

**Early Progress Plans Demonstrating Progress Toward
Attaining the 8-hour National Air Quality Standard for Ozone
and
Setting Transportation Conformity Budgets
for
Ventura County
Antelope Valley - Western Mojave Desert
Coachella Valley
Eastern Kern County
Imperial County**

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**Early Progress Plans Demonstrating Progress
Toward Attaining the Federal 8-hour National Air Quality
Standard for Ozone**

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RECOMMENDATION

Air Resources Board (ARB or the Board) staff recommends that the Board adopt the ozone Early Progress Plans in this report as amendments to the State Implementation Plan (SIP) in order to establish transportation conformity emissions budgets for Ventura County, Antelope Valley - Western Mojave Desert, Coachella Valley, Eastern Kern County and Imperial County. Normally, these conformity budgets would be set with reasonable further progress (RFP) plans. However, the U.S. Environmental Protection Agency (U.S. EPA) is revising its regulations setting out the requirements for RFP plans and will not be able to approve RFP plans for these areas until that revision is complete. Setting conformity budgets with these early progress plans will allow transportation planning to move forward in the interim.

BACKGROUND

Transportation conformity is a provision of the federal Clean Air Act that requires transportation planning agencies to demonstrate that their transportation plans, funding programs, and projects are consistent with (“conform to”) the SIP. One part of demonstrating conformity is a comparison, by transportation planning agencies, of vehicle emissions from transportation plans to emissions budgets in the SIP. An emissions budget is the level of emissions from on-road motor vehicles that ensures an area makes progress toward clean air and ultimately meets air quality standards by the mandated deadline.

Normally, emissions budgets would be set with an RFP plan. However, U.S. EPA is revising its RFP regulations for areas whose air quality is dominated by pollution from upwind regions. Until those revisions are complete, U.S. EPA will not approve RFP plans and related conformity budgets for these types of areas.

The transportation planning process still needs conformity budgets, and U.S. EPA’s inability to approve RFP plans creates a timing problem. To keep the transportation planning process moving, ARB staff has prepared early progress plans for the sole purpose of establishing transportation conformity emission budgets for the four nonattainment areas caught up by U.S. EPA’s revisions, and for Imperial County, whose pending reclassification will generate a need for transportation conformity emissions budgets.

An early progress plan is an optional plan and must simply show some progress toward attainment. The inventories for each of the five areas decline in the future with already adopted controls, thereby demonstrating progress. The plans are simple, containing the inventory demonstrating progress and the associated budgets.

INVENTORIES AND CONFORMITY BUDGETS

The inventories presented below for stationary, area-wide and other mobile sources for all areas are consistent with the emission inventories submitted to U.S. EPA as part of the State Strategy for California's 2007 State Implementation Plan adopted by the Board in September 2007. These inventories contain reductions from adopted regulations only. Consequently, these early progress plans do not create any new regulatory SIP commitments.

The on-road mobile inventories and the transportation conformity budgets are estimated using California's EMFAC2007 on-road mobile emissions model. EMFAC2007 was approved by U.S. EPA on January 18, 2008. Transportation conformity budgets are estimated the year before an area's attainment year. This is consistent with U.S. EPA guidance, which states that attainment should be demonstrated for the last full ozone season before an area's attainment year. Motor vehicle activity data used for all areas except Eastern Kern County was updated by the Southern California Association of Governments (SCAG) in December, 2007 from SCAG's Draft 2008 Regional Transportation Plan transportation model runs. Transportation activity data for Eastern Kern County is from the Kern Council of Governments provided in January 2008.

REVISIONS TO THE JANUARY 29, 2008 VERSION

After these plans were posted on January 29, 2008, ARB staff discovered that some of the input data used by the on-road emissions estimation model, EMFAC, had been corrupted. This resulted in errors in emissions calculations affecting the inventories and transportation conformity budgets for Antelope Valley – Western Mojave Desert and Eastern Kern County. The table entries for these areas on the following pages reflect the corrected numbers.

For Antelope Valley – Western Mojave Desert, the changes result in a new ROG budget in 2009 of 22 tons per day from the original 21 tons per day, and a new NOx budget of 77 tons per day from the original 74 tons. In the case of Eastern Kern County, the ROG budget in 2008 goes from 4 to 5 tons per day, and the NOx budget from 16 to 18 tons per day.

ARB staff consider these changes minor and do not impact the overall progress in these two areas.

Ventura County

Ventura County Summer Planning Emissions Inventory*					
Adjusted for Rules and Programs through December 31, 2006					
		Tons per Day		Reductions, 2002-2009	
		2002	2009	Tons per Day	Percent
ROG					
	Stationary	10.7	10.0		
	Area-wide	14.1	14.1		
	On-road Mobile	20.2	12.0		
	Other Mobile	15.2	14.0		
	Total ROG	60.3	50.0	10.3	17%
NOx					
	Stationary	6.5	6.3		
	Area-wide	1.3	1.3		
	On-road Mobile	30.1	18.5		
	Other Mobile	37.5	36.3		
	Total NOx	75.3	62.4	12.9	17%
* Summer Planning Inventory v.1.06					

As shown above, the emissions inventory from all sources shows a 17 percent reduction in both ROG and NOx in 2009 compared to the 2002 base year. This demonstrates significant progress toward attainment of the federal 8-hour standard.

Ventura County		
Transportation Conformity Budgets		
Summer Planning Emissions in Tons per Day		
	2009	
	ROG	NOx
On-Road Emissions from EMFAC2007	12.0	19.0
Off Model Reductions*	0.0	-0.5
Net On-Road Emissions	12.0	18.5
Conformity Budget**	13	19
* Reductions from adopted rules not reflected in EMFAC2007		
** Budget obtained by rounding up to the nearest ton		

Presented above are the transportation conformity budgets for Ventura County in 2009. EMFAC2007 emission factors were used with motor vehicle activity provided by the Southern California Association of Governments in January 2008.

Antelope Valley – Western Mojave Desert

Antelope Valley – Western Mojave Desert Summer Planning Emissions Inventory*					
Adjusted for Rules and Programs through December 31, 2006					
		Tons per Day		Reductions, 2002-2009	
		2002	2009	Tons per Day	Percent
ROG					
	Stationary	12.0	13.2		
	Area-wide	10.9	11.0		
	On-road Mobile	28.2	21.9		
	Other Mobile	20.1	24.4		
	Total ROG	71.2	70.6	0.6	1%
NOx					
	Stationary	44.2	50.4		
	Area-wide	1.0	1.0		
	On-road Mobile	89.3	76.0		
	Other Mobile	50.4	40.0		
	Total NOx	184.9	167.5	17.4	9%
* Summer Planning Inventory v.1.06					

As shown above, the emissions inventory from all sources shows a combined percent reduction of ozone precursors of 10 percent in 2009 compared to the 2002 base year. This demonstrates significant progress toward attainment of the federal 8-hour standard.

Antelope Valley - Western Mojave Desert		
Transportation Conformity Budgets		
Summer Planning Emissions in Tons per Day		
	2009	
	ROG	NOx
On-Road Emissions from EMFAC2007	22.0	80.6
Off Model Reductions*	0.0	-4.6
Net On-Road Emissions	21.9	76.0
Conformity Budget**	22	77
* Reductions from adopted rules not reflected in EMFAC2007		
** Budget obtained by rounding up to the nearest ton		

Presented above are the transportation conformity budgets for the Antelope Valley – Western Mojave Desert in 2009. EMFAC2007 emission factors were used with motor vehicle activity provided by the Southern California Association of Governments in January 2008.

Coachella Valley

Coachella Valley Summer Planning Emissions Inventory*					
Adjusted for Rules and Programs through December 31, 2006					
		Tons per Day		Reductions, 2002-2012	
		2002	2012	Tons per Day	Percent
ROG					
	Stationary	1.7	2.7		
	Area-wide	4.7	4.7		
	On-road Mobile	10.5	6.4		
	Other Mobile	5.3	4.8		
	Total ROG	22.3	18.6	3.7	17%
NOx					
	Stationary	0.9	0.9		
	Area-wide	0.5	0.4		
	On-road Mobile	41.0	25.5		
	Other Mobile	9.3	8.3		
	Total NOx	51.8	35.1	14.7	32%
* Summer Planning Inventory v.1.06					

As shown above, the emissions inventory from all sources shows a 17 percent reduction in ROG and a 32 percent reduction in NOx in 2012 compared to the 2002 base year. This demonstrates significant progress toward attainment of the federal 8-hour standard.

Coachella Valley		
Transportation Conformity Budgets		
Summer Planning Emissions in Tons per Day		
	2012	
	ROG	NOx
On-Road Emissions from EMFAC2007	6.5	27.5
Off Model Reductions*	0.0	-2.0
Net On-Road Emissions	6.4	25.5
Conformity Budget**	7	26
* Reductions from adopted rules not reflected in EMFAC2007		
** Budget obtained by rounding up to the nearest ton		

Presented above are the transportation conformity budgets for the Coachella Valley for 2012. EMFAC2007 emission factors were used with motor vehicle activity provided by the Southern California Association of Governments.

Eastern Kern County

Eastern Kern County Summer Planning Emissions Inventory*					
Adjusted for Rules and Programs through December 31, 2006					
		Tons per Day		Reductions, 2002-2008	
		2002	2008	Tons per Day	Percent
ROG					
	Stationary	1.0	1.0		
	Area-wide	1.5	1.4		
	On-road Mobile	5.6	4.2		
	Other Mobile	4.7	4.5		
	Total ROG	12.8	11.1	1.7	13%
NOx					
	Stationary	18.2	20.6		
	Area-wide	0.1	0.1		
	On-road Mobile	21.1	17.2		
	Other Mobile	14.1	11.5		
	Total NOx	53.5	49.5	4.1	8%
* Summer Planning Inventory v.1.06					

As shown above, the emissions inventory from all sources shows a combined percent reduction of ozone precursors of 21 percent in 2008 compared to the 2002 base year. This demonstrates significant progress toward attainment of the federal 8-hour standard.

Eastern Kern County		
Transportation Conformity Budgets		
Summer Planning Emissions in Tons per Day		
	2008	
	ROG	NOx
On-Road Emissions from EMFAC2007	4.3	20.4
Off Model Reductions*	-0.1	-3.2
Net On-Road Emissions	4.2	17.2
Conformity Budget**	5	18
* Reductions from adopted rules not reflected in EMFAC2007		
** Budget obtained by rounding up to the nearest ton		

Presented above are the transportation conformity budgets for Eastern Kern County for 2008. EMFAC2007 emission factors were used with motor vehicle activity provided by the Kern County Council of Governments in January 2008.

Imperial County

Imperial County Summer Planning Emissions Inventory*					
Adjusted for Rules and Programs through December 31, 2006					
		Tons per Day		Reductions, 2002-2009	
		2002	2009	Tons per Day	Percent
ROG					
	Stationary	1.3	1.4		
	Area-wide	20.8	20.6		
	On-road Mobile	8.8	6.9		
	Other Mobile	6.4	7.4		
	Total ROG	37.4	36.3	1.1	3%
NOx					
	Stationary	8.5	8.9		
	Area-wide	0.9	0.9		
	On-road Mobile	20.9	16.7		
	Other Mobile	12.6	10.1		
	Total NOx	42.9	36.6	6.3	15%
* Summer Planning Inventory v.1.06					

As shown above, the emissions inventory from all sources shows a 3 percent reduction in ROG and a 15 percent reduction in NOx in 2009 compared to the 2002 base year. This demonstrates significant progress toward attainment of the federal 8-hour standard.

Imperial County		
Transportation Conformity Budgets		
Summer Planning Emissions in Tons per Day		
	2009	
	ROG	NOx
On-Road Emissions from EMFAC2007	6.9	17.6
Off Model Reductions*	0.0	-0.9
Net On-Road Emissions	6.9	16.7
Conformity Budget**	7	17
* Reductions from adopted rules not reflected in EMFAC2007		
** Budget obtained by rounding up to the nearest ton		

Presented above are the transportation conformity budgets for Imperial County for 2009. EMFAC2007 emission factors were used with motor vehicle activity provided by the Southern California Association of Governments in January 2008.