March 14, 2008
7790 Braidburn Avenue
Newark,CA 94560

Mary Nichols, Chair
California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, California 95812

Dear Ms. Nichols,

I'd like to make a few comments regarding the proposed 2008 amendments to the California Zero Emission Vehicle Regulations. Please place this in the record for the public meeting of the board scheduled for March 27, 2008.

Topics I'd like to discuss are the following:

Alternate Path Volume Reduction
New Path 0.3% Gold ZEV Requirement
ZEV Credit Marketplace Issues
Final Thoughts on Enforcement

Topic 1: Alternate Path Volume Reduction

The most inappropriate of the proposed amendments to the ZEV mandate is for the alternate path car makers. The change proposes that alternate path vehicle volume requirements be reduced from 25,000 down to 2,500 in Phase III (2012-2014)..

Pure research is laudable, but if 2,500 vehicles satisfies the requirement, almost nothing to impact air quality will be required of alternate path automakers during the next six years (through 2014). Am I missing something? This appears to be major backsliding.

Or are alternate path car makers required to take the "New Path"? If they are, there is no reason to amend the 25,000 to 2500 since no one will be on the alternate path in 2012-2014.

If the alternate path is being retained, keep the volume requirements at the original higher levels, so automakers will move to the “New Path”, or deliver meaningful volumes under the alternate path.

Topic 2: New Path 0.3% Gold ZEV Requirement

Under the “New Path”, in the 2012-2014 time frame, ZEV credits must equal 12 percent of total Car and Light Duty Truck sales. Only 0.3 percent of the ZEV credits need to come from Gold ZEV vehicles. 0.3 percent credits is equal to about 0.1 percent vehicles. This is a ridiculously low requirement.

A three percent Gold ZEV requirement is being reduced by giving 90% of this (2.7 %) to the new vehicle category “Enhanced AT PZEV”. I believe the Gold ZEV vehicle is being short-changed to spur the Enhanced AT PZEVs.

The intent is to provide incentives for the Enhanced AT-PZEV vehicle category. But instead of reducing the Gold ZEV requirement to such a low level, it would be better to take percentages from PZEV or AT-PZEVs, not from the "Gold" standard.

If it is felt this would not provide sufficient incentives for Enhanced AT-PZEVs, adjust the ZEV point values for additional incentives. Either increase Enhanced AT-PZEV ZEV credits, reduce Bronze and Silver ZEV credits, or both. In the table below, I allow the Enhanced AT-PZEVs + to share the Silver percentage, rather take away from the Gold percentage..

Let me suggest the following percentage changes:

	Phase III (2012-2014), 12 % of total sales	Phase IV (2015-2017) 14 % of total sales
Gold (Pure ZEV)	3 % (replacing 0.3-3%)	4 % (replacing 3-6 %)
Silver + (Enhanced AT PZEV)	0 - 3 % (replacing 0-2.7%)	0-4 % (replacing 0 - 3%)
Silver (AT-PZEV)	0 - 3 % (replacing 3 %)	0-4 % (replacing 2%)
Bronze (PZEV)	6 % (unchanged)	6 % (unchanged)

These new technologies should be encouraged, but not by reducing the Gold ZEV requirements.

<u>Topic 3: ZEV Credit Marketplace Issues</u>

The CARB board and staff are wisely working to open up ZEV credit information. This is a necessary step in order to create a marketplace for ZEV credit exchange. A ZEV credit market will allow all auto makers producing ZEV credits to prosper based on the number they create, not just the major auto makers..

A proper marketplace needs regular reporting. Public reporting, at least quarterly, should be required. Reporting should be by vehicle brand and model. Both ZEV credits and the number of vehicles should be included in the public disclosure.

Currently, from a marketplace perspective, a ZEV valuation problem exists. This is associated with the fact that most major automakers have years of credits going into the future. If credits are too abundant, very little value is associated with them.

The obvious answer is to increase ZEV credit requirements to a level that allows a credit to have real value, and to decrease the number of credits awarded per vehicle.

Final Thoughts on Enforcement

The Board's job is to protect the public health by improving air quality. The ZEV Mandate is an appropriate mechanism to do the job. More than a dozen states have put their trust in letting the California Air Resources Board lead the way to a cleaner future. Don't let them down.

In the past, the board seemed timid to enforce requirements to produce zero emission vehicles. If the auto makers believe the board is too lacking in backbone to vigorously enforce the rules, they will never comply. I believe the Fuel Cell Vehicle diversion is an example of a technique they use to fail to comply.

Don't weaken the Phase III to Phase IV time line or requirements. If the major automakers won't meet them, the Phoenix Motorcar and Tesla Motors type companies will. They can sell their ZEV credits to the major companies. The Phase III requirements for volume production can be met, and on time, if the air resources board doesn't weaken the rules again.

ZEV technology in 2003 was good enough. Better ZEV technology exists now. Vehicles using the newer battery technology do cost more, but only because mass production using the technology is not in place. Mass production of zero emission vehicles won't happen soon unless pressure is maintained.

Any weakness will encourage car companies to bring law suits rather than cooperate. Strongly enforce the rules so we can all breath cleaner air.

Sincerely,

Gordon Green