

Appendix H

Proposed Revision to the Pesticide Element of the 1994 Ozone SIP for the Ventura County Nonattainment Area

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In the 1994 Ozone SIP, the Department of Pesticide Regulation (DPR) committed to obtain reactive organic gas (ROG) emission reductions from pesticides in five nonattainment areas. For the Ventura County nonattainment area, DPR committed to obtain a 20 percent ROG emission reduction from the 1990 base year emissions by 2005¹.

The 1994 Ozone SIP pesticide commitment for Ventura County was made to provide the emission reductions needed to bring Ventura into attainment of the 1-hour ozone standard by 2005. Ventura County met the 1-hour standard starting in 2002 and county ROG emissions continue to decline each year.

Nevertheless, to meet the 1994 Ozone SIP pesticide commitment for the five applicable areas, DPR is proposing new regulations to become effective in 2008. These regulations provide most, but not all of the emission reductions required to fill the 1994 commitment in Ventura County. The remaining 1 ton per day emission reduction would come from new reductions in vehicle emissions, which were not included in the 1994 SIP. This SIP revision, in combination with DPR's 2008 regulation, would fulfill the remaining Ventura County SIP commitment for reductions attributable to pesticides.

In all nonattainment areas except Ventura, DPR's proposed 2008 measures will achieve all of the ROG reductions from pesticides that are required by the 1994 Ozone SIP. For Ventura, meeting the targets of the 1994 SIP would require achieving 2.2 tpd of ROG emission reductions from 2004 levels, while the 2008 measures would achieve only a 1.2 tpd reduction by 2008. DPR's regulations to reduce ROG emissions from fumigants will go into effect beginning in 2008 and achieve the 1.2 tpd reduction using a combination of measures. These measures include changing to application methods with lower emissions. Monitoring studies demonstrate lower emissions when fumigant applications are tarped, irrigated after application, or applied through drip irrigation systems. Changing to these applications, in combination with an overall emission limit for fumigants, will achieve the needed reductions. Quantifying the difference in emission rates associated with different fumigant application methods also accounts for the revisions to earlier estimates of pesticide ROG emissions, including revisions to the baseline estimates.

The proposed pesticide control measures will achieve very significant reductions from the current pesticide emission levels in Ventura County, but not enough to reach the 1994 target. The difficulty in reaching the target is due in part to the very large increase since 1990 in the amount of acreage under cultivation in Ventura. As a result, the 2004 pesticide emission levels in Ventura were about 4.8 tpd, as compared to 3.7 tpd in 1990.

¹ 62 Federal Register 1169-1170; January 8, 1997

To attain the remaining ton of ROG reductions from pesticides by 2008, the only realistic option would be to reduce the number of acres currently fumigated in Ventura by nearly a third, or about 10,000 acres. Land in Ventura is valuable and high value crops (such as strawberries) are typically grown on fumigated acres. The value of crops grown on those acres that require fumigation is estimated at up to \$80,000,000. In the short term, the loss of these high value crops would likely have a negative economic impact on the farm economy and farm employment in Ventura. Growers would be expected to recuperate that loss by converting the land to other uses. Although it is unknown what the new uses would be, a reasonable possibility is that a significant number of acres would be converted to non-agricultural uses (such as housing developments). The conversion of agricultural land to other uses would likely result in various adverse environmental impacts, the extent of which cannot be analyzed at this time.

To avoid the potential impacts described above, ARB proposes to revise the Pesticide Element of the 1994 Ozone SIP for Ventura only. This SIP revision would substitute emission reductions from other sources of ROG for a portion of the emission reductions committed to in the 1994 SIP for pesticides. There would be no “backsliding” from the overall 1994 SIP commitments for Ventura, because all the ROG emission reductions committed to the 1994 SIP would still be achieved. What would change is the source of the emission reductions—a portion of the ROG reductions for Ventura would come from other emission sources instead of pesticides.

ARB staff has calculated the amount of ROG emission reductions that have been achieved in Ventura since 1994. This analysis shows that all of the ROG reductions committed to (except for those anticipated to come from pesticides) have already been achieved in Ventura County (Table 1). Between 2005 and 2008, an additional 1.9 tpd of ROG reductions will be achieved from California’s on-going motor vehicle control program (Table 2), beyond the reductions committed to in the 1994 SIP.

Therefore, we are proposing to revise the 1994 Ozone SIP to substitute 1.0 tpd of ROG emission reductions from California’s on-going motor vehicle control program for 1.0 tpd of the ROG emission reductions committed to for pesticides in the 1994 Ozone SIP in Ventura County.

Table 1
2008 Emission Reductions Compared to
1994 SIP Emission Reduction Commitment
in Ventura County APCD*

Emission Reduction Commitment**	4.11
Enhanced Vehicle Inspection and Maintenance	0.98
On-Road Motor Vehicle Measures	1.08
Off-Road Measures	0.90
Consumer Product Measures	1.16
Total 1994 SIP New Measure Emission Reductions Achieved	4.11

* All emissions are reported in the 1994 SIP emission inventory currency. Does not include DPR, or local (stationary or area-wide) commitments

** Commitment for Emission Reductions in 2005.

Table 2
Decline in ROG Emissions in Ventura County
from California's On-going Motor Vehicle
Control Program*

	2005	2008	Change
On-road Motor Vehicle Emissions	11.4	9.0	2.4
Off-road Emissions	4.0	4.1	-0.1
Consumer Product Emissions	5.7	6.1	-0.4
Total	21.1	19.3	1.9

* Does not include pesticide emissions, or local (stationary or area-wide) emissions under the jurisdiction of the Ventura County Air Pollution Control District. Does not include benefits of new measure commitments identified in Table 1, above. All emissions are reported in the 1994 SIP emission inventory currency.

Notes: ARB did not have emission reduction commitments beyond 2005 in Ventura County. As such, all declines in baseline achieved through California's on-going mobile source control program are surplus to the emission reduction commitments in the 1994 SIP for Ventura County.