

# CHANGES TO THE DRAFT 2010 CLEAN AIR PLAN

CHAPTER/SECTION	DESCRIPTION OF CHANGE
<b>EXECUTIVE SUMMARY</b>	
	Figure EX-1 was updated to include 2009 air quality data
	Figure EX-2 and EX-3 were updated to include revised emission forecasts
<b>CHAPTER 1: INTRODUCTION</b>	
	Re-formatted Table 1-1, "Comparison of 1991 AQAP, 1994 CAP, 1998 CAP, 2001 CAP, 2004 CAP, 2007 CAP, and 2010 CAP"
<b>CHAPTER 2: LOCAL AIR QUALITY</b>	
	2009 data has now been included to expand the range of years in Table 2-2 and Figures 2-2A, Figures 2-3 through 2-10,
	Figure 2-2B has been expanded to include population and vehicle miles traveled data for 2008.
<b>CHAPTER 3: EMISSION INVENTORY</b>	
	No changes were made to Chapter 3.
<b>CHAPTER 4: EMISSION CONTROL MEASURES</b>	
SECTION 4.2 EMISSION CONTROL MEASURE MANDATES	<p>The District added a new paragraph after item 2: 'If an analysis performed during the rulemaking process indicates that the cost-effectiveness of a proposed control measure is too high, the District will not move forward with adopting the new or revised rule.'</p> <p>Staff comment: Staff generally assumes that control measures adopted in other air districts that have been implemented in practice are cost-effective. The text is added for clarity and to explain that the District will not move forward with adopting a new or modified rule if it is found not to be cost-effective during the rule development process.</p>
SECTION 4.2 EMISSION CONTROL MEASURE MANDATES	<p>Staff added the following paragraph before item 4.3: 'The control measure requirements (e.g., ppm limits, gr/l ROC-content limits) indicated in this 2010 Clean Air Plan are subject to change when the actual rulemaking effort is undertaken. The APCD is using the figures herein to develop emission reduction estimates required to be in the plan by ARB and to give a general indication of today's limits necessary to comply with the "every feasible measure" mandate. However, there could be technological advancements between the adoption of this 2010 Clean Air Plan and when the District begins to undertake the rulemaking effort, which would lower the emission limits or other limits used in this plan. The rulemaking staff will consider such improvements in technology and lower emission limits or other limits found in other air district rules during the rule</p>

	<p>development process. The state statutory mandate to comply with the requirement to adopt every feasible control measure applies to both the clean air plan and to rule adoptions.'</p> <p>Staff comment: The intent of the new paragraph is to clarify that the emission limits and other limits (e.g., ROC-content limits) shown in the 2010 CAP are the minimum limits and that the limits in the adopted rule may be lower due to advancements in control techniques that could occur between the adoption of the clean air plan and the adoption of the new or revised rule. Further, the "adopt every feasible measure" requirement applies to both the control measures in the plan and the rules adopted to implement those control measures.</p>
<p>SECTION 4.4 EMISSION CONTROL MEASURES ADOPTED DURING THE REPORTING PERIOD (2007-2009)</p>	<p>Table 4-2 modified: The District revised Rule 321 data to show the actual adoption date of September 20, 2010. Also, updated the ROC emission reduction estimates to be 0.5261 for 2020 and 2030.</p> <p>Staff comment: The change in emission reduction estimates stems from new exemptions in Rule 321.B.6.a, b, f, and g.</p>
<p>SECTION 4.5 PROPOSED EMISSION CONTROL MEASURES</p>	<p>Table 4-3 modified: Staff deleted information on the 2010 revision to Rule 321. Also, typographical error on row Rule 352; text for column CAP Control Measure ID should read N-XC-1, not N-XC-6.</p> <p>Staff comment: The Board of Directors adopted amendments to Rule 321 on September 20, 2010. Due to the adoption of amendments to Rule 321, the control measure status changed from proposed to adopted. Staff also revised Table 4-2 to reflect the change in the control measure status.</p>
<p>SECTION 4.5 PROPOSED EMISSION CONTROL MEASURES</p>	<p>Proposed control measure summary on Page 4-10 modified: Staff removed references to the first-round of Rule 321 changes.</p> <p>Staff comment: The change reflects the September 20, 2010 adoption of the first-round of Rule 321 changes.</p>
<p>SECTION 4.5 PROPOSED EMISSION CONTROL MEASURES</p>	<p>The District revised the discussion to show that the new NOx limit will be 15 ppmv when fired on gaseous fuels. A "Summarized Amended Rule Data for Rule 361" table was also added.</p> <p>Staff comment: The March 31, 2010 draft indicated new limits of 9 and 12 ppmv NOx. Additional research into these limits indicates that they can be achieved but with a sacrifice of thermal efficiency and additional equipment costs. To avoid potentially high cost-effectiveness figures and an increase in fuel use to make up for lost thermal efficiency, the District prefers to propose a general limit of 15 ppmv NOx. Some equipment will have higher NOx limits. The summarized rule data was added at the request of CAC members.</p>
<p>SECTION 4.5 PROPOSED EMISSION CONTROL MEASURES</p>	<p>The District revised the discussion to show that the new NOx limit will be 15 ppmv when fired on gaseous fuels. A "Summarized Amended Rule Data for Rule 342" table was also added.</p> <p>Staff comment: The District used 9 and 15 ppmv NOx limits in the March 31, 2010 draft. For the same reasons stated above, staff now propose that the general NOx limit be set at 15 ppmv, with higher limits for other equipment (e.g., units burning field gas). The summarized rule data was added at the request of CAC members.</p>

<p>SECTION 4.7 CALIFORNIA AIR RESOURCES BOARD CONTROL MEASURES</p>	<p>Table 4-6 modified: The District added the following newer ARB measures to Table 4-6, State Measures Adopted Since the 1994 SIP.</p> <ul style="list-style-type: none"> <li>• In-use off-road diesel-fueled fleets,</li> <li>• Low carbon fuel standard (LCFS),</li> <li>• Small Containers of automotive refrigerant,</li> <li>• Semiconductor operations,</li> <li>• Sulfur hexafluoride emissions in non-semiconductor and non-utility applications</li> <li>• New passenger motor vehicle greenhouse gas emission standards.</li> </ul>
<p>SECTION 4.8 INTERNATIONAL MARITIME ORGANIZATION</p>	<p>Staff added text and Table 4-7 and 4-8 on the International Maritime Organization Marine Environmental Protection Committee treaty information on reducing NOx emissions from marine vessels and limiting their fuel sulfur content.</p>
<p><b>CHAPTER 5: TRANSPORTATION CONTROL MEASURES</b></p>	
<p>SECTION 5.2.1 STATE ACT PERFORMANCE MEASURE</p>	<p>Added Figure 5-3 that shows the Vehicle Miles Traveled per Capita in Santa Barbara County between the years 1988 and 2008 (on page 5-28). Figures occurring after this were re-numbered accordingly.</p>
<p>SECTION 5.3 TRANSPORTATION CONTROL MEASURES</p>	<p>Some TCMs were deleted from Table 5-3 (pages 5-13 through 16) in response to CAC comments that some TCMs listed were out-of-date and stale. The following measures were removed from Table 5-3 because they were deemed to not have enough SOV reduction potential to reduce emissions appreciably Countywide. Staff confirmed that there were no emission reductions quantified in the Plan for these projects. Note that these projects were completed and are currently in place:</p> <ul style="list-style-type: none"> <li>• <b>Crosstown East/West Bikelane couplet</b> (City of Santa Barbara, 1994 CAP)</li> <li>• <b>Shoreline Dr./Cabrillo Blvd. Bikeway</b> (City of Santa Barbara, 1994 CAP)</li> <li>• <b>El Capitan Ranch Bikeway</b> (County of Santa Barbara, 1994 CAP)</li> <li>• <b>Via Real Class II Bikeway – Cravens Ln. to Padaro</b> (County of Santa Barbara, 1998 CAP)</li> </ul> <p>The following projects were removed because they were implemented and later dropped:</p> <ul style="list-style-type: none"> <li>• <b>Natural Gas Garbage Truck, Roll Off Bins, Compactor</b> (City of Lompoc, 1998 CAP)</li> <li>• <b>CNG Bus Purchase</b> (City of Santa Maria, 1998 CAP)</li> </ul> <p>Also, the County of Santa Barbara’s <b>Electric Vehicle Regulations</b> measure was dropped. The measure was initially implemented in the 1998 CAP in anticipation of higher utilization of electric vehicles. The anticipated demand did not materialize as envisioned, so the measure was dropped.</p> <p>Also typo was corrected on the status of the Enhanced Commuter Rail Service measure. The status was changed from “Service On-Going” to “Pending”.</p>
<p>SECTION 5.3 TRANSPORTATION CONTROL MEASURES</p>	<p>Based on input from various CAC members, there may be some potential co-benefits for passenger vehicle ozone emission reductions related to the implementation of SB 375. SBCAG is recommending that the potential for co-benefits be further studied within the forthcoming Sustainable Community Strategy and are therefore recommending this as a TCM for further study in the 2010 CAP.</p>

	<p>The following text was added to on page 5-4:</p> <p>“The other measure proposed for further study, the Activity Centers measure, arose from Senate Bill 375, which was passed in 2008 by the California legislature. SB 375 places new regional planning responsibilities on Metropolitan Planning Organizations (MPO) like SBCAG. The bill is intended to help meet the state’s GHG emission reduction goals in AB 32 through regional transportation and land use strategies to reduce emissions from car and light-duty truck travel. SB 375 ties the regional housing and transportation planning and land use planning processes together by mandating the preparation of a Sustainable Communities Strategy (SCS) in the Regional Transportation Plan. The SCS will be prepared to show how the region will meet targeted reductions in GHG emissions. The targeted reductions (which were set by ARB’s Regional Targets Advisory Committee in September 2010) will be incorporated into SBCAG’s SCS in the next Regional Transportation Plan update (currently scheduled for early 2013). The SCS requirements represent an opportunity to improve the link between transportation and land use planning. One component of the SCS includes analyzing the feasibility of transit priority projects that will contribute to reducing regional GHG emissions. SB 375 sets criteria for what can be considered a transit priority project, such as;</p> <ul style="list-style-type: none"> <li>• minimum residential/commercial mixed use sizes,</li> <li>• close access to major transit stops and high quality transit corridors, and</li> <li>• compliance with extensive environmental and land use criteria.</li> </ul> <p>The criteria for transit priority projects were written in a way to incentivize their development. CEQA exemptions (for growth-inducing impacts and project-specific and cumulative traffic impacts) could make development of these projects less expensive than non-transit priority projects. In addition, identification of potential development sites in the SCS can help in identifying locations for local jurisdictions to address State housing mandates. The concept of transit priority projects and their evaluation in the SCS represents a good example of local adoption of ordinances that would enhance transit development and development of mixed use projects, thus representing an opportunity for further study of the Activity Centers TCM under SBCAG’s new responsibilities under SB 375. The SCS will identify potential locations for transit priority projects based on the criteria outlined in the statute. In addition, the SCS will also capture co-benefits, such as reductions in criteria pollutants. SBCAG will analyze the potential for criteria pollutant reductions in its upcoming SCS, therefore, it is proposed for further study in the 2010 Plan.</p> <p>The TCM was added to Table 5-5 also.</p>
<p>SECTION 5.3 TRANSPORTATION CONTROL MEASURES</p>	<p>Based on questions and comments at the June CAC meeting, further clarification on the rejection of the bus idling TCM was provided. The following sentence was added to the last paragraph in Section 5.3 on page 5-5:</p> <p>“The presence of the State regulation would make it difficult to implement a local rule, therefore, it is proposed for rejection in the 2010 Plan.”</p>

SECTION 5.4.1 ON-ROAD ACTIVITY DATA INPUTS	The following sentence was revised on Page 5-7:  "This ethnic age cohort will age and turn into licensed drivers, but their driving characteristics may differ from <del>the past drivers that were dominated by the white ethnic group</del> prevailing patterns."
<b>CHAPTER 6: EMISSION FORECASTING</b>	
SECTION 6.3 EMISSION INVENTORIES	<p>Changes occurred to the Santa Barbara County emission inventory for 2020 and 2030 due to updated data from ARB's State Implementation Plan model software. Specific revisions occurred to the Area-Wide Sources emission categories of Consumer Products, Architectural Coatings and Solvents, Pesticides/Fertilizers, Residential Fuel Combustion, Fires, and Managed Burning and Disposal. Changes were also made to the Other Mobile Source categories of Trains, Ships and Commercial Boats, Recreational Boats, Off-Road Recreational Vehicles, Off-Road Equipment, Farm Equipment, and Fuel Storage and Handling.</p> <p>For the OCS inventory, changes occurred to the Ships and Commercial Boats category as a result of estimates from the proposed ARB the Commercial Harbor Craft regulation.</p> <p>These inventory changes resulted in modifications to Section 6.3 "Emission Inventories", Table 6-5, "Santa Barbara County", Table 6-6, "Outer Continental Shelf", and Figures 6-1 through 6-5 that illustrate these emission forecasts. (These were previously displayed as Tables 6-3 and 6-4, respectively).</p> <p>On Page 6-4, second to last paragraph, last sentence should read "Area-wide NOx emissions are predicted to <u>increase</u> from 0.91 tons per day in 2007 to 1.32 tons per day by 2030".</p>
SECTION 6.4.2 2008 AMENDMENTS TO MARPOL ANNEX VI	Table 6-3, "Annex VI Oxides of Nitrogen (NOx) Emission Standards" and Table 6-4, "Annex VI Fuel Sulfur Content Requirements" were added.
<b>CHAPTER 7: STATE CLEAN AIR ACT REQUIREMENTS</b>	
	No changes were made to Chapter 7.
<b>CHAPTER 8: STATE MANDATED TRIENNIAL PROGRESS REPORT AND TRIENNIAL PLAN REVISION</b>	
	No changes were made to Chapter 8.
<b>CHAPTER 9: GREENHOUSE GASES AND CLIMATE CHANGE</b>	
	Changed title of chapter from 'Climate Protection' to 'Greenhouse Gases and Climate Change'.
9.3.1 STATE OF CALIFORNIA LEGISLATION	Clarification of ARB GHG reporting thresholds and facility-types required to report.
9.4.1 METHODOLOGY	The addition of power mixes by energy resource for each electrical utility.

9.4.2 2007 CO <sub>2</sub> EMISSION INVENTORY	Added text explaining zero emissions in some of the categories.
	The inclusion of Global Warming Potentials in Table 9-1
	Split recreational boats between OCS and onshore (state tidelands) in Table 9-2 and Table 9-3
	The addition of a new Figure 9-3 that shows CO <sub>2</sub> emissions without the inclusion of emissions attributed to electricity consumption.
	Added Figure 9-5 that shows per capita electricity usage in Santa Barbara County.
<b>CHAPTER 10: TRANSPORTATION POLICY, AIR QUALITY AND LAND USE</b>	
	Previously known as Chapter 11. Public Participation will now be Chapter 11