts will be avoided or <u>minimized</u>.

6. The "All Feasible Measures<sup>"</sup> Analysis is a Race to the Bottom

The control strategies in the 2004 CAP fall short of the level of aggressiveness required to attain the California ambient air quality standard for ozone. First to fall was an attainment demonstration, then the 5% annual emissions reductions became obsolete, and now the all feasible measures process has devolved into an arbitrary comparative process where no measure needs be considered unless it has been adopted in another District. Since all Districts prepare triennial CAPs and look no further than the list of control measures adopted by other Districts,

few new control measures are developed. Thus the CAP all feasible measure process is largely an exercise with no meaningful benefit.

This is elucidated in the statement that only rules adopted by other Districts will be considered, and references to other Districts that have been the least effective at controlling air pollution in the state. If Santa Barbara County elects to follow the footsteps of San Joaquin Valley in controlling air pollution, it is unlikely we will ever achieve and maintain the California ambient air quality standard for ozone.

There is no explanation as to why control measures identified as reasonably available control measures should not be imposed prior to 2007 and 2010 — the Act requires attainment "as expeditiously as practicable" and that requires control strategies to be implemented "as expeditiously as practicable." A six year delay in identifying a known control measure for which a parallel rule already exists is not expeditious or acceptable. Given that "long term" control measures are 'scheduled for adoption until 2100-2012, it appears that the further study measures may not be adopted until after that time.. The 2004 CAP does not appear to actually include all feasible control measures for adoption or implementation, but rather puts them on a very generous schedule for eventual consideration.

A further study measure carried forward from the 2001 maintenance plan, wineries and breweries, should be adopted and implemented promptly. This is a growing source category in Santa Barbara County that should be controlled expeditiously.

The control measure vetting and winnowing process appears quite arbitrary. The CAC questioned why staff made various unilateral screening decisions rejecting control strategies without consulting that body for guidance. This "closed door" exercise taints the integrity of the control strategy selection process. The District should hold workshops that include the public and CAC in evaluating prospective sources and control strategies.

7. Construction Equipment Emissions Inventory Issues

The 2004 CAP discloses that construction (and mining) equipment emissions are up to five times higher than previously estimated, as previously contended by commenter's counsel. 3-11. In light of the newfound significance of this emission category, the District must achieve a better characterization of the emissions from this category and develop strategies for their control, including alternatively fueled construction equipment and other mandatory mitigation measures for application by land use permitting jurisdictions.

8. Environmental Justice Issues

There are continuing concerns that the District and SBCAG are ignoring environmental justice consequences of its actions. Public transit is an important community asset for low income and

communities of color. The County has emphasized subscription, commuter transit services (which serve more affluent populations) to the detriment of scheduled services that serve the needs of our County's poor. The County lacks basic intercommunity service allowing a person to use public transit to move between many of our communities. Not only is it discriminatory; but it induces auto dependence and increased single occupancy vehicle emissions and VMT.

Further, spiraling VMT and the related highway-based emissions from vehicle use disproportionately and increasingly affects housing adjacent to highways, which typically contains high percentages of low income and people of color. Intentionally or accidentally, the effect of the CAP and its related programs is to discriminate against low income communities and communities of color.

The CAP should include a consideration and analysis of the environmental justice implications of its adoption and implementation. What is in the CAP is as important *as what is* not in the CAP, and means to avoid disproportionate impacts should be included as part of a environmental justice impact assessment.

Thank you for considering our concerns on the 2004 CAP.

Sincerely, Marc Chytilo

Attachments

CC: Our Children's Earth Foundation Tom Murphy Jim Damkovich

## LAW OFFICE OF MARC CHYTILO

## ENVIRONMENTAL LAW

April 15, 2004

Mr. Terry Dressler, Control Officer Air Pollution Control District 260 N San Antonio Road, Suite A Santa Barbara, California 93110

Mr. Jim Kemp, Executive Director Santa Barbara County Association of Governments 260 N San Antonio Road, Suite B Santa Barbara, California 93110

By E-mail - DresslerT@sbcapcd.org, jkemp@sbcag.org

## RE: 2004 CAP TCM Plan

Dear Terry and Jim:

At last night's APCD CAC meeting, I expressed concern that the draft TCM list proposed for the 2004 CAP was being developed without the benefit of an emissions reductions target. I further expressed concern that the District must undertake a specific TCM Planning process under State law.. Finally, I stated that I supported a more extensive and expansive process for involving and including the public, transit operators, local municipalities, adjacent counties and other agencies in the process of identifying potential TCMs and scoping them so they would receive adequate consideration in the reasonably available control measure analysis process. The CAC was generally supportive of these concerns, so I write to describe more particularly the issues at hand.

Health and Safety Code § 40717 establishes a clear mandate for Districts to establish the quantity of emissions reductions necessary from transportation sources necessary to attain the state standard. § 40717(b)(1). This language unquestionably applies to the 2004 CAP. §§ 40717(a); 40717(b)(3)(C). Other portions of the California Clean Air Act require attainment demonstrations and emissions reductions goals. See, for example, Health and Safety Code § . 41503(b), describing the standards by which ARB is supposed to assess the CAP's adequacy. The fact that there is an exemption for District that cannot feasibly predict an attainment date does not eliminate that requirement unless the District and its CAP demonstrate this on the basis of substantial evidence. I was led to believe that the data from SCOS would enable ARB and local Districts to predict attainment dates, and since the District was required to model attainment of the federal one hour standard, addressing the state standard should represent a limited increment of additional work.

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7 - 44

Mssrs. Dressler and Kemp April 15, 2004 Page 2

In any case, the Transportation Sources Plan must be developed and "adopted" by the COG, or SBCAG, and then submitted to the District on a schedule adopted by the District. 40717(b)(2). The District has a mandatory obligation to review and reject that plan if inadequate to achieve the emissions reductions requirement. 40717(b)(3).

In light of the broad public distrust in the "101 in Motion<sup>"</sup> process (many community representatives believe that the SBCAG Board of Directors has directed a particular outcome, a belief supported by the record), the TCM planning process is' an important opportunity for public involvement in scoping potential TCMs. The APCD CAC had a lively discussion about potential transit measures, and staff recited that there are no shortage of creative ideas to address local congestion issues and different forms of transit. The California Clean Air Act recites that "Districts shall focus particular attention on reducing the emissions from transportation sources and areawide emissions sources." Health and Safety Code § 40910.

I ask that the District and SBCAG create a robust public outreach process that includes the public, the various agencies that have expressed interest in public transit issues through the unmet transit needs process, transit operators and adjoining jurisdictions. Your agencies' duty is to consider all reasonably available transportation control measures, not simply adopt all feasible measures. \$ 40918(a)(3). The CAP must address means to achieve applicable performance standards. Id.

Thank you for considering these views on this important topic. I hope that this will result in a renewed effort to identify and adopt TCMs that can overcome the challenges our community faces in achieving the state standard and addressing transportation needs of our community.

Sincerely,

/s/ Marc Chytilo

cc: Tom Murphy Jim Damkowitch Bill Dillon May 21, 2004

Marc Chytilo Law Office of Marc Chytilo P.O. Box 92233 Santa Barbara, CA 93190

Dear Mr. Chytilo:

The Santa Barbara County Air Pollution Control District (APCD) and the Association of Governments (SBCAG) appreciate your interest in the development of the 2004 Clean Air Plan and specifically the on-road mobile source portion of the inventory. We share your enthusiasm for transportation control measure (TCM) planning and we believe that the cooperative planning process undertaken pursuant to our memorandum of understanding complies with the intent of the applicable requirements in the Health and Safety Code. In your recent letter on this topic, you raise the following issues that we have responded to below:

- The 2004 Clean Air Plan is being developed without a specific emissions reductions target.
- There should be a more extensive and expansive process for identifying TCM's in the 2004 Clean Air Plan.
- The 2004 Clean Air Plan must address means to achieve applicable performance standards.

The fundamental state requirement that our planning process has focused on since the enactment of the California Clean Air Act is the five percent annual emission reduction requirement under Health and Safety Code § 40914. If an area can not meet the five percent reduction requirement, they must include every feasible measure in their plan to attain the state standard by the earliest practicable date. While § 40717 mandates that areas quantify the emission reductions from transportation sources to attain state and federal standards, we do not have the photochemical modeling analysis to identify the targets for the state standard. Therefore, we are technically unable to fulfill the process identified under § 40717 and must default to the every feasible measure approach outlined in § 40914. Even without the benefit of photochemical modeling, we believe that the progress we have made in cleaning our air (with significant emissions reductions from on-road mobile sources) clearly shows that our air quality planning process has been a success. According to our most recent air quality data, we have one monitoring station (Paradise Road) that violates, that state standard and only by a very slim margin. Back in 1990, we had ten monitoring stations that violated the state standard.

# **EXHIBIT 2**

The origin of the TCM projects identified in the 2004 Clean Air Plan is from the previously adopted plans (1994 and 1998). As part of the development of these plans – a comprehensive process involving and including the public, transit operators, local municipalities, and other agencies was undertaken. We agree with your desire for an extensive and expansive process for identifying TCM's and believe that the current "101 in Motion" process represents a unique opportunity to engage in such an endeavor. W e are unaware of a "broad public distrust" in the process and encourage you to take advantage in this very important opportunity. Many of the further study measures identified in the 2004 Clean Air Plan will be evaluated by "101 in Motion" and we see this as an unparalleled opportunity for the public, transit operators, local municipalities, and other agencies to participate in developing transportation strategies to address congestion and air quality in Santa Barbara County. As § 40910 provides that it is the intent of the legislature to avoid redundant work, we view the "101 in Motion" process as the proper forum front which to evaluate existing and future TCM's in our most congested transportation corridor at this point in time.

As Chapter 5 of the 2004 Clean Air Plan discusses, areas having "moderate" air pollution are required to track and provide reasonably available TCM's to provide a substantial reduction in the rate of increase in passenger trips and vehicle miles traveled (VMT). The ARB has further defined this "performance measure" as holding the growth in VMT to the same growth rate in population. The data presented in Chapter 5 shows that for 12 of the last 16 years, the annual VMT growth rate has exceeded the annual population growth rate in Santa Barbara County. Our ability to limit the growth rate of VMT to that of the local population is problematic due to many factors related to how and where we live and work in the region. This issue is also one that the "101 in Motion" process will consider and we encourage you to bring this issue to that forum.

We hope that we have addressed your concerns and that you will take an active role in the "101 in Motion" process. If we find that the "101 in Motion" process was ineffective in evaluating TCM's or our local air quality is degrading, we will consider initiating another process to evaluate such measures. If you have any questions or comments, please call either Michael Powers at (805) 961-8910 or Tom Murphy at (805) 961-8857.

Sincerely,

Terry Dressler Air Pollution Control Officer Santa Barbara County Air Pollution Control District

cc: Michael Powers, SBCAG Tom Murphy, APCD Dennis Wade, ARB Jim Kemp Executive Director Santa Barbara. County Association of Goverments

## LAW OFFICE OF MARC CHYTILO

## ENVIRONMENTAL LAW

March 28, 2001

Mr. Bill Derrick, Executive Director Santa Barbara County Association of Governments 222 E. Anapamu Street, Suite 11 Santa Barbara, California 93101

Mr. Doug Allard, Control Officer Santa Barbara County Air Pollution Control District 26 Castilian Drive, Suite B-23 Santa Barbara, California 93117

## RE: TCMs and Land Use Strategies for the 2001 Maintenance Plan and Regional Transportation Plan

Dear Bill and Doug:

As each of us has discussed, our County faces a growing mobile sources emissions inventory and shrinking stationary source emissions inventory. The severity of the future problem is exacerbated by substantial population and VMT growth projections. These factors mandate that your agencies take more serious steps to develop and implement more effective land use air pollution control strategies and transportation control measures (TCMs). At the March meeting of the APCD Community Advisory Council (CAC), the CAC expressed a strong desire that your agencies address this issue in a more effective and comprehensive manner. This desire was stated by both public health advocates and stationary source representatives on the CAC.

As the Maintenance Plan is being developed, I implore your agencies to consider a new suite of land use strategies and TCMs for inclusion in the upcoming Maintenance Plan and revised Regional Transportation Plan (RTP). Not only are new, popular and feasible TCMs and land use strategies available, but improved modeling allows a more realistic and meaningful assessment of the emissions reductions benefits of these measures. Projecting future population and VMT growth curves against either increased single occupancy vehicle automotive usage or wider-spread use of alternative transportation strategies discloses the necessity of developing alternatives to the single occupancy vehicle. This is particularly important in addressing the fine particulate matter ambient air quality standard and the upcoming "next generation" of state and federal ambient air quality standards. We are not out of the woods.

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# **EXHIBIT 3**

In order to stimulate your staff's discussion and consideration of options, below is a list of potential land use strategies and TCMs suggested for inclusion in the Maintenance Plan and RTP. I obtained most of my information about these strategies from various web sites and from experience in other communities. I trust that you will ensure that each suggestion receives careful consideration.

<u>Commuter Choice:</u> Adopt and staff a Commuter Choice program. This is an obvious program to adopt. Recent changes in state and federal tax law allow employers to offer employees parking and transportation benefits as tax-exempt compensation, with greater incentives for parking cash-out and alternative commute options. Employees can receive up to \$175 per month of their existing or new compensation tax free. This is truly "found money" for both employers and employees which offers a meaningful incentive to use alternative commuter options in a flexible and cohesive package. According to the International Council for Local Environmental Initiatives "[t]his simple act of uncovering parking subsidies and offering a choice can reduce solo car commuting by up to 22%."

<u>Guaranteed Ride Home Program:</u> A locally missing element of all alternative transportation strategies is the guaranteed ride home program (and/or workplace loaner car) for individuals who must return home (or to their child's school) for emergencies or after hours when transit service may not be available. While typically administered through taxi companies, some communities have implemented "community car" programs, where an employer and/or employee can participate in cooperative car ownership to provide a "backup" for workers who need a car infrequently, but urgently, while at the workplace or on their personal time.

<u>Community Car Programs</u>: A number of communities in the United States and Europe have begun "community car" programs. In essence, this is a low cost, cooperative subscription car rental system allowing families to avoid many of the expenses of auto ownership while maintaining access to a car when specifically needed. Communities must be designed and operated to allow most daily functions to occur without needing a car. In some European cities (e.g., Zurich), community cars enjoy preferential parking privileges, enhancing their attractiveness. San Francisco has recently initiated a community car cooperative program. Linked to new residential design features enhancing the quality of communities that are not designed with the car as the first priority, the community car concept may offer considerable benefits in encouraging more appropriate land uses

<u>Smart Growth Resources:</u> Smart Growth Resources to land use planning officials. Our sprawling land use patterns cost local government in increased and inefficient services, destroy open space, increase auto dependence, waste personal economic resources and degrade quality of life. See, for example, <u>Driven to Spend: How Sprawl and Lack of Transportation Choice Are Driving Up Family Transportation Costs</u>, http://www.transact.org/. Land use planners in the County and cities lack a regional perspective and are largely ignorant of the environmental and social ramifications of ignoring air quality impacts and transportation alternatives in their review and planning processes. This is one essential ingredient of sprawl. Your agencies must tackle this issue aggressively, or else decisions made in coming years will preclude an *efficient* future public transportation system and create

continuing problems for our communities. Only your agencies are positioned to assemble and provide effective materials on "smart" planning for air <u>quality</u> and transportation perspectives and make strong recommendations for appropriate land use development patterns and design. While your agencies lack direct regulatory control, you can serve both as an important source of information, training and expertise to cities and the county.

<u>Bike projects:</u> Design and implement a much more comprehensive bicycle system for the region. Develop and implement a continuous, connected bike lane system from each county line with an extensive bike lane network. Develop a bike lane network serving all medium and large schools to promote safe bike commuting to school. Complete a comprehensive network of bikeways, including: Class I (exclusive bike paths separated from roads), Class II (on-road striped bike lanes), Class III, (on-road shared, signed routes) and Bicycle Boulevards. Install bicycle route numbering with maps. Maintain effective and continuing review and improvement of safety problems and maintenance of all bikeways. Review and maintain highway and street standards including surface standards, bridge access, bike lane cleaning, illegally parked car intrusion elimination, and bicycle sensitive traffic signals.

<u>Pedestrian Projects:</u> The region lacks a comprehensive sidewalk system, and continues to design new development prioritizing vehicular, rather than pedestrian access. Areas within existing communities where existing and future land uses are conducive to pedestrian use should be subject to a master planning process to be designed and shaped to become more pedestrian-friendly over time as . redevelopment and other improvements occur and as these communities and developments mature.

<u>Recognize Induced Traffic and VMT:</u> SBCAG should require future project-level analysis (and analysis of all private projects which require transportation infrastructure improvements to accommodate traffic increases) to include additional modeling that incorporates the principle of latent (induced) demand in its design. Recalibrate the travel model, using actual VMT from completed projects.

<u>TEA Restrictions to Enhance Transit and Smart Growth:</u> Some communities in California have considered restricting certain portions of TEA-21 funds to communities which adhere to certain land use and transit performance standards. For example, the following policies could have application in Santa Barbara County:

1) A RTP investment policy prioritizing transportation projects that are coupled with transit, bicycle and pedestrian oriented development along transit corridors and nodes, and conditioning capacity increasing highway projects on the adoption of growth management plans that embody provisions for open space preservation and subregional agreement on a growth budget that does not overload either transportation infrastructure or other forms of infrastructure.

2) Condition funding and approval of projects serving large new trip generating land uses on a major reduction in drive-alone access to those projects. Such reductions shall be based on providing

parking for fewer than the number of spaces ordinarily required, parking charges, cashing out employer paid employee parking, developer subsidies for transit access to the project, and other similar transportation measures. The effectiveness of demand management shall be guaranteed by an enforceable agreement to meet performance standards for access that reduce by some figure (half?) the number of drive alone trips and mandate the \*addition of further transportation incentives to meet performance goals if they are not met.

3) Increased county-level transit ridership targets (necessitating increased investment in transit, increasing the cost effectiveness of transit investments, as well as encouraging land use jurisdictions to incentivize transit-supportive land use decisions). The TCM should reference achieving and maintaining a minimum modal split for transit, pedestrian and bike travel at specific milestones, with If/Then consequences for each portion of the county at these points for not reaching the specified target.

4) Fund highway expansions only within cities or sub-regions of the county where 80 percent of employees in businesses with over 5 employees are offered parking cash-out or commuter choices, and where parking is unbundled from rental housing and business rental/lease agreements.

5) Allocate a certain percentage of discretionary funds exclusively to projects (both maintenance and capacity-expanding) in areas that meet specified smart growth criteria as is the practice in San Mateo (where transportation money is given to cities that approve dense housing near rail stations).

These policies build upon the use of TEA funds as incentives for smart growth principle utilization, as pioneered by Dr. John Holtzclaw, director of Sierra Club's Transportation Program. This approach has been determined to be legally appropriate upon scrutiny by the Air Resources Board. (K. Walsh, ARB General Counsel, to F. Chin, MTC, 10/26/1999),

EPA's Transportation Air Quality (IRAQ) Center provides state and local air quality regulators and transportation planners with access to critical information regarding transportation programs and mobile source incentive-based programs, partnership opportunities, giant funding sources, useful contact names, and technical assistance. http://www.epa.gov/oms/transp.htm. Links from this page provide testimonials and experiences from other programs and references to EPA's emissions reductions quantification analysis for TCMs and land use strategies. See also The Surface Transportation Policy Project; http://www.transact.org/ca/.default.htm.

## Environmental Justice Issues

Transportation Equity issues are central to this process. SBCAG's environmental justice deficiency was noted by the Department of Transportation in the recent MPO certification review, and must be addressed aggressively. A suggested approach is the formation of a joint APCD-SBCAG Environmental Justice Committee comprised of community representatives that are supported and

staffed by agency members. Funds should be available to reimburse qualifying (low-income) participants the lost income and costs of attendance to allow participation by transit-dependent community representatives. The Agencies should commit to create a consensus methodology for El impact equity analysis.

This is a preliminary list with both some concrete suggestions and conceptual framework for addressing these issues. I hope this assists you and your staffs in evaluating TCMs in the Maintenance Plan and Regional Transportation Plan. I trust that you will ensure that these issues are given serious and careful consideration.

Thank you.

Sincerely,

Marc Chytilo



## **STAFF REPORT**

SUBJECT: Highway 101 Implementation Plan

MEETING DATE: October 16, 2003

AGENDA ITEM: 10

## **RECOMMENDATION:**

- A. Approve an amendment to the Measure D expenditure plan to:
  - 1. Revise the existing Route 101 widening project to: Route 101 interchange improvements, *operational improvements*, and widening to six lanes, San Ysidro Road Milpas Street to county line.
  - 2. Allocate available Regional Measure D funds designated for the Route. 101 widening project as follows:
    - a. \$11,107,000 to expedite completion of programmed 101 operational improvements.
    - b. \$1,500,000 for operation and expansion of intercounty transit service between Ventura County and Santa Barbara County.
    - c. Up to \$1,082,742 for the Highway 101 Implementation Plan.

(Note: Approval of the expenditure plan amendment requires 9 affirmative board votes)

- B. Adopt a policy directing that:
  - 1. The implementation Plan shall include result in a project or set of projects that will increase the capacity by adding lanes and reduce congestion on Highway 101.
  - 2. Highway 101 widening options shall include at a minimum additional mixed flow lanes, High Occupancy Vehicle lanes, High Occupancy Toll lanes, reversible lanes and/or use of the highway shoulders and restriping for additional lanes within the present rights-of-way.
  - 3. In addition to widening Highway 101, the Implementation Plan shall include other projects providing congestion relief Including those that *increase corridor capacity (eg., rail and bus transit)*, reduce *regional* travel demand, promote *expand* alternative transportation modes and improve operation and management of the transportation system.

Member Agencies Buellton • Carpinteria • Goleta • Guadalupe • Lompoc • Santa Barbara • Santa Maria • Solvang • Santa Barbara County

# **EXHIBIT 4**

- 4. The implementation Plan shall include an analysis of alternative congestion relief projects which may be used in support *of* the NEPA and/or CEQA environmental review process during the next phases of project development.
- C. Authorize the Chair to execute an agreement with Parsons Brinckerhoff to perform technical services for the Highway 101 implementation Plan, at a not-to-exceed price of \$1,511,742.
- D. Authorize Executive Director to approve contract amendments up to \$151,000.
- E. Approve appropriation increases in both the FY 03-04 General Fund and LTA Capital Projects budgets in the amount of \$689,300 for the Highway 101 Implementation Plan consultant contract and an increase in General Fund revenues for the Measure D contribution to the 101 Implementation Plan.

## **DISCUSSION:**

At the last two SBCAG meetings in August and September, the board heard public testimony and had extended discussions about the 101 Implementation Plan. While there was general agreement among the board members that SBCAG, Caltrans and local agency partners need to move forward quickly to develop an action plan for relieving traffic congestion on the 101 corridor, there were outstanding questions on how the Implementation Plan can fulfill this need. The item has been continued to the October 16 meeting and the board has indicated that it intends to take action on the implementation Plan at this meeting.

Based on board discussion and direction given at prior meetings, staff has developed several recommendations for board action. The recommendations, which are supported by the TAG with North County staff representatives, include:

- Amending the Measure D expenditure plan to allocate available funds to Implement near-term congestion relief projects,
- Adopting a policy to provide board direction for the IP regarding alternative strategies for congestion relief, and
- Approving a consultant contract, scope of services and funding actions for completion of the IP.

## Measure D Expenditure Plan Amendment

Board members have expressed a strong desire to implement projects that will bring congestion relief benefits as quickly as possible. Caltrans has reported, however, that completion of a freeway widening project will take more than ten years. The Implementation Plan will identify both short-term congestion relief projects that can be implemented quickly as well as longer term major capital improvement projects.

At last month's meeting and retreat, the board was advised that the lack of sufficient STIP funding is jeopardizing timely completion of the Route 101 operational improvement projects, which were programmed in the 1996 STIP, and are currently under development by Caltrans. These projects are intended to reduce congestion, improve operations and safety at specific locations in the South Coast 101 corridor between Milpas Street and the Ventura county line by

adding new freeway and auxiliary lanes and improving ramps and interchanges. The three 101 operational Improvement projects currently programmed are:

- 101/Milpas St to Hot Springs Road—reconstruct interchanges, add southbound freeway lane and northbound auxiliary lanes
- 101/Ortega Hill (Evans to Sheffield)—add northbound auxiliary lane •
- 101/Linden Ave and Casitas Pass Road—reconstruct interchanges

All three of the projects are being developed to be compatible with the future widening of 101. in fact, some of the major components of the operational improvement projects such as the addition of freeway and auxiliary lanes and interchange reconstruction will complete elements of work that would be necessary as part of a widening project and thus will result in a direct reduction in costs for a future widening project.

Unfortunately, the current uncertainty of STIP funding is likely to delay completion of the operational improvements along with their congestion and safety benefits. In particular, the lack of state funding will have an Immediate adverse Impact on two of the operational improvement projects and delay further progress on them as noted below.

- The design work on the <u>101/Ortega Hill (Evans to Sheffield)</u> project Is nearly complete and the project will be ready to begin construction in early 2004 with construction being anticipated for completion In early 2006. The project is fully programmed with \$3.1 million In STIP funds. However, since the State Highway Account (source of the STIP funds) has been depleted, the project will be placed on the CTC's "pending allocation" list and it is unknown when the funds needed to proceed with construction will be available. It is conceivable, based on the funding situation statewide .that the project would be delayed significantly without outside funding,
- The <u>101/Milpas to Hot Springs Road</u> project will have an environmental document finalized this Fall and work is scheduled to begin on final final design and right of way acquistion. However, due to the STIP cash shortfall, the \$5.7 million in programmed funds for the right-of-way phase are not currently available for allocation and it is unknown when these funds will be made available. The project has a projected funding shortfall of \$11.11 million (\$10.36 million in construction and \$0.75 million in right of way). Construction, which is expected to begin in 2006, will likely be delayed without outside funding.

Several board members expressed support for a proposal to use Measure D Regional funds to keep these projects on schedule. As a result, staff has developed, a recommendation, supported by the TAG, to amend the Measure D expenditure plan to allocate Measure D funds to the two 101 operational improvements identified above. In addition, the recommendation calls for a Measure D allocation to provide expanded inter-county transit service on the 101 corridor and to fully fund the 101 implementation plan as discussed below.

The Measure D expenditure plan currently includes a project to widen Route 101 to six lanes and improve interchanges between San Ysidro Road and the county line. In order to allocate Measure D funds for the operational improvements, it is recommended that the board approve an amendment to the Measure D expenditure plan to revise the 101 project. The proposed amendment would extend the western limit of the project to Milpas Street and specifically allow the expenditure of these Measure D funds for the 101 operational improvement projects.

The proposed expenditure plan amendment would also allocate Measure D funds designated for the 101 project as follows:

- \$11,107,000 to expedite completion of programmed 101 operational improvements.
- \$1,500,000 for operation and expansion of intercounty transit service between Ventura County and Santa Barbara County.
- Up to \$1,082,742 for the Highway 101 Implementation Plan.

It is currently projected that a total of \$15.3 million in Measure D funds will be available for the Route 101 project. Amending the Measure D expenditure plan as recommended will require *a* two-thirds majority approval by the entire SBCAG board (9 affirmative votes).

As indicated in Attachment A, the \$11.107 million in Measure D funds proposed for the operational Improvements would be allocated as follows: \$3.1 million for construction of the 101/Ortega Hill project and \$8.0 million for the 101/Milpas to Hot Springs project (\$5.6 million for right-of-way capital and support and \$2.4 million for construction). The \$8.0 million In STIP funds currently programmed for construction of the 101/Ortega Hill project and right-of-way capital and support for the 101/Milpas to Hot Springs project would be reprogrammed to address the \$10.4 million construction funding shortfall for 101/Milpas to Hot Springs. The reprogrammed STIP funds would be coupled with an additional \$2.4 million in Measure D funds to eliminate the current shortfall for this project.

At this time, no Measure D funding is recommended for allocation to the 101/Linden and Casitas Pass project. Although the project has a projected construction shortfall of approximately \$20 million, no immediate benefit can be realized by allocating Measure D funds. Caltrans work on this project is continuing with the STIP funds that are currently allocated. The project is currently under environmental review and is scheduled to begin construction in 2007 and complete construction in 2011.

Using the Measure D funds to expedite completion of the 101 operational improvement projects is both appropriate and consistent with purpose of the 101 project listed in the Measure D expenditure plan. The Measure D regional highway program has committed nearly \$120 'million of local Measure D revenues to complete 15 major highway projects. Virtually all of these funds have been or will be expended to relieve congestion and improve operations and safety on state highways in the County. The last of the 15 projects in the Measure D highway program to be completed is the 101 widening/interchange improvement project. The project limits currently described in the expenditure plan do not include the four-lane section of 101 from San Ysidro Road to Milpas Street because in 1989 when Measure D was approved, a project to widen this segment to six lanes was fully programmed in the STIP. The clear intent of the project in the Measure D expenditure plan was to provide a portion of the funds needed to extend the 101 widening and interchange improvements south of San Ysidro Road and to help ensure that the entire 12 mile four-lane segment of 101 between Milpas Street and the county line Is widened and improved. It is, therefore, appropriate to extend the limit of the Measure D project to Milpas Street as proposed.

If the board approves the allocation of Measure D funds for the 101 operational improvements, it will be necessary for the board to take subsequent actions at future meetings to approve cooperative

agreements with Caltrans for each of the projects. The agreements will outline the roles and responsibilities of each agency. In addition, SBCAG will need to seek approval by the CTC of a STIP amendment revising the programming amounts for each project as described in Attachment A.

Providing local contributions to fund state highway improvement projects is quite common, particularly In self-help counties that have local transportation sales taxes. SBCAG's contribution of Measure D funds to the 101 operational improvement projects would have no effect on the county share amount of STIP funds that SBCAG will receive because these funds are allocated to regions based on a formula specified in statute.

Staff and the TAG are also recommending that the board allocate \$1.5 million of the Measure D 101 project allocation for operation and expansion of the intercounty transit service currently provided by the Coastal Express. It was reported to the board at its retreat last month that this service is experiencing strong ridership growth (16% increase in FY 02-03) *and* productivity (farebox recovery ratio is currently 31%) . and it is believed that there is significant potential for expansion of current peak period and express service. Because the Coastal Express service provides direct congestion relief benefits by reducing peak hour auto trips on the South Coast 101., allocating the Measure D funds for this service should be considered.

At the board retreat, staff reported that the CMAQ funding being used for the Coastal Express 3year demonstration project will be exhausted along with the current APCD subsidy at the end of the current fiscal year. It is projected that beginning in FY 04-05, SBCAG will experience a shortfall of approximately \$200,000 annually for its share of the Coastal Express operating costs (Ventura County Transportation Commission and SBCAG split the costs equally). Unless another funding source Is identified for SBCAG's share of the operating costs, the Coastal Express service will have to be terminated at the end of the pilot program next year.

The recommended allocation of \$1.5 million in' Measure D funds will allow the service to continue to operate for at least "6 more-years (until Measure D expires in 2009) and provide for an expansion of the service to include approximately 4 more weekday peak period round trips (11 weekday round trips are currently provided). Other funding options for subsidizing the Coastal Express are limited. Existing sources of transit funding including FTA 5307 urbanized area formula funds and TDA funds are already fully committed to existing transit services. CMAQ funds cannot be used after the 3-year pilot program is complete.

The staff and TAG recommendations for a	llocating Measure D funds for operational improvements
and transit services in the 101 corridor will provide several benefits as shown in the table below:	

Project	Status	Benefit
US 101: Mllpas to Hot Springs Road	<ul> <li>Final EIR in November</li> <li>Construction scheduled for 2006</li> <li>Ready to begin right of way but no money in SHA</li> <li>Overall funding shortfall of \$11.1 million</li> </ul>	<ul> <li>Maintain current schedule</li> <li>Initiate right of way delivery</li> <li>Fully funds project</li> </ul>
US 101: Ortega Hill — Evans to Sheffield	<ul> <li>Ready for advertisement; no money in SHA</li> </ul>	Begin construction in 2004
Coastal Express	On-going service showing Increased ridership levels Operating deficit beginning In FY 04-05	<ul> <li>Maintain existing service</li> <li>Expand peak service in FY 04- 05</li> <li>Reduce trips on 101 corridor</li> </ul>
US 101: Linden / Casitas Interchanges	In environmental review Overall funding shortfall of \$20 million	<ul> <li>No immediate direct benefit</li> </ul>

The recommended Measure D expenditure plan amendment would allocate about \$13.7 million of the available funds for the 101 project leaving a balance of approximately \$1.6 million. It is recommended that the remaining funds be reserved at this time to serve as a contingency amount for the 101 operational improvement projects. The reserve could be also be used for specific projects that come from the IP Including early implementation of low cost projects that can provide immediate congestion relief benefits,

### Policy Direction for the Implementation Plan

One of the major concerns expressed by several board members is that the IP fails to reflect the necessity of adding new capacity to 101 to Improve traffic flow: While many members acknowledged the need to evaluate other strategies, they also stated that relieving congestion would require increasing the capacity of 101 by adding new lanes and that this must, therefore, be a mandatory component of the IP. Increasing frustration with the congestion and voter approval of Measure D in 1989--which includes a project to widen 101 south of San Ysidro Road–are cited as evidence of broad support for widening 101. As a result, some board members indicated that they may support the IP only if It includes a project to widen 101 as a mandatory component.

Consequently, last month, staff and the TAG presented recommendations for board consideration that would provide policy direction for development of the IP. These recommendations are again being presented this month with some changes based on board comments and alternative language suggested by Councilmember Smyser at last month's meeting. The suggested language by Councilmember Smyser was as follows:

The Implementation Plan shall result in a project that will provide additional lanes and concurrently other capacity alternatives that may result in other projects to reduce congestion on Highway 101. The plan will also provide concurrently for the designation end release of Measure D funds for approved operational improvements

The policy direction recommended by staff and the TAG is included in Recommendation B. The revised language in B(1) states the board's intent that a project or projects to increase the capacity of 101 shall be the result of the IP and clarifies that increased capacity shall be provided by adding lanes. The board must not to preclude consideration of the many options for adding freeway lanes including traditional mixed flow lanes, high occupancy vehicle (carpool) lanes, high occupancy toll lanes, reversible lanes, etc. Consequently, recommendation B(2) identifies some of these options for widening 101 and adding lanes that will be evaluated *in* the 1P. A successful long-range, comprehensive plan for relieving congestion must' also include projects other than adding freeway lanes. Recommendation B(3) states that the IP will include other projects that would increase the carrying capacity of the travel corridor such as bus or commuter rail transit, reduce travel demand, provide alternatives for peak period single-occupant auto trips and Improve the operation and management of the system. Finally, Recommendation B(4) states that the board intends to fully comply with CEQA and NEPA by using the IP to support a requirement to evaluate alternative congestion relief projects.

## **Consultant Scope of Work Modifications**

At the September board meeting, staff and the TAG presented some recommended changes in the consultant scope of services to ensure that the IP addresses regional issues In Northern Santa Barbara County and Ventura County (these were presented as Recommendation B in the

September staff report). Since the feedback from board members was generally supportive, staff requested that Parsons Brinckeroff incorporate the recommendations in a revised contract scope of services.

Staff and the TAG recommended that the consultant scope of services be modified to address four regional issues. The issues and the amendments to the Scope of Work are identified below, The Scope of Work is provided as Attachment C.

### Issue: identify future con<sup>g</sup>estion <sup>p</sup>roblems in North County and northern Ventura County.

Increased commuting from Ventura County and Northern Santa Barbara County by South Coast workers Is a trend that is likely to continue. The SBCAG Regional Travel Model will be used to forecast traffic growth out to 2020 for the entire county based on SBCAG's adopted Regional Growth Forecast. This forecast of added vehicle traffic will be compared to existing capacity on Highway 101 to identify any significant deficiencies both within and outside the South Coast area. Sub-areas within Ventura and San Luis Obispo Counties are included as part of the SBCAG travel model so the interregional travel issue Will also be addressed. Forecast periods for the travel model are based on *the* SBCAG Regional Growth Forecast that provides population, employment and household projections every five years from 2000 to 2030.

Response: Scope of Work modified to reflect use of regional travel model to address countywide travel issues. See Attachment C - Revised Scope of Work: Subtask 2.4 and Task 10.0 respectively.

### Issue: Evaluate the potential impacts of future construction on 101 corridor on congestion levels and potential migration of commuters from Ventura County to Northern Santa Barbara County

There is potential for migration of South Coast commuters from Ventura County and elsewhere to Northern Santa Barbara County due to worsening congestion, highway construction related impacts, and, housing un-affordability. While such changes in travel behavior can be difficult to predict, the travel model will allow assumptions regarding commute shifts to be tested and potential new congestion problems to be identified throughout the region.

Response: Scope of Work modified to reflect potential change in commute patterns and countywide travel issues. See Task 10.0 of Attachment C.

## Issue: Develop project screening/evaluation criteria that specifically account for effects (positive and negative) of candidate projects on North County areas of 101.

The IP must ensure that project evaluation criteria assess impacts to North County. Through the IP public outreach • process, criteria will be developed to help screen and prioritize congestion relief projects. Screening/evaluation criteria will include those that will assess impacts of candidate projects on areas outside the South Coast.

Response: Scope of Work modified to reflect potential change in commute patterns and countywide travel issues. See Task 10.0 of Attachment C.

### Issue: Expand public outreach efforts in North County areas.

The IP needs to engage North County and Ventura County commuters so they and other stakeholders are given an opportunity to participate in its development.

Response: Scope of Work modified to reflect involvement of other users of the Highway 101 corridor. See Subtask 3.1,.3.2, 3.3, 3.4, and 3.8 of Attachment C.

Staff believes that the changes in the scope of services noted above respond to the board's direction.

### Funding for the Implementation Plan

Attachment B summarizes the proposed funding sources for the 101 IP. It is recommended that up to \$1,082,742 in Measure D funds be allocated to the 101 IP. These funds would be allocated from the 101 project through the proposed Measure D expenditure plan amendment. The current balance of Measure D funds estimated to be available for this project is approximately \$15.3 million. To the extent that other funds are secured for the IP, the need for Measure D funding will be reduced.

Earlier this year, SBCAG requested the assistance of Congresswoman Capps in obtaining a Congressional funding appropriation of \$600,000 for the 101 IP. It appears likely that this request will be approved this year. The House and Senate appropriations committees have approved an FY 03-04 transportation appropriations bill that includes the full \$600,000 requested for the 101 IP.

In addition, SBCAG was recently informed by Caltrans of the award of two discretionary planning grants for the IP of \$90,000 and \$158,800. SBCAG applied for these grants some time ago and is fortunate to have received approval given the state's current fiscal condition. SBCAG will need to approve grant agreements before being permitted to expend these funds.

Assuming that the federal appropriations bill is approved and the two recent grant awards are approved, SBCAG will have succeeded In obtaining nearly \$850,000 in state and federal discretionary funding for the IP and the need for Measure D regional funds would be reduced to less than \$250,000. it is Important to note that these funds have been awarded specifically to complete the 101 Implementation Plan and they cannot be used for other purposes if the board decides not to proceed with the IP.

## Conclusion

More than a year ago, the board adopted the South Coast 101 Deficiency Plan and concurrently directed that staff develop an Implementation Plan which would provide a comprehensive, long-term action plan for relieving congestion on 101. Since that time, significant progress has been made including:

 Execution of an MOU committing SBCAG, Caltrans, the County, the Cities of Santa Barbara, Carpinteria and Goleta, the SBMTD and the APCD to work cooperatively in development of the IP

- Selection of a qualified consultant and negotiation of a contract and detailed scope of services to complete the IP.
- Identification of multiple funding sources needed to complete the IP including approval of nearly \$1.0 million in discretionary grants.
- Preparation of a board policy to guide development of the Implementation Plan
- Development of a work plan that will make use of Measure D regional funds to expedite completion of 101 operational improvement projects and to operate intercounty transit services providing near-term congestion relief benefits

The board actions being presented at the October 16 meeting for approval are needed to move forward with the development of the implementation Plan.

## COMMITTEE REVIEW:

The Technical Advisory Group, supplemented with North County representation considered the staff recommendations on October 3. The TAG considered the proposal by Councilman Smyser and other Issues raised by board members at the September Board meeting. The TAG approved the recommendations above including the Measure D expenditure plan amendment, policy direction for the IP and the consultant contract with Parsons Brinckerhoff. The TAG expressed some reservations about the availability of STIP funding needed to complete the operational improvement projects and requested that staff seek commitments from the CTC, to the extent this is possible, to ensure that the operational improvements are given a high priority for allocation of STIP funds when they are needed.

STAFF CONTACT: Jim Kemp, Michael Powers, Fred Luna, Steve Vandenberg

Attachment A: Putting Measure D to work In the Corridor

Attachment B: Highway 101 implementation Plan Funding Proposal (Revised)

Attachment C: Revised Scope of Work submitted by Parsons Brinckerhoff Cost Proposal by Parsons Brinckerhoff

September 23, 2004

RECEIVED 2004 SEP 24 PM 3: 30 SANTA BARBARA COUNTY AIR POLLAPPARA COUNTY

Tom Murphy APCD Manager Technology and Environmental Assessment 260 N. San Antonio Rd. Suite A Santa Barbara, CA 93110

Comments Draft 2004 Clean Air Plan August 2004

Dear Mr. Murphy:

Here are my questions and comments for the above document: Pg 3-14 NOx annual emissions. Under mobile sources you cite 78% = 13,804 tons; in the 2001 Clean Air Plan (CAP) we had 80% = 15,319. We are dealing here with light duty passenger cars and trucks. How do you explain this reduction, if the traffic and gridlock in the freeways and streets is continuing to increase? Please comment.

Pg.4-4 table 4-1(2004 CAP) "Emissions control measures adopted before 2001" you dropped the ROC and NOx emission reduction that one can clearly see in the comparable table on pg 4-27 (2001 CAP). I suggest keeping the same format with the same headings and information from the 2001 Clean Air Plan. Why drop the future projections of ROC and NOx for 2005, 2010, and 2015?

Pg 4-11 Table 4-4 Please add the Rule# to Gas turbines (363)

Pg. 4-23 (2001 CAP) Liquefied Natural and Petroleum Gas Truck loading was deleted from in the 2001 Clean Air Plan. On March 3, 2004 a truck contracted by the Southern California Gas Co. spilled five gallons of mercaptan in Goleta near the Bacara Resort. The CAC was informed about the spill. This control measure should be reinstated and not deleted.

1 of 3

Pg 5-2 It would be helpful to have comparison charts from North and South County regarding population growth and VMT (Vehicle Mile Traveled). The source of your VMT is Caltrans. Did they take into account traffic originating in Santa Barbara County or are they counting traffic on the 101 freeway, a major thoroughfare for the entire state of California?

## Land use strategies:

Higher density with fewer parking spaces does not mean fewer cars. To the contrary, higher density with inadequate parking affects adjacent residential areas as people who do not have places to park in their development will use the side streets leading to them. Sometimes they even will park on designed bike lanes, creating a danger to bicyclists as they have to use the street instead of their assigned safer lane.

Pg. 7-8 paragraph 6e) needs correction "Discourage projects less than 20 housing units per gross acre". The Village Homes at Davis cited as an example by the Local Government Commission (LGC) have a density of 7.7 per acre, not 20 per acre. Where was the # 20 for the housing units per acre taken from?

Public transportation has to be optimal and functional for people to leave their cars. Streets and thoroughfares should be built first. People living in California are dependent on their cars. They are still the preferred mode of transportation. SUV's are replacing cars and instead of carrying more passengers; we still see one person per vehicle.

Building of large residential areas should be placed on hold until alternative routes or mode of transportation have been created if the LOS (level of service) of the existing streets is going to be degraded to a LOS D or F secondary to increased traffic generated by this homes.

2 of 3

Developments should not encroach on buffer areas of ESHA's (environmental sensitive habitats).

In Goleta the few open spaces left are already being eyed for development. Once you have paved over an area there is no going back. Infill development should not place residents or employees near sources of nuisance, dust, odors and accidental releases of toxic substances that could be lethal.

Why do the CMP (Congestion Mitigation Program) requirements state that a specific area should be zoned residential within one third of a mile of a rail transit station? We know NOx reacts with ammonia, moisture and other compounds to form nitric acid and related particles. Small particles penetrate into the lung and can cause respiratory disease such as emphysema, bronchitis and can aggravate existing heart disease.

Studies regarding the impact of ROC and NOx to populations near trains should be incorporated into this report.

As part of the final document under a separate chapter I would like to see all the comments that we members of the CAC contributed for each chapter. This is part of the public record and should be shared.

Sincerely yours Inge E. Cox, MD

CAC Member for the City of Goleta





September 23, 2004

Mr. Tom Murphy APCD Manager Technology and Environmental Assessment 260 N. San Antonio Rd, Suite A Santa Barbara, CA 93110-1315

Dear Mr. Murphy;

Thank you for the opportunity to review and comment on the proposed Air Quality Management Plan. While the Plan contains valuable information, Chapter Seven raises several questions.

Chapter Seven contains many useful suggestions to enhance the potential for greater use of alternative transportation modes. However, the chapter also contains numerous recommendations that could create adverse impacts on the local quality of life and if implemented by the Air Resources Board would be an unwarranted intrusion into local land use authority and jurisdiction. These recommendations may even serve to reduce air quality in the region instead of improving it. There are two sets of policies that are particularly troubling, the policies relating to densification (Section 7.3.1) and parking (Section 7.4.3).

### DENSIFICATION POLICIES

The densification policies in this chapter, Section 7.3.1, are based on inadequate premises and could be growth inducing.

### Premises of the Recommendations:

Chapter Seven advocates policies to intensify land use based on the conclusion that past land use patterns and trends are creating an increase in vehicle miles traveled and that research conducted in other geographical areas has demonstrated that more dense land use patterns reduce vehicle miles traveled (VMT) on a per unit basis.

CITY COUNCIL Cynthia Brock *Mayor* 

Jonny D. Wallis Mayor Pro Tempore

Jean W. Blois Councilmember

Margaret Connell Councilmember

Jack Hawxhurst Councilmember

CITY MANAGER Frederick C. Stouder

### Increasing VMT

The recommendations in this chapter appear to be based on the following:

The largest source of human-generated onshore air pollution in Santa Barbara County is motor vehicles. Consistent with state and national trends, and as discussed in Chapter 5 of this 2004 Plan, motor vehicle use continues to increase and the rate at which vehicle miles traveled is growing much faster than the rate of population growth. The principal reasons for this are high housing prices and land use patterns that encourage long-distance commuting from home to work and increasingly require cars to be used for every errand, from taking children to school to shopping to dining. (Italics added; Page 7-2)

There is no documentation presented for the conclusion that a change in land use patterns or housing costs are the principal causes of the increasing rate of growth for vehicle miles traveled. During this period of time there has been very little change in residential development patterns on the south coast. The changes that have occurred would tend to indicate that the population of the south coast area is becoming more concentrated rather than more dispersed.

Between 1990 and 2000 the total number of housing units on the south coast increased by only 3.4%, almost all of this consisting of "infill" of parcels within the existing development pattern. Most of this development occurred at locations where travel patterns would be very similar to the travel patterns with the surrounding uses and therefore would not tend to increase the *per capita* Vehicle Miles Traveled. The 3.4% rate of growth was less than half the rate of population growth in the same period (8%)—indicating that about half of the population growth was absorbed into existing units. In addition all of the net population growth in the Santa Barbara County Census Division consisted of Hispanic households who tend to reside in the city centers of the area. Hispanic households. As such, these trends can not be considered a significant change that would account for the amount of increase in vehicle miles traveled.

While there has been an increase in long distance commuting between 1990 and 2000, the amount of this increase is very small relative to the total amount of population, employment or vehicle miles traveled. The US Census of Population reports for the period indicate that the number of people who commute more than 30 minutes to work increased by 10% (not 20% as reported on page 5-17 of the Plan)<sup>1</sup> a little above the population increase of 8%.

GOLETA

<sup>&</sup>lt;sup>1</sup> Americanfactfinder, Tape 3 of 2000 Census, Table P31 and Tape 3 of 1990 Census, Table P50.

In addition, as correctly noted on page 5-11, an increase in inter-county commuters has occurred. Countywide this increase was 5,403 between 1990 and 2000.<sup>2</sup> This number represents only about 3% of the entire Santa Barbara County workforce. It is difficult conclude that these numbers (combined, accounting for only about 5% of the 18% increase in VMT for 1990 to 2000 shown on figure 5.1) account for the increases in VMT cited in Chapter 5 as noted by the above quoted paragraph.

The Plan does not significantly address other potential influences. For example changes in VMT may be closely related to economic conditions. The graph on page 5-2 should be compared to economic indicators to see if economic conditions may be a significant factor—the trough between 1989 and 1995 does suggest that this may be a factor. We also note that the VMT data is from CalTrans and therefore is likely based on traffic count data on the State system which would be heavily influenced by through and recreational traffic volumes unrelated to local population growth in the area. Other significant factors that should also be considered include—relative gas prices, general demographic factors etc. Finally, since VMT is difficult to estimate at the local level, the methodology involved in making these estimates should be examined.

### Research in Other Areas.

In order to justify the effectiveness of its recommended land use strategy the Plan relies on a study for the Air Resources Board "Transportation –Related Land Use Strategies to Minimize Motor Vehicle Emissions: an Indirect Source Research Project" (1995). As noted on page 7-3 of the Plan, this study did find substantial differences in VMT generation from different densities of development, with high-density areas having substantially lower VMT rates than lower density areas. However, <u>all</u> of the higher density areas studied were very large urban areas, parts of large metropolitan regions (San Francisco Bay area, Los Angeles , Sacramento and San Diego) of millions of people. Even the suburban "control" places were within or closely associated with these metropolitan areas. None of these high density areas included geographic areas that were comparable in scale of development or population to any part of Santa Barbara County now, or forecasted for the future the SBCAG.

Since the study only included metropolitan areas and used density as the primary variable to be examined, it did not consider one of the most significant variables associated with reducing per capita VMT generation; the mass of urban development. Massive traffic congestion that occurs in these metropolitan areas (many times the magnitude found here) leads to people seeking alternative transportation. If traffic does not reach truly intolerable levels, the private automobile still is the preferred mode for almost all people. The findings of this study are inapplicable to this area. We are unaware of any study that shows the benefits of density to reducing VMT per capita conducted on any area comparable in size and scale to this region. In order for the strategies suggested to work in this region, substantial growth would first need occur that would create the traffic congestion comparable to the metropolitan regions that

<sup>&</sup>lt;sup>2</sup> We do complement the Plan on reporting the correct intercounty commuting data as reported by the Census rather than other often cited, yet less established data sources.



were studied. Even then it might be questionable that the strategies would have a significant impact based on the examples cited.

### Adverse Impacts of Following the APCD Recommendations

The Plan does not include an analysis to determine if the policies recommended would actually reduce air quality relative to existing land use plans and regulations. There are at least two ways that these recommendations could reduce air quality conditions on the south coast: growth and high density sprawl.

### Growth

The report does not address the most basic cause of air quality degradation—increased growth. The density standards recommended by the Plan would increase substantially the development envelop of the region, allowing substantially more growth to occur than what would currently be permitted under existing plans and ordinances. The impacts of this additional growth should be analyzed in comparison to existing regulations with and without additional commuting into the region.

### High Density Sprawl

While the Plan does recognize that its recommendations should not be applied in inappropriate circumstances, the thrust of the policies is to promote densification in almost all urban or suburban locations. All that seems to be required is a "transit route" irrespective of existing or planned head-ways and connectivity to jobs and commercial areas.

This includes many areas where commercial services and jobs are not likely to be located. If new development occurs at the densities recommended the residents of these developments would still need to travel significant distances to these services. Since the higher density would result in a larger numer of people traveling to these services, there will be more travel than there would be with a lower density development at such sites.

For people not to use their cars, even in high density environments, transit use must be more attractive for the trip than the car. The Plan makes no assessment of whether transit services would be financed to provide the high level of service that would be required to achieve the objectives sought if the desired densities were achieved. Even with much more extensive transit services available, it would still be questionable whether the benefits of such service would cause people to choose transit over their car in our area or similar areas.



### PARKING

Section 7.4.3 advocates a severe restriction in the amount of parking that may be allowed in new development. Although a clear rationale for such an aggressive measure is not expressed in the chapter, it appears to be related to the belief that curtailing parking opportunities would stimulate transit use; e.g. if you cannot park your car you will ride the bus. This at very best -- is a gamble. If not successful this strategy will result in many problems. In residential areas, parking problems will overflow into adjacent areas detracting from neighborhood quality. In commercial areas, minimal parking tends to exacerbate traffic congestion (and related air pollution) as people search for parking and may ultimately result in a loss of business.

There are numerous areas where second units and overcrowding have created a lack of parking in the City of Goleta. There is no evidence that increased transit use has been a result, but problems associated with parking have been. In commercial areas, this policy will hinder the viability of commercial uses and could result in large public expenditures to mitigate the problems associated with inadequate parking.

### CONCLUSION

There are important air quality impacts associated with development patterns. The most significant of these impacts is from growth itself. Unless this aspect of land use is addressed, polices advocating densification and restrictive parking will have little if any impact on overall air quality. "Transportation –Related Land Use Strategies to Minimize Motor Vehicle Emissions: an Indirect Source Research Project," gives many examples of communities that have relatively low vehicle miles traveled per capita. While this may or may not be due to density, we would not want to trade our quality of life for the quality of life in any of those communities or for that matter our air quality.

Thank you for the opportunity to review your Air Quality Management Plan. Please contact us if you have any questions.

Sincerely

Patrick L. Dugan General Plan Manager

Cc: Frederick C. Stouder City Manager



AIR RES. BOARD

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Terry Tamminen Agency Secretary Air Resources Board



Arnold Schwarzenegger Governor

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2004 SEP 27 M 7: 27 Chairman 1001 I Street • P.O. Box 2815 ANTA BARPA Sacramento, California 95812 • www.arb.ca.gov IR POLLUTION CONTROL

September 24, 2004

Mr. Tom Murphy, Manager Technology and Environmental Assessment Division Santa Barbara County Air Pollution Control District 260 North San Antonio Road, Suite A

Santa Barbara, California 93110-1315

Dear Mr. Murph

Thank you for providing the Air Resources Board (ARB) the opportunity to review the Santa Barbara Air Pollution Control District's (District) <u>Draft 2004 Clean Air Plan</u> (Draft Plan). Santa Barbara County recently achieved two significant air quality goals: the U.S. Environmental Protection Agency (U.S. EPA) redesignated the County to "attainment" for the federal 1-hour ozone standard, and designated the County as attainment, based on current air quality data, for the new federal 8-hour ozone standard. The Draft Plan provides the framework for achieving the next ozone air quality goal: attainment of the state standard.

We appreciate District staff's early consultation with ARB to help ensure that the Draft Plan and addresses California Clean Air Act planning requirements. This letter provides ARB staff's comments on the Draft Plan and our suggestions for your consideration regarding the proposed control measure adoption and evaluation commitment.

### Emission Inventory

ARB staff has identified emission estimates for several inventory categories in the Draft Plan that differ from estimates in ARB's databases. As you know, the Southern California region will begin to develop attainment plans for the federal 8-hour ozone standard soon. Accurate and complete base year and forecast inventories are essential to the development of these plans. Although the County is in attainment for and will not need to submit a State Implementation Plan (SIP) revision for the federal 8-hour ozone standard, the County's emission inventory will play an important role in overall ambient air quality modeling for the region. Therefore, we strongly encourage you to coordinate your emission inventory revision efforts with our Emission Inventory Branch.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: http://www.arb.ca.gov.

California Environmental Protection Agency

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Mr. Tom Murphy September 24, 2004 Page 2

We appreciate the cooperation between the District and the Santa Barbara County Association of Governments (SBCAG) in providing ARB the motor vehicle activity data needed to develop EMFAC2002 emission estimates for the Draft Plan. We understand that SBCAG expects to complete an update of its travel model in time for the next triennial update, and encourage the District to continue its work with SBCAG and ARB staff in the preparation and review of the new activity data. We also note and appreciate that the District and SBCAG extended the planning horizon out to 2020 as a part of the 2004 plan update.

### Progress Made in the 2001-2003 Reporting Period

The 2001 Plan proposed the adoption of four District control measures in the near-term period of 2001 through 2003. The District adopted two of four measures proposed for this period. The revisions to the District's Architectural Coatings rule produced significantly higher emission reductions than were forecast in the 2001 Plan, while Rule 360, Large Water Heaters and Small Boilers, proved to be less effective than expected. The District did not meet commitments to consider two revisions to Rule 333, Reciprocating Internal Combustion (IC) Engines.

### **Control Strategy Recommendations**

The Potential All Feasible Measures report prepared by the California Air Pollution Control Officers Association Rules Subcommittee (CAPCOA Report) identifies the most stringent measures adopted to date by California districts. The District has utilized this resource, as well as ARB's <u>Identification of Performance Standards for Existing</u> <u>Stationary Sources: A Resource Document</u>, in identifying "all feasible measures" and defining its proposed control strategy. These documents also formed the basis for our comments on the Draft Plan.

The Draft Plan identifies a total of 13 emission control measures for adoption. Four of these measures are slated for adoption during the near-term (2004-2009), six in the mid-term (2007-2009), and three in the long-term (2010-2012). Santa Barbara's 2001 Clean Air Plan identified two measures for adoption by 2004 that have not yet been acted on; these are identified in the 2004 Draft Plan as potential near-term controls that will be considered for adoption in the 2004-2006 timeframe. These revisions are projected to produce over 1  $\frac{1}{2}$  tons per day reductions of ozone precursors by 2015.

ARB staff concurs with the selection of these measures proposed for adoption in the near-, mid- and long-term timeframes.

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Mr. Tom Murphy September 24, 2004 Page 3

The Draft Plan also identifies four new control measures and potential revisions to eight existing rules for further study. Some of the further study measures would affect rules or source categories that are also identified as proposed emission control measures. We have comments on the following proposed further study measures.

<u>Natural Gas Fuel Specifications</u>: We support the District's efforts to maintain a consistent natural gas fuel supply for stationary sources that avoids excess emissions from "hot" gas combustion. The California Public Utilities Commission, the California Energy Commission, and ARB are exploring the need for Statewide standards; we recommend that the District take these efforts into account when considering the need for a District-specific standard.

<u>Gas Turbines:</u> This source category is a carry-over from the 2001 Clean Air Plan, which included a proposed near-term control measure that has not yet been brought to the District Board for consideration. The District does not currently have a prohibitory rule for this source category, although turbines at facilities subject to the District's New Source Review regulation may have been required to meet the Best Available Control Technology standards in place at the time of the review. In addition, several other districts have adopted rules for this category. Therefore, we encourage you to add it to your list of proposed emissions control measures.

<u>Boilers, Steam Generators and Process Heaters, and Stationary IC Engines (Rules 342 and 333)</u>: Revisions to control measures for these categories may yield significant additional emission reductions. The levels of control now available for these source categories already exceed those identified in the 2001 Plan. Therefore, we encourage the District to move these proposed rule revisions from "further study" to its list of rules scheduled for adoption.

<u>Solvent Cleaning and Degreasing (Rules 362 and 321):</u> These rules are identified as both "proposed measures" and "further study" measures. We recommend that that the District consider incorporating rule limits consistent with All Feasible Measures when these rules are revised in the near term.

#### Coordination with SBCAG

We are aware that the District, SBCAG, local transit and transportation agencies, and the California Department of Transportation (Caltrans) are participating in the "101 in Motion" study to identify regional solutions to mobility issues in Santa Barbara County. The Draft Plan shows that the growth in annual Vehicle Miles Traveled (VMT) has increased at twice the rate of Santa Barbara's population growth since 1980. The disparity in these growth rates increased significantly in the latest reporting period, with

Mr. Tom Murphy September 24, 2004 Page 4

VMT increasing at four times the rate of population growth. We recognize that methodological changes in VMT estimation from 1999 on may account for some of the sharp increase in this ratio. We encourage the District and SBCAG to continue participation in the "101 in Motion" project to develop broad regional strategies. These strategies to reduce VMT growth may include smart growth, alternative transportation modes, mixed land uses, and measures to improve the job/housing balance.

We look forward to continuing our work with you and your staff. If you have any questions, please contact me at (916) 322-5350, or have your staff contact Ms. Sylvia Oey, Manager, Southern California Liaison Section, at (916) 322-8279.

Sincerely,

Bob Slitchen

Robert D. Fletcher, Chief Planning and Technical Support Division

cc: Ms. Sylvia Oey Air Resources Board

> Mr. Michael Powers Deputy Director for Planning Santa Barbara County Association of Governments 260 North San Antonio Road, Suite B Santa Barbara, California 93110

# APCD RESPONSE TO PUBLIC COMMENTS

#### • Comments From Marc Chytilo

- 1. <u>Comment</u>: Health and Safety Code Section 40717
  - While the District and SBCAG have not performed photochemical modeling Response: to determine an emission reduction quantity necessary from transportation sources to attain the state standard, the District and SBCAG have determined the emissions reductions necessary for such sources by including in the CAP all reasonably available and feasible TCM's. These TCM's in the CAP constitute the District and SBCAG's determination of the emission reductions necessary for this CAP to attain the state standard. These reductions together with the substantial emission reductions achieved through ARB's regulation of fuels and tail pipe emissions are achieving significant reductions of emission from transportation sources. As explained in the District/SBCAG letter to Marc Chytilo on May 21, 2004, the District has made substantial progress toward attainment of the state standard since 1990, when 10 monitoring stations showed violations of the state standard. In contrast, the most recent data show that only one station (Paradise) violates the state standard and only by a slim margin. In light of this progress and the very narrow margin of improvement needed to attain the state standard, the District and SBCAG have determined that the emission reduction necessary from transportation sources necessary to attain the state standard are those that will be achieved from the implementation of all feasible measures that have been included in the CAP. These reductions together with the stationary source regulations should achieve the state standard. The District will continue to monitor the air quality data and, if necessary, make future adjustments to the CAP, including to TCM's, as necessary to take further steps to achieve the state standard.

- 2. <u>Comment</u>: Transportation Control Measures
  - *Response*: Table 5-2 in Chapter 5 ("Transportation Control Measures") enumerates thirteen currently adopted TCMs while Table 5-5 lists nine TCMs proposed for further study. Seven projects identified in this list of nine for further study TCMs have now either been implemented or are funded and proceeding to implementation. The remaining projects are currently being evaluated as part of a comprehensive study called the *101 In-Motion*. The latter is a \$1.6 million study to identify a "solution package" of projects/strategies to address congestion in the Highway 101 corridor in the long term. Additionally one TCM has been proposed as a contingency measure.

Commenter cites only the first SBCAG board directive regarding the *101 in Motion process*. The complete adopted policy direction from the SBCAG board for the *101 in Motion* process is as follows:

- 101 in Motion shall result in a project or set of projects that will increase the capacity by adding lanes and reduce congestion on Highway 101.
- Highway 101 widening options shall include at a minimum additional mixed flow lanes, High Occupancy Vehicle lanes, High Occupancy Toll lanes, reversible lanes and/or use of the highway shoulders and re-striping for additional lanes within the present rights-of-way.
- 3) In addition to widening Highway 101, 101 in Motion shall include other projects providing congestion relief including those that increase corridor capacity (e.g.., rail and bus transit), reduce regional travel demand, expand alternative transportation modes and improve operation and management of the transportation system.
- 4) 101 in Motion shall include an analysis of alternative congestion relief projects which may be used in support of the NEPA and/or CEQA environmental review process during the next phases of project

development.

The commenter is doubtful that the 101 in Motion process is one through which TCMs could be developed and maintains that there remains a "broad public distrust" of 101 in Motion process. However, through 101 in Motion, a wide cross-section of community members as well as city, County, Caltrans, APCD and MTD staff have jointly developed eight alternative congestion relief packages one of which does include traditional mixed flow lanes but others include TCMs such as high occupancy vehicle lanes (standard and reversible), ramp metering, express transit, commuter rail, limiting the number of all-day parking spaces, variable parking rates, enhanced demand management strategies (flexible work schedules, reducing bus/vanpool fares), and land use measures such as transit oriented development. Additionally, the 101 in Motion process has also included an extensive public outreach program – specifically to low income and minority segments of our population. These efforts have been well received by the public. And while there may remain a segment of the public which is distrustful of the eventual outcome of 101 in Motion, the process does represent the most inclusive and comprehensive effort to date for developing meaningful TCMs. It should also be made clear that although a freeway capacity enhancement will be part of the 101 In-Motion solution package, this could take the form of HOV/HOT lanes and/or reversible HOV/HOT lanes. The latter project types are federally recognized TCMs (CAAA Section 108f), are listed as further study TCMs in the 2004 Clean Air Plan, and are eligible for federal Congestion Mitigation and Air Quality (CMAQ) program funds.

As a point of clarification APCD Rule 701, <u>Transportation Conformity</u>, does not have a TCM substitution provision.

### 3. Comment: Suggested TCMs.

- a) Commuter choice
- <u>Response</u>: SBCAG already has adopted (TCM 1-4) and staffs a similar program. SBCAG's Traffic Solutions Office implements a commuter based TDM program countywide. Recent changes in state and federal tax law that allow employers to offer employees parking and transportation benefits as taxexempt compensation, with greater incentives for parking cash-out and alternative commute options has been aggressively marketed by the Traffic Solutions Office. Copies of the tax code, samples and descriptions of the various potential parking cash-out strategies and their estimated tax savings are provided in the Employer Transportation Coordinator (ETC) Training and Resource Guide. Similar information is posted on the Traffic Solutions Web Site. In addition, SBCAG staff regularly recommends parking cash out programs when reviewing/commenting on environmental documents for land use projects that trigger the Congestion Management Program thresholds for analysis.

SBCAG's Traffic Solutions Office provides/implements the following commuter based TDM programs and services:

- Employer Services: Including the development of a training and resource manual, free consulting services, and a monthly newsletter geared towards informing employers about alternative transportation resources available to them and their employees.
- Carpool Matching: Provide free carpool matching services for commuters interested in forming carpools. Matchlists can be e-mailed, mailed, faxed or telephoned to clients. In 2004/05, on-line instant carpool matchlists will be available through the Traffic Solutions website.
- Emergency Ride Home Program: Program providing a free ride home to eligible alternative transportation commuters in the event of an unplanned personal emergency. This program is offered through a

partnership with employers (at no charge to employers).

- New Vanpool Rider Rebate Program: Provides a \$100 rebate to new vanpoolers, after they join the vanpool for at least three months.
- Vanpool Quick Start Program: Provides a 50 and 25 percent subsidy for vanpool lease support for each new vanpool for the first and second months of operation respectively; \$60 rebate for vanpool driver physical exams; lease support for new vanpools serving Downtown Santa Barbara commuters and aggressively assists in the formation of vanpool groups; and, a \$400 subsidy for the San Marcos Pass Vanpool program paid for by San Marcos Golf Course.
- Amtrak Commuter Passes: Negotiated and market reduced rate passes (monthly and 10-ride) for Central Coast commuters.
- Coastal Express: Marketing and administrative support for the Coastal Express bus service between Santa Barbara and Ventura counties.
- Clean Air Express: Administration of the Clean Air Express commuter bus service.
- Bike to Work Day: Cooperative special event with the Santa Barbara Bicycle Coalition held at seven locations countywide to promote and reward bicycle commuting.
- Rideshare Events: Countywide events designed to encourage alternative transportation.
- Pollution Prevention Week Partner: An annual educational campaign about pollution and the strategies individuals and businesses can use to reduce pollution.
- Green Award Consortium: Annual award honoring the voluntary environmental efforts of Santa Barbara county businesses.
- Participates and supports the Santa Barbara Carfree Program designed to encourage visitors to tour Santa Barbara without a car.
- Kids Care for Clean Air Calendar: Cooperative educational project with APCD showcasing children's art about air pollution and transportation.
- Countywide Bike Map & Countywide Transit Map: Production and distribution of both maps displaying bike and transit routes throughout Santa Barbara County.

- Website: Maintain an up-to-date website that includes information about alternative transportation in Santa Barbara county, including on line applications for carpool matchlists and links to transportation service providers and resources.
- Downtown Santa Barbara Transportation Programs: Repackage and renew the downtown alternative transportation programs, such as carpool parking, free bus passes, and bicycle lockers.
- School Programs: staff resources to promote alternative transportation at schools, including bike and walk to school days, bicycle and pedestrian safety instruction, school pools, buses, and incentive programs for school children.
- Enhanced Employer Programs: Staff and financial resources to provide and support employer-based telework and flexible schedule pilot programs.
- b) Community Car Program
- *Response*: Community car programs are of interest to SBCAG and the APCD. Such programs have worked well in areas like the Bay Area where they have been integrated with major transit hubs and where certain conditions exist such as adequate density, severely limited on-street parking, limited and expensive garage space etc. Although these conditions do not exist in Santa Barbara County, SBCAG feels that there are applications for community car programs that can be structured to promote alternative forms of transportation. One such example is for new developments (e.g. large residential developments) to offer a community car program coupled with parking cash out options as a means to reduce residential parking requirements. As reviewing agencies under CEQA, SBCAG and the APCD will continue to consider community car programs a potential mitigation for new developments of this scale.

SBCAG does feel that given the right conditions and program requirements, some employer based car-sharing programs can be effective at promoting alternative forms of transportation to work thereby reducing vehicle emissions. One such program is being considered at UCSB. SBCAG has met and discussed how such a program could be structured at UCSB in order for it to compete for Congestion Mitigation and Air Quality (CMAQ) funds. Given the lack of more favorable conditions for a more regional approach to car sharing, SBCAG feels it is more prudent and protective of air quality to assess the merit of employer based car-sharing programs on a case by case basis.

- c) Smart Growth Resources
- *Response*: Both SBCAG and the APCD agree with your statements regarding the importance of educating both local planners and the public on the importance of better land use development and design. Hence, an entire chapter of the 2004 Clean Air Plan addresses the land use and air quality linkage. Chapter 7 provides examples of specific land use strategies; provides a list of prospective transportation system management policies and programs that local agencies can incorporate into general plans and circulation elements; and, describes the process in terms of communication, coordination, and monitoring that may be necessary to ensure that such policies if pursued will produce the desired results. This chapter was purposely structured in this "how to" fashion to be a resource for local agencies to use as they deem appropriate.

While SBCAG has very limited direct responsibility for land use planning in the region, there is increasing recognition of the need to effectively integrate land use and transportation planning in order to 1) reduce the impact of sprawl and consumption of land, 2) address the imbalance between jobs and housing in different parts of the region, 3) limit the increase in travel demand, and 4) minimize the need for major highway capacity improvements.

SBCAG's Overall Work Program for fiscal year 2004-05 includes several

activities designed to help inform decision-makers and provide a framework for addressing these issues. These include upgrades to SBCAG's travel forecasting model, a continuing project to analyze alternative land use futures in terms of their transportation implications and SBCAG's recent jobs/housing Interregional Partnership report. These activities will build upon the Regional Growth Forecast anticipated to be updated in 2005/06 and will also provide input to the update of the Regional Transportation Plan.

- d) Bike projects
- <u>Response</u>: The identification of a more comprehensive bicycle system for the region was made and formalized with the adoption of The Regional Bikeway Plan (SBCAG) in July of 1994. A primary goal of the study was to identify a regional bikeway system which links the major population centers and, within centers, major trip origins and destinations. Routes chosen for inclusion on the regional bikeway system serve the needs of both commuters and recreational riders. Completion of the regional bikeway network is a transportation performance measure that is tracked and reported by SBCAG during biennial updates of the Santa Barbara County Congestion Management Program (see 2003 CMP). A full update of SBCAG's Regional Bikeway Plan is scheduled in 2004/05.

In August of 1998, the SBCAG board approved two new Regional Transportation Plan policies regarding bikeways. First:

• Determine that projects supportive of the SBCAG Regional Bikeway Study will be given priority for the use of bikeway funds.

This policy is carried out as part of SBCAG's project selection criteria for state and federal funding program cycles. Priority is given to bikeway projects (Class I or II) that fill or connect the SBCAG regional system of routes as identified in the Regional Bikeway Study.

To help guarantee a funding source for the completion of the regional bikeway system, the SBCAG board approved the second RTP policy:

• Establish goal to program a least 10% to TEA-21 flexible funds from the Regional STP, CMAQ and TEA funds for these bikeway projects (i.e., regional bikeway system).

Upon completion of each federal funding cycle, SBCAG reports how the flexible funds are distributed by project type. Historically, SBCAG has programmed over 15% of ISTEA and TEA-21 flexible funds for bikeway projects countywide.

Continuous review and improvement of safety problems and maintenance including surface street standards, bridge access, and traffic control issues are carried out by not only each respective local agency's public works department but by eight regional bike clubs throughout the county as well.

SBCAG's Traffic Solutions Division disseminates the "official" Santa Barbara County Bike Map on a continuous basis and tracks the number of maps it gives out in its monthly newsletter. The Santa Barbara County Bike Map includes a complete inventory of all designated Class I, Class II, and Class III bikeways in the county. The Bike Maps also lists phone numbers and contacts for regional bike clubs within the county and for reporting of bikeway hazards, provides safety tips for cyclists, and lists all applicable bike laws. SBCAG plans to include the taxonomy of bicycle signage in future upgrades of the Bike Map. The taxonomy will help educate cyclists on how to understand the various bicycle signs. Presently, all South County jurisdictions use a consistent standardized taxonomy of signs. North County jurisdictions have not coordinated bicycle signage efforts to date.

In conclusion, SBCAG/APCD believe that many if not all of the suggestions for bike projects are already being addressed.

- e) Pedestrian projects
- <u>Response</u>: SBCAG agrees that pedestrian-friendly facilities need to be given greater consideration in land use design and implementation. However, such considerations continue to be under the purview of the cities and the county. Chapter 7 of the 2004 Clean Air Plan provides examples of specific land use strategies; provides a list of prospective transportation system management policies and programs that local agencies can incorporate into general plans and circulation elements; and, describes the process in terms of communication, coordination, and monitoring that may be necessary to ensure that such policies if pursued will produce the desired results. This chapter was purposely structured in this "how to" fashion to be a resource for local agencies to use as they deem appropriate.

The City of Santa Barbara is planning to develop a Pedestrian Facility Plan that will identify a comprehensive sidewalk system. This will be the first plan of its kind in Santa Barbara County.

A more regional issue that SBCAG is cognizant of and will continue to work with Caltrans on is cross-highway pedestrian and bikeway access issues. Given that Highway 101 can act as a barrier to pedestrian and bikeway crosshighway movements, increasing attention to this issue is needed during the design phase of new interchanges and interchange reconstruction projects.

- f) Recognize induced traffic and VMT
- *Response*: This is not a TCM but more of an air quality analysis consideration. SBCAG did include a discussion of induced VMT in the 2001 RTP EIR and has included a more in depth assessment using local traffic data in the Highway 101 Deficiency Plan (June, 2002). SBCAG does not advocate an "across the board" treatment of induced vehicle activity as a result of transportation infrastructure improvements. Current peer reviewed research and local data

strongly suggests that the magnitude of an induced effect is scale sensitive (i.e., magnitude of travel time savings from the proposed improvement) and dependent on the presence of several other land use and travel demand characteristics and factors. Hence, consideration of latent demand should be handled on a project-by-project basis.

All travel models – including SBCAG's Santa Barbara Travel Model are calibrated/validated using actual "ground truth" HPMS VMT data. Santa Barbara County's Highway Performance Monitoring System (HPMS) sample size currently meets 90–10 precision limits (90-percent confidence with 10-percent allowable error – or in other words there is the probability that 90 times out of a 100 the error of a data element estimate will be no greater or less than 10 percent of its true value). This ensures that the annual HPMS VMT estimates for Santa Barbara County reflect VMT from currently completed projects. Future land use projects are generically reflected in SBCAG's travel forecasts given that the model's socio-economic input files include growth in employment and housing levels for small geographical units called Traffic Analysis Zones (TAZs). The source of the model's socio-economic data comes directly from SBCAG's Regional Growth Forecast tracks actual growth in employment and housing.

- g) Comprehensive Public Transit Gap
- <u>Response</u>: A pilot transit project between Lompoc and Santa Maria has been funded by SBCAG and local agencies and this intercommunity transit service is scheduled to begin in 2004/05. Intercommunity transit exists between the Ventura County and Santa Barbara County (Coastal Express), the Cities of Santa Maria and Guadalupe (SMAT), and is also scheduled to begin service connecting Santa Ynez Valley communities with southern Santa Barbara County (SBMTD). Currently, regional commuter transit exists between San

Luis Obispo County and the Santa Maria area of Santa Barbara County (SLORTA) and between northern Santa Barbara County and the South Coast of Santa Barbara County (Clean Air Express). SBCAG will monitor the success of these services to determine their cost-effectiveness and opportunities to expand. In addition, an analysis of the effectiveness of enhanced inter-city and inter-county public transit service to and from the South Coast of Santa Barbara County will be studied as part of the *101 In-Motion* process.

- h) Parking management
- <u>*Response*</u>: Such strategies were considered as part of the 1995 101 Alternatives Study but did not gain general public or political acceptance or support. Parking management strategies to subsidize and increase public transit will again be assessed as part of the *101 In-Motion* process.
  - i) TEA Restrictions
- <u>*Response*</u>: This is an interesting concept. However, SBCAG staff feels that such restrictions if desired by the Board would be more appropriate as RTP policies rather than formal TCMs. Such policies do not easily lend themselves to emission reduction quantification or tracking.

As stated previously (bike projects), to help guarantee a funding source for the completion of the regional bikeway system, the SBCAG board approved the following RTP policy:

• Establish goal to program a least 10% to TEA-21 flexible funds from the Regional STP, CMAQ and TEA funds for these bikeway projects (i.e., regional bikeway system).

Upon completion of each federal funding cycle, SBCAG reports how the flexible funds are distributed by project type. Historically, SBCAG has programmed over 15% of ISTEA and TEA-21 flexible funds for bikeway

projects countywide.

It should also be mentioned that currently the following two flexible funding programs (Federal Surface Transportation Program (STP) and Federal Congestion Mitigation and Air Quality (CMAQ)) are subject to similar restrictions within jurisdictions that are found to be in noncompliance with the adopted Congestion Management Program for Santa Barbara County (Section 65089.2 (C)(1) California Government Code).

- 4. <u>Comment</u>: Land Use Strategies
  - <u>Response</u>: The APCD's participation in land use activities rests with Community Programs section. This section is responsible for reviewing and commenting on environmental documents for development projects, recommending mitigation measures to reduce a projects emissions profile as well as representing the APCD on the County's Subdivision Review Committee. The APCD is also a member of a statewide group of air districts committed to supporting and updating URBEMIS, an ARB-developed model which calculates emissions from development projects. Finally, the APCD provides training to County and city planning department staff on issues relating to air quality and land use.
- 5. <u>Comment</u>: VMT Growth
  - <u>*Response*</u>: Given that trip starts and average trip length are estimated using traffic modeling rather than being measured in the field, they are not the most appropriate statistics to assess historical trends in vehicle activity. Both EPA and ARB recognize and advocate the use of "ground truth" vehicle activity data generated as part of the federal Highway Performance Monitoring System (HPMS) program for this purpose. This is footnoted on page 5-2 in Chapter 5.

6. <u>Comment</u>: Contingency Measures

<u>Response</u>: Chapter 5, Table 5-5 has been revised to list Enhanced Inspection and Maintenance Program as a contingency measure. This is consistent with previous Clean Air Plans transportation control measures as shown in Table 5-3 and Table 5-4.

- 7. <u>Comment</u>: Air Pollution Transport
  - *Response*: Transport analyses conducted by the ARB have shown that emissions from the San Joaquin Valley can have an impact on the northern portion of the South Central Coast Air Basin (which includes Santa Barbara, San Luis Obispo and Ventura Counties), primarily in northern San Luis Obispo County. The ARB, however, has not identified a South Central Coast Air Basin to San Joaquin Valley transport couple. Additionally, emissions generated in the San Joaquin Valley are considerably higher than those generated in Santa Barbara County. Given the prevailing meteorology and relatively low emissions compared to San Joaquin Valley, it is not likely that Santa Barbara County emissions contribute significantly to San Joaquin Valley exceedances.
- 8. <u>Comment</u>: Emissions Trends (marine shipping)

<u>Response</u>: The APCD's Innovative Technology Group, in concert with other coast air districts, ARB, EPA and the federal Maritime Administration are aggressively pursuing programs to reduce marine shipping emissions through the application of control technologies such as fuel- water emulsification. As EPA has preempted state and local jurisdictions insofar as controls on marine vessels and as a majority of marine vessels transiting our coast are foreign-flagged, progress is not as rapid as we would desire.

9. <u>Comment</u>: All Feasible Analysis

<u>*Response*</u>: The basis for selecting all feasible measures has been the California Air

Pollution Control Officers Association's Potential All Feasible Measures report as well as ARB's "Identification of Performance Standards for Existing Stationary Sources". The former document identifies the most stringent measures adopted to date by California air districts. ARB considers these two documents a sufficient basis from which to select all feasible measures.

With respect to the concerns raised as to when certain measures will be adopted, ARB concurs with the timeframes and measures selected.

10. *Comment*: Construction Emissions

<u>*Response*</u>: We always strive to improve the accuracy of our emissions inventories and control measures.

- 11. Comment: Environmental Justice
  - <u>*Response*</u>: SBCAG and the APCD are both striving to properly address environmental justice issues as part of our planning procedures and processes. SBCAG and the APCD will continue to gauge and monitor whether the current forums and public outreach process and technical analyses addresses environmental justice issues.

## • Comments From Dr. Ingeborg Cox

- 1. <u>Comment</u>: Reduction in mobile source emissions
  - *Response*: The 2001 CAP is based on a 1999 baseline inventory while the 2004 CAP is reporting a 2000 baseline inventory. Although there is greater on-road activity in 2000 than in 1999, there are less vehicle emissions of ROC and NOx. This is primarily the result of changes in ARB's estimated rate of fleet turnover (new vehicles being introduced into the fleet while older more polluting vehicles being retired from the fleet).

- 2. <u>Comment</u>: Table 4-1 and future ROC and NOx projections
  - <u>*Response*</u>: This Plan focuses on the triennial update and the Plan revision guidelines that require us to examine measures proposed in the last three years and in the future. Therefore, we did not quantify emission reductions from previously adopted measures.
- 3. *<u>Comment</u>*: Add Rule # to Gas Turbines
  - <u>*Response*</u>: Rule numbers are provided at the time a control measure is proposed as a new rule. As the gas turbine control measure is in the Further Study category and there is no existing gas turbine control rule, there is no rule number.
- 4. Comment: LPG Truck Loading Control Measure
  - <u>*Response*</u>: This control measure would have required balance systems to collect displaced vapors during truck loading and unloading. It was deleted in the 2001 CAP because facilities are already equipped with vapor balance systems as required by Title 58 of the National Fuel Gas Code and no further ROC emission reductions would be realized. In any event, it would not have prevented accidental spills as occurred near the Bacara resort.
- 5. <u>Comment</u>: VMT/Population growth and source of VMT data
  - <u>*Response*</u>: While population estimates for Santa Barbara County can be reported by sub-area, the "ground truth" VMT estimates from Caltrans can not. This precludes generating population to VMT growth rates disaggregated by north and south county. SBCAG's new regional travel model will be able to generate VMT estimates by sub-area. As such, future triennial updates can report future growth rate comparisons of population and VMT by sub-area if desired.
- 6. <u>Comment</u>: Land Use Strategies

- <u>Response</u>: Research conducted by John Holtzclaw of the Sierra Club ("How Compact Neighborhoods Affect Modal Choice – Two Examples") indicates that auto trips significantly increase when density falls below 20-25 units per acre. Therefore the 2004 Plan recommends 20 units per acre.
- 7. <u>Comment</u>: Infill development

*Response*: We agree that infill development should not place residents or employees near sources of nuisance, dust, odors or accidental releases of toxic substances. See Section 7.3.1, first paragraph.

- 8. <u>Comment</u>: CMP Requirements
  - <u>*Response*</u>: The rational of zoning residential units within one third of a mile from rail transit stations is to provide alternative transportation within a reasonable walking distance of homes.
- 9. Comment: Include all comments in the Plan
  - <u>*Response*</u>: All comments received and responses to them will be documented in Chapter 8 of the Plan.

## • Comments From the City of Goleta

- <u>Comment</u>: The City of Goleta express a general concern that the recommendations contained in this chapter constituted an unwarranted intrusions into local land use authority and jurisdiction. Additionally the City of Goleta found the policies relating to densification and parking, particularly troubling.
  - <u>*Response*</u>: Chapter 7 has been substantially revised to address the concerns expressed by the City of Goleta and members of the APCD Board of Directors. It should be noted that this chapter does not establish land use policies; rather its purpose is to recommend that the air pollution impacts of growth be minimized through land use policy. Communities can and should decide

which land use policies would ultimately result in the least negative effects to air quality.

# • Comments From the California Air Resources Board

### 1. <u>Comment</u>: Emission Inventory

- *Response*: We are addressing the 2004 Plan inventory categories identified by ARB staff as differing from the estimates in the ARB data base. Additionally, we will continue our coordination with SBCAG and ARB staff in preparing and reviewing the new activity data in SBCAG travel model.
- 2. Comment: Control Strategy Recommendations
  - <u>*Response*</u>: Natural Gas Fuel Specifications: Should it become necessary to adopt a district-specific standard, we will certainly consider the efforts undertaken by the CPUC, CEC and ARB.

Gas Turbines: At this time, we have concluded that adoption of a gas turbine control measure will not result in any emission reductions and thus would not be the most prudent use of our resources. We will continue a dialog with ARB staff concerning the development of this control measure

Boilers, Steam Generators and Process Heaters and Stationary IC Engines: Based on CAC recommendations and on subsequent discussion with ARB, Rules 333 and 342 will remain as Further Study Measures.

Solvent Cleaning and Degreasing: When Rules 321 and 362 are revised, we will consider incorporating rule limits consistent with All Feasible Measures.

### 3. <u>Comment</u>: VMT Growth

<u>Response</u>: Comment noted. As stated, a sampling change in Caltrans Highway Performance Monitoring System (HPMS) program did occur in 1999 (see below). Although this change has had a positive effect on the veracity of Santa Barbara County's VMT estimates for the period 2000 to 2002, it does represent a methodological departure from all previous historical VMT estimates generated for our county. Also, causality associated with this "trend" must be tempered by the fact that this is a short-term 3-year trend that is being compared with two 10-year trends.

Prior to 2000, states could put all of the urban areas that contained more than 50,000 but less than 200,000 population - that were not in an NAAQS nonattainment area - into a statewide "collective". This enabled a state to sample this collective as if it were just one urban area. Urban areas (population >50000 and <200000) within NAAQS non-attainment areas would still have to be sampled individually. Large urban areas (population >200,000) would always have to be sampled individually whether or not they were in an NAAQS non-attainment area (although all of the large urban areas were in NAAQS non-attainment areas). At the time, this collective included the urban areas of Chico, Redding-Anderson, Salinas, San Luis Obispo, Santa Cruz, Seaside-Monterey, Watsonville, Yuma (the portion of the urban area that's in California), along with Lompoc, Santa Barbara and Santa Maria. Accordingly, Caltrans sampled this collective as though it were a single urban area.

# • Comments From John Gilliland's July 15<sup>th</sup> Memo

 <u>Comment</u>: The APCD indicates that emissions from natural sources are excluded from the Planning Emission Inventory (PEI) because they are unregulated. Is the APCD willing to consider including some biogenic sources such as oil and gas seeps, agricultural waste composting and range burning in APCD regulations and the PEI?

- <u>*Response*</u>: We do not have any current plans to regulate natural sources, including those you mention above. As you point out, emissions from natural sources are excluded from the planning inventory since they are not regulated or controlled through the implementation of control measures. The planning inventory is a modified subset of the annual emission inventory developed by adjusting the annual inventory to account for seasonal variation because most ozone exceedances occur between April and October. Planning inventories are created consistent with guidance from the Air Resources Board.
- <u>Comment</u>: Vandenberg Air Force Base Airborne Laser Mission Growth Allowance: Can the APCD add a footnote to this discussion that indicates this requirement may be removed pending the repeal of the Federal one-hour standard?
- 3. <u>Response</u>: The emissions shown in the VAFB ABL Growth Allowance table are included in the 2004 Plan for consistency with inventories specified in the 2001 Plan. We will footnote the ABL emissions table, however, to specify that the requirement may be removed pending the repeal of the Federal 1-hour standard.
  - <u>Comment</u>: Impacts of Marine Shipping: Is it possible for the APCD to determine the actual marine shipping for 2001, 2002, and 2003 to see how it tracks with the forecasted assumption? If the emissions are significantly different (either greater or less) is it possible to revise the forecast for this 2004 SCCAP or the 2007 SCCAP?
  - <u>Response</u>: Marine shipping forecasts are based on growth data from the 1999 report: Marine Vessel Emissions Inventory, Update to 1996 Report: Marine Vessel Emissions Inventory and Control Strategies prepared by ARCADIS fro the South Coast Air Quality Management District.

NOx estimates from 2000 to 2002 are as follows (2003 inventory not yet

prepared):

2000: 11,512 tons per year 2001: 11,972 tons per year 2002: 12,940 tons per year

These data show that 2002 NOx emissions were 12.4% higher than 2000 emissions. We have predicted about 19% growth from 2000 to 2005 in the 2004 Plan. Based on the short-term trends, our growth predictions appear reasonable.

- 4. <u>Comment</u>: Impacts of Marine Shipping: The APCD stated that the burden of attaining or maintaining air quality improvement goals may fall disproportionately on onshore sources. Please add a discussion as to the ramifications to the local jurisdictional authority if air quality improvement goals are waived for onshore sources.
  - **<u>Response</u>**: The statement regarding disproportionate onshore responsibilities was made to highlight the potential implications of the large increase in NOx emissions anticipated from marine shipping. We are not aware of any state sanctions that could be imposed by ARB if the Board waives air quality improvement rules due to stakeholder input. The ARB does, however, have the legal authority to mandate additional control measures if a district fails to achieve interim goals or maintain adequate progress toward attainment.
- 5. <u>Comment</u>: 2004 Clean Air Plan Activity Indicators and Factors for 2005, 2010, 2015 and 2020: Under the prescribed fires section, is the APCD willing to consider revising the baseline numbers to more accurately represent this section. Even though this very low activity took place in 2000, a review of previous years and post years indicates values more closely attuned to the 6,250 values. The value, as listed, provides an erroneous growth factor for this category.

- <u>*Response*</u>: Forecasts are prepared relative to baseline activity and adjusting real baseline value to "fit" more closely with forecasts is not a good precedent. While forecasted activity for prescribed fires for each of the planning years is significantly higher than 2000 baseline levels, it shows the ratio of expected activity (provided by the National Forest Service) to actual activity.
- 6. <u>Comment</u>: Santa Barbara County OCS NOx Emission Forecast Including Marine Vessels: This table clearly illustrates that the 2000 baseline year is less than the 2020-forecasted year. Is it possible for the APCD to receive Plan approval when the 2020 values are higher than the baseline year?
  - Response:The ARB is fully aware of challenges of controlling emissions from marine<br/>shipping and the implications that these emissions have on air quality goals.<br/>The ARB has indicated, however, that projected emissions from marine<br/>shipping should not jeopardize approval of the Plan. The APCD will<br/>continue to work closely with the ARB and other agencies to determine<br/>appropriate control strategies for marine shipping.

# • Comments From John Gilliland's March 18<sup>th</sup> Memo

- 1. <u>Comment</u>: EMFAC2002 Output Sheets Are Diesel Oxidation Catalysts accounted for in the CAP?
  - <u>*Response*</u>: Yes indirectly. Future vehicle emission standards that are presently adopted are reflected in EMFAC2002. EMFAC2002 is technology neutral i.e., how the auto manufacturers meet these standards is left to them. Diesel oxidation catalysts may be one such strategy to meet the emission standards reflected in EMFAC2002.



**SBCAG** 

isanta barbara county association of governments

May 21, 2004

Marc Chytilo Law Office of Marc Chytilo P.O. Box 92233 Santa Barbara, CA 93190

Dear Mr. Chytilo:

The Santa Barbara County Air Pollution Control District (APCD) and the Association of Governments (SBCAG) appreciate your interest in the development of the 2004 Clean Air Plan and specifically the on-road mobile source portion of the inventory. We share your enthusiasm for transportation control measure (TCM) planning and we believe that the cooperative planning process undertaken pursuant to our memorandum of understanding complies with the intent of the applicable requirements in the Health and Safety Code. In your recent letter on this topic, you raise the following issues that we have responded to below:

- The 2004 Clean Air Plan is being developed without a specific emissions reductions target.
- There should be a more extensive and expansive process for identifying TCM's in the 2004 Clean Air Plan.
- The 2004 Clean Air Plan must address means to achieve applicable performance standards.

The fundamental state requirement that our planning process has focused on since the enactment of the California Clean Air Act is the five percent annual emission reduction requirement under Health and Safety Code § 40914. If an area can not meet the five percent reduction requirement, they must include every feasible measure in their plan to attain the state standard by the earliest practicable date. While § 40717 mandates that areas quantify the emission reductions from transportation sources to attain state and federal standards, we do not have the photochemical modeling analysis to identify the targets for the state standard. Therefore, we are technically unable to fulfill the process identified under § 40717 and must default to the every feasible measure approach outlined in § 40914. Even without the benefit of photochemical modeling, we believe that the progress we have made in cleaning our air (with significant emissions reductions from on-road mobile sources) clearly shows that our air quality planning process has been a success. According to our most recent air quality data, we have one monitoring station (Paradise Road) that violates that state standard and only by a very slim margin. Back in 1990, we had ten monitoring stations that violated the state standard.

260 N San Antonio Road, Santa Barbara, California 93110 Terry Dressler Jim Kemp Air Pollution Control Officer SBCAG Executive Director 805.961.8800 805.961.8900 The origin of the TCM projects identified in the 2004 Clean Air Plan is from the previously adopted plans (1994 and 1998). As part of the development of these plans - a comprehensive process involving and including the public, transit operators, local municipalities, and other agencies was undertaken. We agree with your desire for an extensive and expansive process for identifying TCM's and believe that the current "101 in Motion" process represents a unique opportunity to engage in such an endeavor. We are unaware of a "broad public distrust" in the process and encourage you to take advantage in this very important opportunity. Many of the further study measures identified in the 2004 Clean Air Plan will be evaluated by "101 in Motion" and we see this as an unparalleled opportunity for the public, transit operators, local municipalities, and other agencies to participate in developing transportation strategies to address congestion and air quality in Santa Barbara County. As § 40910 provides that it is the intent of the legislature to avoid redundant work, we view the "101 in Motion" process as the proper forum from which to evaluate existing and future TCM's in our most congested transportation corridor at this point in time.

As Chapter 5 of the 2004 Clean Air Plan discusses, areas having "moderate" air pollution are required to track and provide reasonably available TCM's to provide a substantial reduction in the rate of increase in passenger trips and vehicle miles traveled (VMT). The ARB has further defined this "performance measure" as holding the growth in VMT to the same growth rate in population. The data presented in Chapter 5 shows that for 12 of the last 16 years, the annual VMT growth rate has exceeded the annual population growth rate in Santa Barbara County. Our ability to limit the growth rate of VMT to that of the local population is problematic due to many factors related to how and where we live and work in the region. This issue is also one that the "101 in Motion" process will consider and we encourage you to bring this issue to that forum.

We hope that we have addressed your concerns and that you will take an active role in the "101 in Motion" process. If we find that the "101 in Motion" process was ineffective in evaluating TCM's or our local air quality is degrading, we will consider initiating another process to evaluate such measures. If you have any questions or comments, please call either Michael Powers at (805) 961-8910 or Tom Murphy at (805) 961-8857.

Sincerely,

Terry Dressler Air Pollution Control Officer Santa Barbara County Air Pollution Control District

cc: Michael Powers, SBCAG Tom Murphy, APCD Dennis Wade, ARB Jim Kemp Executive Director Santa Barbara County Association of Governments

### July 26, 2004 Letter to Tom Banigan (NuSil Technology) Regarding Employment Trends

July 26, 2004

Mr. Thomas P. Banigan 1150 Mark Avenue Carpinteria, CA 93013

Dear Tom,

At the July 14, 2004 Community Advisory Council meeting, you provided an estimate that approximately 4,000 jobs were lost in the industrial sector over the last five years and suggested that the industrial employment activity indicator used in the 2004 Clean Air Plan may be trending in the wrong direction, particularly in the short-term. Please note that industrial employment includes not only jobs in manufacturing (durable and non-durable goods), but mining and construction as well. These projections come directly from the Santa Barbara County Association of Governments (SBCAG) Regional Growth Forecast 2000-2030 (RGF). The RGF was prepared with extensive public participation and review, and was adopted by SBCAG's Governing Board on March 21, 2002. According to RGF data, industrial employment is expected to grow by about 4,700 jobs from 2000 to 2005.

We have researched your concerns further using the April 2004 UCSB Economic Outlook for Santa Barbara County that shows about 2,220 industrial jobs were lost in Santa Barbara County during the period of 2000 to 2003. During that timeframe, 2,275 jobs were lost in manufacturing alone, although construction employment increased by 283 jobs in that period. From 2002 to 2003, however, manufacturing employment increased by 200 jobs. Additionally, from 2002 to 2003, construction employment gained 416 jobs, while mining employment, the smallest fraction of the industrial sector, decreased by about 58 jobs. These data show that there was a net increase in industrial employment of 558 jobs from 2002 to 2003.

The UCSB Economic Outlook data suggest that while there were net losses in manufacturing

employment from 2000 to 2003, total industrial employment may be trending upward as shown by 2002 to 2003 data. In addition, we believe that there will be significant increase in housing construction, in particular due to considerable growth in the North County, which will translate to further increases in construction employment over the next several years. Recent increases in manufacturing and construction employment suggest that our industrial employment growth projections for 2005 are possible. As such, our emission growth projections for sources tied to industrial employment will continue to reflect the industrial employment growth forecasts presented in SBCAG's 2000 RGF.

Should you have any questions, please do not hesitate to call me at 961-8894 or Brian Bresolin, SBCAG's Regional Analyst at 961-8909.

Sincerely,

Joe Petrini Emission Inventory/Planning Specialist III

Cc: Tom Murphy, APCD Brian Bresolin, SBCAG

# 7.5 ARB TRANSPORT ANALYSIS



# Air Resources Board

Alan C. Lloyd, Ph.D. Chairman 1001 | Street • P.O. Box 2815 Sacramento, California 95812 • www.arb.ca.gov



Arnold Schwarzenegger Governor

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August 25, 2004

Mr. Terry Dressler Air Pollution Control Officer Santa Barbara County Air Pollution Control District 260 North San Antonio Road, Suite A Santa Barbara, California 93110

Dear Mr. Dressler:

The purpose of this letter is to transmit a final copy of the report summarizing our recent evaluation of the effect of transport from Santa Barbara County on ozone levels in the South Coast Air Basin. The enclosed document, "<u>Assessment of Transport from Santa Barbara County to the South Coast Air Basin</u>," updates the previous Air Resources Board (ARB/Board) assessment conducted in 1990.

Last year, the Board adopted amendments to the transport mitigation regulations that apply to air quality districts that have been identified as contributing to ozone violations in a downwind area. The amendments require these upwind districts to implement "all feasible measures." The amendments also provide an option under section 70601(d) that allows upwind districts to limit the application of this requirement if the most recent transport assessment indicates that the upwind district's impact on the downwind area is "inconsequential." As a result of these amendments, your district asked ARB staff to update the assessment of Santa Barbara County's transport impact on the South Coast.

In conducting the analysis, my staff worked closely with your staff and the staff of the Ventura and South Coast districts. Our updated analysis has determined that, based on the most recent air quality and meteorological data, the impact of Santa Barbara County on the South Coast Air Basin is "inconsequential." Should you wish to invoke section 70601(d) based on the results of this new analysis, the mechanism for doing this is to incorporate the analysis and findings of the study into the triennial update of your State ozone plan.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <u>http://www.arb.ca.gov</u>.

#### California Environmental Protection Agency

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7 - 101

Mr. Terry Dressler August 25, 2004 Page 2

If you have any questions, please contact Ms. Lynn Terry at (916) 322-2739. If you or your staff have questions of a technical nature regarding the study, please contact Mr. Robert Effa at (916) 322-6076.

Sincerely,

Cath till

Catherine Witherspoon Executive Officer

Enclosure

cc: Dr. Barry Wallerstein Executive Officer South Coast Air Quality Management District 21865 E. Copley Drive Diamond Bar, California, 91765-4182

> Mr. Michael J. Villegas Air Pollution Control Officer Ventura County Air Pollution Control District 669 County Square Drive, 2<sup>nd</sup> Floor Ventura, California 93003-5417

Lynn Terry Deputy Executive Officer Air Resources Board

Mr. Robert Effa Chief, Air Quality Data Branch Air Resources Board

# Assessment of Transport from Santa Barbara County to the South Coast July 28, 2004

# Introduction

In 2003, the Air Resources Board (ARB or Board) amended the transport mitigation requirements applicable to upwind air quality districts (upwind districts). Upwind districts are those that have been identified as contributing to ozone violations in downwind areas. The new requirement to implement "all feasible measures" significantly strengthened the regulations. The regulations also provide an option for upwind districts to limit the application of the mitigation requirements if the measures are not needed in the downwind area, or if the most recent transport assessment demonstrates that the upwind district's impact on the downwind area is "inconsequential."

The ARB has previously identified the Santa Barbara Air Pollution Control District (Santa Barbara District) as an upwind district and it is included, along with the Ventura County Air Pollution Control District, in the South Central Coast to South Coast transport couple. However, transport impacts can change over time. Transported emissions can decrease due to the implementation of emission control regulations, which reduce emissions in the upwind area. This couple has not been evaluated since 1990 and considerable air quality progress has occurred during this fourteen-year period.

The Santa Barbara District now attains both the national 1-hour and 8-hour federal ozone standards, and is close to attaining the more stringent State ozone standard. In addition, emissions have also dramatically declined during this period due to the implementation of a wide variety of emission control measures. Due to the improving air quality in Santa Barbara County, the Santa Barbara District requested that ARB work together with the districts in the region to reassess their transport impacts. This assessment would be most helpful prior to the release of the Santa Barbara District's update to their State air quality plan. Upwind districts are required to begin implementing the new "all feasible measures" provision of the transport mitigation regulations in their 2003/4 triennial air quality plans.

ARB staff worked with representatives from the Santa Barbara District, the South Coast Air Quality Management District (the South Coast District) and the Ventura County Air Pollution Control District (the Ventura District). This report summarizes the updated assessment, which relied on data for the period 2000 through 2003. This study only evaluated transport between the South Central Coast and South Coast, and not transport between districts within the South Central Coast.

## Previous Assessment

ARB evaluated transport between the South Coast and South Central Coast in 1989 and 1990. In 1990, modeling was used to characterize the magnitude of transport. In addition,

over the last thirty years a number of researchers have evaluated transport between the southern portion of the South Central Coast Air Basin (Santa Barbara and Ventura Districts) and the South Coast Air Basin. The general consensus, as reported in ARB's 1989 transport identification report, is that transport takes place in both directions, but transport is mostly from the South Coast Air Basin to the South Central Coast Air Basin.

In 1990, ARB analyzed three ozone episodes that occurred in 1984 and 1985. An urban airshed model was used and incorporated data from the South Central Coast Cooperative Aerometric Monitoring Program (a field study). Two episodes were characterized as insignificant and the other as significant for transport from the South Central Coast to the South Coast. The two days characterized as insignificant, September 7, 1984 and September 13, 1985 had daily peak ozone levels of 0.14 and 0.11 ppm at Reseda, respectively. The September 17, 1984 ozone episode identified as significant had a peak ozone level of 0.16 ppm at Reseda. However, the 1990 ARB Staff Report concluded that while the couple included both Santa Barbara and Ventura as upwind districts, most of the transported mass most likely originated in Ventura County.

## Assessment Approach

Transport of ozone and its precursors occurs when winds of sufficient speed, direction, and duration are present. Transport can take place near the surface (surface-level transport) or far above the surface (transport aloft). This assessment only considered the likelihood of surface level transport over land, and did not evaluate potential for surface level transport over the Santa Barbara Channel (channel) or transport aloft. Transport over the channel or offshore of the channel was not evaluated because both districts and ARB have very limited legal authority to control emission sources operating there. Specifically, the Santa Barbara and Ventura Districts only have authority over the stationary sources in the channel or offshore of the channel, and not marine shipping sources. Marine shipping sources represent over 90% of those emissions in the channel or offshore of the channel.

Aloft transport is of concern for many areas of the State, and was considered for inclusion in this analysis. However, it was deemed not to be important for the transport couple under consideration. This is because there are very few emission sources within the onshore portion of either Santa Barbara or Ventura Counties with the potential to release emissions aloft. For example, based on one SCOS 1997 summer episode day emissions inventory for the Santa Barbara County, only 5% of the NOx emissions (1.8 tons per day) and only 1% of the ROG emissions (0.4 tons per day) are from stack-based sources. Aloft emissions of this magnitude were considered unlikely to contribute significantly to downwind ozone levels at the sites under consideration for this analysis.

The characterization of transport is based on detailed analysis of one or more days when the ozone standard was violated in the downwind area. There are two basic approaches that are typically utilized to assess transport: (1) air quality modeling evaluations or (2) data analysis techniques. The modeling approach relies on large data sets gathered from special field studies. In contrast, the data analysis approach uses available data from air quality monitoring and meteorological databases, along with emissions and population estimates, to assess transport. Regardless of which approach is used, the results of the analysis are used to label the magnitude of transport. Three labels are applied according to whether the ozone violation in the downwind area is predominately due to transport (overwhelming), local emissions (inconsequential), or a combination of both (significant).

This current study evaluated transport for all State ozone exceedance days during the period 2000 through 2003. As has been done in prior studies, it would have been desirable to include a model-based assessment of transport for the days that were analyzed. The available modeling episodes for southern California (using the SCOS modeling domain, which includes Santa Barbara and Ventura Counties) are from 1997 and 1998. Development of other episodes is very resource intensive, and would have impacted SIP development efforts for central and northern California. Therefore, a number of air quality analysis methods were used to evaluate transport impacts for this current study. This study was conducted in several steps.

- Typical wind flow patterns were identified for the study area and the magnitude of the ozone air quality problem in the downwind area was identified;
- Screening analyses were conducted on all exceedance days to identify days with potential for transport;
- In-depth trajectory analyses were conducted on days identified as having weather conditions conducive to transport, which were identified in the step above;
- Population growth and change in emissions were evaluated in both upwind and downwind areas.

# Study Area

For this current analysis, the study area consisted of the two southern counties in the South Central Coast (Ventura and Santa Barbara) and a portion of the South Coast Air Basin, as shown in Figure 1. The downwind area in the South Coast is the western part of the San Fernando Valley and the Santa Clarita area. The Santa Clarita area is slightly north of the San Fernando Valley. The air monitoring sites representative of the downwind areas in this analysis are Reseda and Santa Clarita. These sites are closest to the boundary between the two air basins. If transport originated in the South Central Coast, one or both of these sites would be the most impacted.

The Santa Barbara coastal strip is only a few miles wide and is bordered on the inland side by mountains that reach 4,000 feet. This narrow southern coastal strip of Santa Barbara County connects to the San Fernando Valley via the Oxnard Plain of Ventura County. The Oxnard Plain includes the cities of Ventura, Oxnard, and Camarillo. The San Fernando Valley is an inland valley within northwestern Los Angeles County and extends to the southeastern boundary of Ventura County. Still further inland and northward, the Santa Clara River Valley runs eastward from near the city of Ventura to Castaic and the Santa Clarita area that are located just north of the San Fernando

Valley. To the south of the San Fernando Valley, the 3,000 foot Santa Monica Mountain ridge slopes down to sea level at Point Mugu in Ventura County.

# Wind Flow Patterns

Throughout the year, airflow patterns within the study area are dominated by a diurnal land-sea breeze pattern with strong on-shore winds most of the day and calm to weak offshore during the night. These sea breeze winds are generally from the southwest to west in the study area and are channeled by the coastal mountains. In addition, a portion of the onshore seabreeze in the Los Angeles coastal plain and the seabreeze from the Oxnard Plain converge in the San Fernando Valley.

Under the seabreeze pattern, emissions transport is complex within the study area. In general, the onshore seabreeze blows emissions within the Oxnard Plain of Ventura County eastward into the interior valleys of Ventura County.

Two other wind flow patterns can exist in the study area. These include a general pattern of winds from the south and weak to strong offshore winds associated with the Santa Ana pattern. Under these two patterns emissions transport is complex.

As discussed above, there are a number of geographical barriers and wind flow patterns that limit the pathway that a parcel of air originating in Santa Barbara County could take. The three most likely pathways over land for emissions in the coastal Santa Barbara County area to transport into western Los Angeles County are listed below and shown in Figure 1:

- Santa Barbara County to Ventura County to Santa Clarita via the Santa Clara River Valley;
- Santa Barbara County to Ventura County to Reseda in the San Fernando Valley via Highway 118;
- Santa Barbara County to Ventura County to Reseda in the San Fernando Valley via Highway 101.

# Air Quality

There has been a growing concern over air quality at the Reseda and Santa Clarita downwind sites, which had 263 State 1-hour ozone exceedances from 2000 through 2003. The 2002 and 2003 ozone seasons were particularly severe in this portion of the South Coast, with an average of 85 and 55 days per year exceeding the State ozone standard at Santa Clarita and Reseda, respectively. Approximately 70% of the time when the South Coast experiences a State ozone exceedance anywhere in the basin, it also occurs at Santa Clarita. In addition, some of the highest peak level ozone levels that occurred in the South Coast during the last two years have been recorded at the Santa Clarita monitoring site. This includes ozone concentrations twice the level of the State standard. While the South Coast is classified as an extreme one-hour ozone nonattainment area and has more than enough emissions within the basin to cause these exceedances, it is also important to

evaluate whether transport is a contributing factor to poor ozone air quality in this region. If transport is a factor, it needs to be addressed through the implementation of the mitigation regulations.

In contrast, the number of days when ozone standards are exceeded in Santa Barbara County has dropped dramatically. Santa Barbara County now attains both federal ozone standards. During the last three years, the Santa Barbara District, classified as a moderate nonattainment area, averaged only five days when the State ozone standard was exceeded. The average daily maximum ozone concentration for 2001-2003, using the mean of the top 30 days for the worst site, is now at the level of the State standard, with only a few days remaining that have peaks above the level of the State Standard. Ventura County, the other upwind district in this couple, has also seen significant air quality improvements. They now attain the federal 1-hour ozone standard, although they still exceed the more protective federal 8-hour ozone and State 1-hour ozone standards. Though they had an average of 32 State ozone exceedance days over the last three years, the number of exceedances has decreased by 141 percent since 1990.

# Screening Analyses

In order to determine the transport impacts that the Santa Barbara District has on the South Coast Air Basin, there was a need to review all recent ozone exceedances at the downwind sites. As noted, there were 263 State 1-hour ozone exceedance days that occurred at Reseda and/or Santa Clarita between 2000-2003. Due to the large number of exceedance days, it was not possible to evaluate each exceedance day in-depth. Therefore, the approach used was to identify days with potential for transport, and then focus more in-depth analyses on these days.

Multiple levels of screening methods were used to identify days with high transport potential. The screening methods employed were (1) evaluation of weather conditions, (2) conducting time series analysis, and (3) a review of the progression of the hour of the daily maximum ozone concentration. These screening methods are described below.

The primary method for screening was an evaluation of weather conditions to determine if winds of sufficient speed, direction, and duration were present that would have been conducive to the transport of ozone or its precursors. For all 263 days, the wind speed and direction at the downwind sites (Reseda and Santa Clarita) were examined at the time of the daily maximum ozone concentration and up to six hours prior to the maximum ozone concentration. The goal was to identify days with persistent winds from the west, which could have resulted in transport from Santa Barbara and Ventura Counties.

The second screening method was time series analysis. This analysis was applied to some of the days identified as having transport potential in the first screening step. The objective of this analysis is to determine whether weather conditions are conducive to transporting emissions on the prior day and remaining overnight to contribute to an exceedance on the next day. This analysis consists of plotting hourly ozone, NOx, and CO concentrations, along with hourly wind speed and direction for a 48-hour period at the

downwind site (Reseda and/or Santa Clarita sites). Hydrocarbon measurements were not available. However, CO was used instead to characterize the motor vehicle emissions behavior. The impact of transported emissions on the previous day would be indicated by persistent winds from the west along with high NOx and CO concentrations on the prior day, followed by calm winds and continued high NOx and CO concentrations on the next day. In other words, emissions transported into the area on the previous day remain to contribute to an ozone exceedance on the following day. Low winds on both days with high NOx and CO would suggest emissions are mostly local and transport was unlikely.

The third screening method was a review of the progression of the hour of the daily maximum ozone concentration along a path beginning in Santa Barbara County through Ventura County to Reseda or Santa Clarita. If there is progression in the time of the peak ozone concentration along the path, this could be an indication that ozone was transported. However, this approach was not effective in identifying potential transport days, because of the intermediate precursor emissions in Ventura County, topography, and varying elevations of air monitoring sites along the path.

## Trajectory Analysis

The screening procedure described above identified 12 potential transport days for the period 2000 through 2003. Ten of these days are for exceedances that occurred at Santa Clarita and two for Reseda. These 12 days, plus an additional 4 days with the highest daily maximum ozone concentration at Santa Clarita (0.18-0.19 ppm) in 2003, were chosen for in-depth study using trajectory analysis. The additional 4 days were not identified as having weather conditions conducive to transport during the screening analysis; however they were analyzed due to their high concentrations.

The objective of a trajectory analysis is to identify the most likely source of emissions and the path those emissions took to result in an ozone exceedance at a downwind location. In other words, it is a pictorial analysis technique that estimates the path an air parcel took over a specified period of time. In a backward trajectory, the site location and site hour of the daily maximum ozone concentration are used as the starting point. From this point, the air parcel is backed up in time, based on an hourly set of wind data. Depending on whether a computer model or manual approach is used, the path of the air parcel is estimated using model generated hourly gridded wind fields or manually generated hourly airflow fields, respectively. The gridded wind and airflow fields are based on wind speed and direction at various sites in the study area. In a model, terrain barriers can be considered. However, they were not used in this analysis. In ARB staff's opinion, the observed wind measurements already reflected the influence of terrain.

Initially, back trajectories were manually constructed for the two Reseda and one Santa Clarita State ozone exceedance days which were identified in the screening process. This manual method has been used in previous ARB transport assessments. Back trajectories were manually drawn for these three days, due to the unavailability of a trajectory model at the early point in this assessment. Wind data (speed and direction) from approximately 21 weather monitoring stations within the study area were used to construct each manually drawn back trajectory. Wind data included four offshore buoy sites. The wind data were obtained from the U.S EPA–AIRS, CIMIS, and NOAA buoy databases. A total of about 90 weather data sites were available; however only 21 were used in this case due to the extensive time requirements to construct manually drawn back trajectories. Based on these trajectories, the ARB and districts determined those State ozone exceedances for the two Reseda days were the result of local emissions. However, the one Santa Clarita day warranted further analysis by a trajectory model.

When the two dimensional (2-d) Caltech trajectory model became available, it was used to analyze the remaining Santa Clarita day. In addition, it was used to analyze the other 9 days identified in the screening process, along with the 4 days having the highest ozone concentration at Santa Clarita in 2003.

Wind data (speed and direction) from approximately 90 weather monitoring stations within the study area were used to construct each 2-d trajectory. Wind data included six offshore buoy sites. The wind data were obtained from U.S EPA-AIRS, CIMIS, RAWS, NOAA buoy, and Plymouth State University databases.

Typically, back trajectories are constructed beginning at the hour of the daily maximum ozone concentration. However, for each of the 14 days analyzed with the 2-d Caltech trajectory model, separate back trajectories were constructed for each hour when the State ozone standard was exceeded. The back trajectories extended back in time up to 44 hours depending on the hour of the State ozone exceedance. This was done to better characterize the weather conditions and likely pathways for emissions to be transported. Since all of the 14 exceedance days occurred at Santa Clarita, back trajectories beginning at Santa Clarita were constructed for these 14 days. In addition, because on 11 out of these 14 days there was also an exceedance at the Reseda site, back trajectories for these days were also constructed beginning at Reseda. In all, a total of 83 Reseda and 94 Santa Clarita back trajectories were completed using the 2-d Caltech trajectory model.

In general, back trajectories from Santa Clarita indicated that emission contributions from Los Angeles County and Ventura County occurred at hours exceeding the State ozone standard on 10 of these 14 days. Four of these ten days had this emission contribution over multiple consecutive hours. As noted, there were also ozone exceedances at Reseda on 11 of these 14 days. Back trajectories at hours that exceeded the State ozone standard at Reseda on 7 of these 11 days indicated that emissions were limited to Los Angeles County. However, the remaining four days had contributions of emissions from Los Angeles County, along with Ventura County or Ventura County and the offshore area of Santa Barbara County.

As discussed above, none of the back trajectories were similar to the transport paths shown in Figure 1; that is, they did not follow the paths all the way into Santa Barbara County or back into the Santa Barbara urban area from the Santa Barbara Channel. However, a few trajectories backed into the vicinity of Vandenberg Air Force Base from the channel. However, this small area only represents approximately 1% of Santa Barbara County's emissions (estimated 0.8 tons per day combined ROG and NOx emissions, see Tables 1 and 2) and less than 0.1% of Los Angeles County's combined ROG and NOx emissions. Therefore, the emissions in the Vandenberg Air Force Base area are insufficient to have influenced ozone concentrations in the South Coast. It is also not located within the major population centers of Santa Barbara County.

# **Emissions**

A comparison of emission trends over time will provide additional information on which to base an assessment of transport impacts. Emission estimates for ozone precursors were obtained for the current year and compared to 1985 emission estimates (the year of the ozone episode evaluated in 1990). These emission estimates are shown in Table 1 and Table 2 and the source of these emission estimates is discussed in detail in Attachment A. The ROG and NOx emission estimates are from the official ARB emission inventory in the 2004 Almanac. However, the emission estimates may not reflect the district's most recent inventory in their air quality plans.

Emissions in the upwind and downwind areas have declined significantly since 1985. The South Central Coast portion of Santa Barbara and Ventura Counties (onshore emissions) combined ROG and NOx emissions have declined by over 40%. Moreover, emissions decreased by 58% in the San Fernando Valley and the South Coast portion of Los Angeles County, although they are substantially higher than those emissions in either the South Central Coast portion of Ventura or Santa Barbara County. The Outer Continental Shelf (>3 to 25 miles offshore) portion of Santa Barbara County's combined ROG and NOx emissions for ships (approximately 33 tons per day), which are uncontrollable by the Santa Barbara District, are approximately 25% of Santa Barbara County's total combined ROG and NOx emissions.

Thus, both the upwind and downwind areas have had steadily declining emissions since 1985. These declining emissions in Santa Barbara County suggest a lower potential for significant transport impact on the South Coast since the 1990 ozone transport assessment. Because Ventura County separates Santa Barbara County from the San Fernando Valley, these declining emissions suggest a much lower potential for transport impact from Santa Barbara County on the South Coast since the 1990 transport assessment. Declining emissions may also indicate a lowered potential for transport from Ventura County. The decline in emissions is expected to continue. This should continue to lower the potential for transport from the South Coast.

## **Population**

A comparison of population in the study area over time will provide additional information on which to base an assessment of transport impacts. The population of Los Angeles County dwarfs that of either Santa Barbara or Ventura counties. The 2000 population of Los Angeles County exceeds 9 million, compared to 753,000 for Ventura County and 400,000 for Santa Barbara County. However, there has been significant population growth along certain portions of the transport pathway, particularly in Ventura County. The Ventura County cities of Thousand Oaks, Oxnard, and Simi Valley are connected to Los Angeles County through commerce, jobs, and commute traffic. These cities experienced 11.1% to 19.5% population growth between 1990 and 2000. Santa Clarita grew at the even larger rate of 36.5%. In contrast, the City of Santa Barbara had a 4.7% increase in population.

# Transport Contribution

This section links emission trends, population trends, air quality, and trajectory results together to assess the transport contribution. We look at these to assess the transport contribution from Santa Barbara County, Ventura County, and the South Coast. As discussed in the section of trajectories, no trajectory backed into the landmass of Santa Barbara County with significant emissions and population. However, the back trajectories did indicate a contribution from Ventura County and the South Coast.

Of the 263 State ozone exceedance days at Reseda and/or Santa Clarita, there were no back trajectories that included a significant contribution from Santa Barbara County. However, back trajectory analysis identified 10 Santa Clarita days with emission contributions from Los Angeles County and Ventura County at hours exceeding the State ozone standard. Of these 10 Santa Clarita days, four days indicated significant emissions contribution from Ventura County due to multiple hours with back trajectories from the west.

The back trajectories indicate that for three of these four days, the initial buildup of ozone concentrations reaching the State 1-hr exceedance level was due to emissions within the South Coast. However, this buildup reached a peak either during the hour that the wind direction shifted or two hours after the wind direction shifted and brought emissions from Ventura County. Ventura County emissions, along with local South Coast emissions, continued to be sufficient in maintaining ozone concentrations above the State standard one hour after the occurrence of the peak ozone concentration. The Ventura County contribution was evident upwind at Piru by the elevated ozone concentrations that included one day that exceeded the State 1-hour ozone standard. In addition, the back trajectories also indicated that the Ventura County emissions had built up in stagnant flow overnight or during the early morning hours of the exceedance day over urban areas on the Oxnard Plain or inland valley. When air stagnates over an emissions area, these emissions accumulate (buildup) dispersing very little. The stagnation of emissions over these urban areas suggests that a significant buildup of emissions occurred within Ventura County before arriving at Santa Clarita in the westerly sea breeze. This was evidenced by the high ozone concentrations upwind of Santa Clarita at Piru.

On the fourth day, the back trajectories indicated that the initial buildup of ozone concentrations in the late morning was due to emissions within the South Coast. However, a wind direction shift at noon brought emissions from Ventura County over the next three hours. The back trajectories also indicated that these Ventura County

emissions had built up in stagnant airflow overnight in the Piru area prior to arriving at Santa Clarita in the westerly seabreeze. These emissions reaching Piru had come from urban areas in the northern Oxnard Plain (Ventura) and transported inland by seabreeze winds the previous day. In addition, elevated ozone concentrations upwind at Piru suggest that there was a significant contribution of Ventura County emissions during the three hour period. The combination of local South Coast emissions and transported Ventura County emissions resulted in 3 hours of ozone concentrations exceeding the State 1-hr ozone standard.

The stagnation of air in Ventura County prior to reaching Santa Clarita, emissions from the urban areas in the Oxnard Plain and inland valley, and elevated ozone concentrations upwind of Santa Clarita at Piru suggest that Ventura County contributed to ozone exceedances at Santa Clarita. In addition, the large number of ROG and NOx emissions in Los Angeles County compared to the South Central Coast indicate that local emissions within the South Coast were sufficient to significantly contribute to the exceedances on these four days.

## **Conclusions**

This study examined all 263 State ozone exceedance days for the period 2000 to 2003 that occurred at either the Reseda and/or Santa Clarita monitoring sites. Of these 263 days, analyses indicate that weather conditions on these days do not show transport of significant ozone precursors or ozone from the mainland portion of Santa Barbara County to either Santa Clarita or Reseda. Trajectory analyses indicate that contributions were from either the South Coast Air Basin or the South Coast Air Basin and Ventura County. In addition, emissions are continuing downward, and the magnitude of emissions makes transport of ozone precursors from the Santa Barbara County portion of the South Central Coast even less likely.

This analysis supports a finding that the magnitude of transport during the last four years from Santa Barbara County to the South Coast has been inconsequential. In addition, this study did not find any basis for changing the transport classification for the Ventura County portion of the South Central Coast.

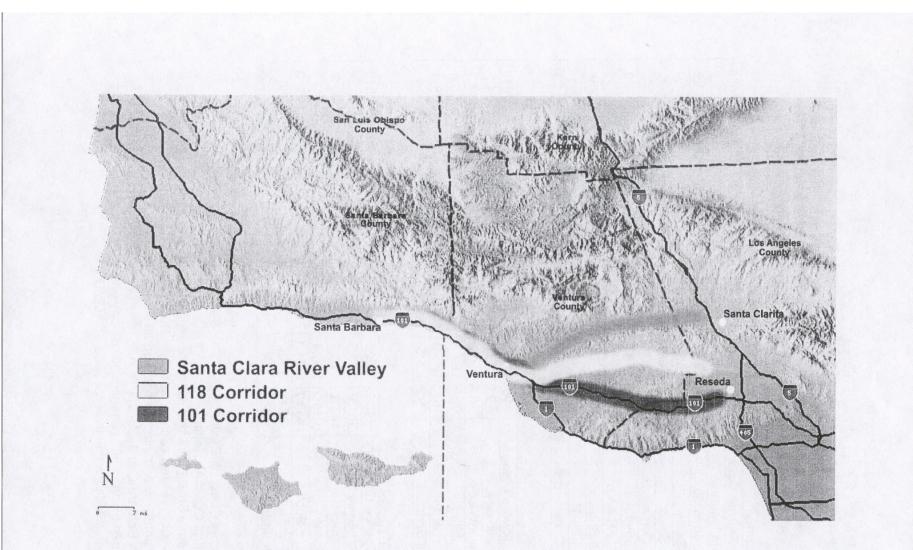


Figure 1. Study Area and Transport Pathways over Land (South Central Coast to South Coast)

#### Table 1 ROG Emission Inventory for Air Basin Portions of Santa Barbara, Ventura, and Los Angeles Counties Annual Average (tons per day) ARB Emissions Inventory Branch 2004 Almanac Data

#### Santa Barbara County

Air Basin	Source Category	1985	1990	1995	2000	2002	2003	2005	2010
SCCAB	Stationary	22.1	19.8	15.6	13.9		13.5	11.9	12.1
	Area-Wide	12.6	13.0	11.6	11.9		11.6	11.1	11.2
	Mobile	46.8	40.2	29.5	21.5		17.4	15.1	11.0
	Ships*				0	0			
	Commercial Boats*				0.087	0.034			
	Subtotal	81.5	73.0	56.7	47.3		42.5	38.1	34.3
	VAFB Area**					0.4	0.4		
OCS	All Sources	4.9	5.4	4.9	3.1		3.2	2.7	2.9
	Ships*				0.98	1.10			
	Commercial Boats*				0.085	0.034			

#### Ventura County

Air Basin	Source Category	1985	1990	1995	2000	2002	2003	2005	2010
SCCAB	Stationary	19.0	20.9	15.6	13.2		13.4	13.6	14.2
	Area-Wide	16.8	16.8	14.7	16.1		14.6	13.9	13.8
	Mobile	71.4	57.3	45.0	33.0		26.8	23.0	16.5
	Subtotal	107.2	95.0	75.3	62.3		54.8	50.5	44.5
OCS	All Sources	1.2	1.5	1.4	0.5		0.6	0.6	0.1

## Los Angeles County

Air Basin	Source Category	1985	1990	1995	2000	2002	2003	2005	2010
SoCAB	Stationary	281.9	227.5	124.5	118.2		94.0	86.2	88.9
	Area-Wide	147.1	128.2	106.8	113.2		101.1	97.2	90.3
	Mobile	1014.2	668.4	513.3	369.1		285.7	240.2	174.1
	Subtotal	1443.2	1024.1	744.6	600.5		480.8	423.6	353.3
	SFV** All Sources	374	265	193	155		133	118	80
OCS	All Sources	NR	NR	NR	NR		NR		

Notes:

NR=Not Reported

SCCAB=South Central Coast Air Basin

SFV=San Fernando Valley VAFB=Vandenberg AFB

SoCAB=South Central Coast Air Basin

Ships=large ocean-going vessels such as container ships, auto carriers, and tankers.

Commercial boats=small vessels used for commercial fishing.

\* Provided by Santa Barbara County APCD

\*\*Emissions are based on one 1997 summer episode day and are estimated from 1997 and 2010 baseline emissions used in the final 2003 SCAQMD SIP

# Table 2

# NOx Emission Inventory for Air Basin Portions of Santa Barbara, Ventura, and Los Angeles Counties Annual Average (tons per day) ARB Emissions Inventory Branch 2004 Almanac Data

#### Santa Barbara County

Air Basin	Source Category	1985	1990	1995	2000	2002	2003	2005	2010
SCCAB	Stationary	13.4	12.7	9.8	10.1		9.5	8.6	8.5
	Area-Wide	2.0	2.0	2.0	2.0		2.0	2.0	2.0
	Mobile	48.5	50.1	42.0	35.3		28.8	26.3	19.9
	Ships*				0	0			
	Commercial Boats*				0.50	0.39			
	Subtotal	63.9	64.8	53.8	47.4		40.3	36.9	30.4
	VAFB Area**					0.4	0.4		
OCS	All Sources	37.2	35.8	34.9	34.7		38.6	41.1	47.1
	Ships*				32.06	35.45			
	Commercial Boats*				0.49	0.39			

#### Ventura County

Air Basin	Category Name	1985	1990	1995	2000	2002	2003	2005	2010
SCCAB	Stationary	28.6	14.0	8.2	6.3		6.1	6.0	5.8
	Area-Wide	2.2	2.0	2.0	2.0		2.0	1.9	2.0
	Mobile	61.9	69.0	56.4	48.4		42.6	39.0	28.2
	Subtotal	92.7	85.0	66.6	56.7		50.7	46.9	36.0
OCS	All Sources	8.1	8.5	8.3	8.9		9.5	9.9	0.4

#### Los Angeles County

<u> </u>			-		-		-	-	
Air Basin	Category Name	1985	1990	1995	2000	2002	2003	2005	2010
SoCAB	Stationary	195.8	121.6	99.2	65.2		48.6	47.7	45.9
	Area-Wide	23.2	17.5	16.7	18.5		19.3	19.5	16.1
	Mobile	955.3	874.6	740.9	645.1		562.3	513.1	392.3
	Subtotal	1174.3	1013.7	856.8	728.8		630.2	580.3	454.3
	SFV** All Sources	242	209	177	150		128	113	76
OCS	All Sources	NR	NR	NR	NR		NR		

Notes:

NR=Not Reported SCCAB=South Central Coast Air Basin SoCAB=South Central Coast Air Basin SFV=San Fernando Valley VAFB=Vandenberg AFB

Ships=large ocean-going vessels such as container ships, auto carriers, and tankers. Commercial boats=small vessels used for commercial fishing.

\* Provided by Santa Barbara County APCD

\*\*Emissions are based on one 1997 summer episode day and are estimated from 1997 and 2010 baseline emissions used in the final 2003 SCAQMD SIP

# ATTACHMENT A

# **EMISSIONS**

We used annual average emission estimates for ROG and NOx from ARB's 2004 Almanac web page for the years 1985, 1990, 1995, 2000, and 2003. These estimates covered Santa Barbara County, Ventura County, and Los Angeles County. In addition, we developed a ROG and NOx emissions inventory for the same years for the San Fernando Valley in order to have emissions estimates representing the Reseda and Santa Clarita area.

The San Fernando Valley NOx and ROG emissions inventory were estimated by extracting emissions from grid cells in the SCOS97 modeling region. The emission estimates were based on emissions in the 1997 and 2010 baseline years for a Tuesday during the 1997 episode (August 5). These emission estimates were extracted from the final emission inventories used for the 2003 South Coast SIP photochemical modeling. San Fernando Valley ROG and NOx emissions for 1985, 1990, and 1995 were based on the ratio of San Fernando Valley to Los Angeles County emissions for the year 2000. Emissions for 2000 and 2003 were interpolated from the 1997 and 2010 baseline year emissions.

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# **PUBLIC NOTICE**

# Draft 2004 Clean Air Plan and Supplemental Environmental Impact Report Public Comment Period Starts August 25, 2004

**SUMMARY:** The Santa Barbara County Air Pollution Control District (APCD) has prepared a Draft 2004 Clean Air Plan and associated Draft Supplemental Environmental Impact Report. As required by the California Clean Air Act, the 2004 Clean Air Plan provides a three-year update to the 2001 Clean Air Plan. Previous plans developed to comply with the California Clean Air Act include the 1991 Air Quality Attainment Plan, the 1994 Clean Air Plan, and the 1998 Clean Air Plan. The 2004 Clean Air Plan includes previously adopted air pollution control measures and newly proposed and further study emission control measures. The 2004 Plan is not required to address any Federal Clean Air Act requirements. The 2004 Clean Air Plan will be submitted to the California Air Resources Board for approval.

Pursuant to the California Environmental Quality Act (CEQA), the APCD has prepared a Draft Supplemental Environmental Impact Report for the 2004 Clean Air Plan.

<u>PUBLIC REVIEW</u>: Beginning August 25, 2004, the Draft 2004 Clean Air Plan will be available for public review and comment for 30 days and the Draft Supplemental Environmental Impact Report will be available for review and comment for 45 days. Both documents will be available at public libraries in Santa Maria, Buellton, Lompoc, Goleta, Santa Barbara, and UCSB, and at the following four locations, and on the APCD website at <u>www.sbcapcd.org</u>:

- 1. Santa Barbara County APCD: 260 N. San Antonio Road, Suite A, Santa Barbara
- 2. Santa Barbara County Clerk's Office: 123 E. Anapamu Street, Santa Barbara
- 3. Santa Barbara County 5<sup>th</sup> District Supervisors Office: 511 E. Lakeside Parkway, Santa Maria
- 4. Santa Barbara County Clerk's Office: 401 E. Cypress, Suite 101, Lompoc

**PUBLIC WORKSHOP:** There will be a meeting of the APCD Community Advisory Council to consider the 2004 Clean Air Plan on Wednesday September 15, 2004 at 6:30 pm at the address below. Public comments can be provided on the Draft 2004 Clean Air Plan and the Draft Supplemental Environmental Impact Report at the Community Advisory Council meeting.

Wednesday, September 15, 2004 6:30 pm Days Inn: Windmill Room 114 East Highway 246, Buellton

#### WRITTEN COMMENTS:

Written comments on the Draft 2004 Clean Air Plan should be submitted to

- > Tom Murphy, APCD Manager, Technology and Environmental Assessment,
  - o 260 N. San Antonio Rd, Suite A, Santa Barbara, CA 93110-1315.
  - Comments must be received by 5:00 PM on **September 24, 2004**.

Written comments on the Draft Supplemental Environmental Impact Report should be submitted to > Dr. Ron Tan, APCD Planning and Technology Supervisor,

- o 260 N. San Antonio Rd, Suite A, Santa Barbara, CA 93110-1315
- Comments must be received by 5:00 PM on October 11, 2004.

For more information, please contact Mr. Murphy at 805/961-8857 or Dr. Tan at 805/961-8812. Published SB News-Press, Lompoc Record, SM Times 8/25/04; SB Independent 8/26/04



#### NOTICE OF PUBLIC HEARING 2004 CLEAN AIR PLAN and SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT Thursday, December 16, 2004 – Approximately 2:00pm Board of Supervisors Hearing Room 105 East Anapamu Street, Fourth Floor Santa Barbara, California 93101

The Santa Barbara County Air Pollution Control District will hold a public hearing to consider adoption of the proposed 2004 Clean Air Plan and certification of the Supplemental Environmental Impact Report (SCH No. 9103045) for the 2004 Clean Air Plan.

**SUMMARY:** The Santa Barbara County Air Pollution Control District (APCD) has prepared a Draft 2004 Clean Air Plan and associated Draft Supplemental Environmental Impact Report. As required by the California Clean Air Act, the 2004 Clean Air Plan provides a three-year update to the 2001 Clean Air Plan. Previous plans developed to comply with the California Clean Air Act include the 1991 Air Quality Attainment Plan, the 1994 Clean Air Plan, and the 1998 Clean Air Plan. The 2004 Clean Air Plan includes previously adopted air pollution control measures and newly proposed and further study emission control measures. The 2004 Plan is not required to address any Federal Clean Air Act requirements. The 2004 Clean Air Plan will be submitted to the California Air Resources Board for approval.

Pursuant to the **California Environmental Quality Act** (CEQA), the APCD has prepared a Supplemental Environmental Impact Report (SCH No. 91031045) for the 2004 Clean Air Plan.

**PUBLIC REVIEW:** The Draft 2004 Clean Air Plan and Supplemental Environmental Impact Report are available at public libraries in Santa Maria, Buellton, Lompoc, Goleta, Santa Barbara, UCSB, on the APCD website at www.sbcapcd.org and at the following three locations:

Air Pollution Control District 240 N. San Antonio Road Suite A Santa Barbara Air Pollution Control District 301 E. Cook Street, Suite L Santa Maria 4<sup>th</sup> District Supervisors Office 401 E Cypress Suite 101 Lompoc

**WRITTEN COMMENTS:** Written comments on the 2004 Clean Air Plan should be submitted to Tom Murphy, APCD Division Manager, 240 N. San Antonio Road, Suite A, Santa Barbara, CA 93110-1315. In order to be included in the staff report for the Board's action, comments must be received by 5:00 PM on November 29, 2004. For more information, please contact Mr. Murphy at (805) 961-8857.