

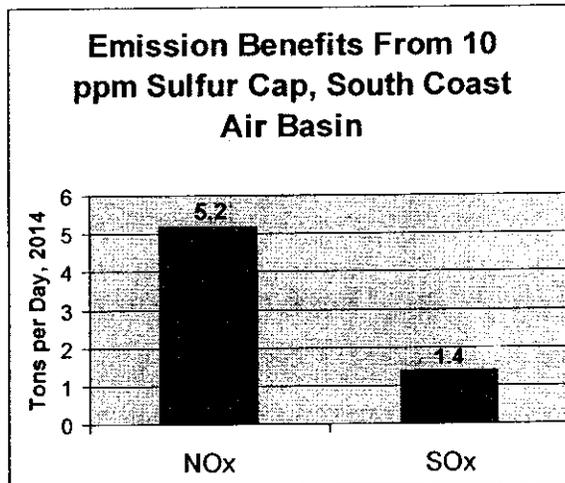
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07-6-3

**Testimony of the South Coast Air Quality Management District on the
ARB Staff Proposed Amendments to Phase 3 California Reformulated
Gasoline Regulations**

**Presented at ARB Board Hearing
June 14, 2007, Fresno, CA**

Good morning Dr. Chairman and members of the Board. I am Paul Wuebben, Clean Fuels Officer for the South Coast Air Quality Management District. The AQMD staff appreciate this opportunity to present comments on this rulemaking. We commend your staff for establishing an excellent process, and for providing careful analysis in its detailed staff reports. I do want to say at the outset that in general we firmly endorse the changes being proposed today by your staff. There are four general areas I will address this morning dealing with sulfur levels, inventory date, permeation inventory temperature assumptions, and certification fuels.

Regarding the sulfur cap, the proposed limit of 20 ppm is an essential step forward. However, we strongly recommend that cap be further tightened to 10 ppm. Such a level is an essential enabler of higher fuel efficiency vehicle technologies. Sulfur average levels today are between 9 to 11 ppm, so there is already a large compliance margin with the proposed 20 ppm cap. Japan and the European Union have already acted. California should not concede any ground with respect to its world leadership on this issue. We know that 10 ppm can be produced at reasonable cost and with no meaningful impact on gasoline volume, and there are important additional NOx benefits. In 2014, we estimate that a 10 ppm sulfur limit will result in emission reductions of 5.2 tons per day of NOx and 1.4 tons per day of SOx, as shown below.



Finally, there is no reason that gasoline sulfur specifications should be less stringent than those applicable to diesel fuel.

Regarding the Predictive Model (PM) changes, the District supports your staff's proposals in general. There are several areas, however, where we believe additional modifications are warranted in the PM. A key policy decision is the choice of inventory year used to calculate refiner mitigation obligations. We strongly recommend that the 2010 inventory year be used rather than 2015. At least five years of unmitigated HC emission increases have occurred already. The Alternative Emissions Reduction Plan (AERP) goes into effect in 2010. Full gasoline compliance commences in 2012 and its closest inventory year is 2010, not 2015. The start date for the implementation of the Low Carbon Fuel Standard is 2010. The 2010 inventory is also a much closer approximation to today's emissions.¹ Given the air pollution public health emergency status of the South Coast Air Basin, ARB should take all feasible steps to expedite emission reductions. SB 989 did not envision that there would be a 13 year lag after the phase out of MTBE as implied by the 2015 proposal.

¹ The 2015 inventory is inherently lower, and in effect provides a less stringent level of control. For example, the emission mitigation obligation would increase statewide from 12 to 18 tons per day of HC emissions for cars and light and medium duty trucks by switching from 2015 to 2010.

Regarding permeation emissions, it is clear that HC emissions are exponentially – not just linearly - related to temperature. ARB staff proposes a temperature profile with a peak temperature of only 87 ° F for the Los Angeles County portion of the ozone planning inventory used in the model. This temperature assumption is inconsistent with the fact that last year the South Coast Air Basin experienced the highest number of consecutive days above 100 degrees on record. We therefore recommend that ARB adjust the Los Angeles County inventory by raising its maximum temperature to at least 95 degrees.

Lastly, the issue of certification fuel harmonization needs to be addressed. Gasoline vehicles are still allowed to certify with inherently cleaner Phase 2 gasoline even though MTBE-based formulations are no longer commercially available. The use of such a non-representative fuel represents a de facto relaxation of vehicle emission standards. The gross disparity between the certification test fuel and the in-use fuel specification is a major weakness of the Predictive Model. We recommend that the ARB Board direct staff to update its certification fuel requirements as soon as possible.

In conclusion, we appreciate the scope and complexity of the issues before you. The judgments being made today will lock California into such blends for decades.² This sobering reality should reinforce the Board's sense of caution on this extensive update. We respectfully urge that the Board consider our proposed changes carefully. Thank you for this opportunity. I would be pleased to answer any questions you may have.

² One important perspective can be seen from a chart of data included in a report prepared by the Renewable Fuels Association (Draft Final Report, The Case for A Dual Tech 4 Model Within the California Predictive Model, May 20, 2007). The table in Appendix 1 attached at the end shows clearly that the cleanest gasoline with respect to ozone forming potential and NOx emissions is a formulation with 0% ethanol. As California moves to implement the LCFS, this comparison should not be forgotten. In effect, this data suggests that a compromise is being struck to accommodate up to 10% ethanol blends. For that reason, it is imperative that the Board exercise the maximum precautionary principle possible with respect to low level ethanol blends in gasoline.

Appendix 1 Attachment to Footnote # 2

Table ES-1. Comparison of Single and Dual Model on Four Fuels Passing the ARB Single Model				
Property	Percent Ethanol			
	0.0%	5.7%	7.7%	10.0%
RVP	6.60	6.91	6.92	6.99
T50	204	206	209	212
T90	315	310	313	313
Aromatic	25.0	25.0	25.0	25.0
Olefin	8.0	9.0	9.0	6.0
Total Oxygen	0.0	2.0	2.7	3.5
Sulfur	5	5	5	5
Benzene	0.50	0.50	0.50	0.50
Single Predictive Model Criteria	% Change in Emissions			
OFP	-0.67	-0.38	-0.59	-0.05
NOx	-6.0	-4.8	-2.9	-1.1
Pass/Fail	Pass	Pass	Pass	Pass