October 19, 2006

Clerk of the Board
Air Resources Board
1001 I Street
Sacramento, California 95814

RE: Comments on Proposed Amendments to Zero Emission Bus Regulation

Dear Air Resources Board:

Hythane Company appreciates the Air Resources Board's (ARB) interest in providing bus fleets with an opportunity to meet some of the obligations of the Zero Emission Bus Regulation through the use of "zero emission enabling technologies" such as Hythane® or other hydrogen/natural gas fuel blends. We are grateful that the ARB recognizes the important role that Hythane® can play in easing the transition to zero emission bus technology by transit agencies that have elected to achieve emission compliance.

We are deeply troubled, however, by the minimal incentive that ARB has chosen to provide transit agencies that have already invested in the alternative fuel path and are interested in further reducing their emissions through the use of zero emission enabling technologies. Although Hythane® and other hydrogen/natural gas fuel blends can enable any transit agency to integrate both hydrogen production and dispensing in to their operations more cost effectively than fuel cell technology, the approach suggested by the revised rule will not encourage transit agencies to take this important intermediary step.

Providing bus fleets with only a one year delay in the zero emission bus purchase requirement in exchange for the implementation of a demonstration project that incorporates the use of zero emission enabling technology is insufficient. This minimal delay does not offer fleets any incentive to implement advanced technology demonstrations and is therefore an ineffective means of achieving ever lower emissions in the present. Moreover, the amendments provide little incentive for fleets to invest in demonstrations that would facilitate the deployment the hydrogen fueling infrastructure that is necessary for future deployment of zero emission buses in California.

If leveraged appropriately, Hythane® can deliver tremendous emission reductions for a fraction of the cost of the proposed zero emission bus technology. As we presented to staff, conversion of 30% of the existing natural gas bus fleet in California to Hythane® would cost only $37 million, would lead to the construction of 40 hydrogen production/fueling facilities, and would yield nearly 2,000 tons of NOx emissions over the remaining useful lives of those buses. Thus, the development of a real incentive to incorporate zero emission enabling technologies would yield far more desirable and cost effective results than the current staff proposal.

We suggest amending the rule to allow for meaningful incentive for zero emission enabling technologies. A mechanism which would postpone the purchase requirement by the same number of years that a transit agency implements a demonstration project would be a good start, as long as that demonstration project yields the same or greater emission reduction benefit as if the agency began to make 15% of its purchases zero emission buses, per the current revised proposal. Thus, if a transit agency implemented a demonstration project in 2007 that yielded the same or greater emission reductions as the purchase

requirement, the transit agency would not be subject to the purchase requirement until 2014. Such an approach would likely provide a real encouragement to transit agencies to accelerate emission reductions.

Hythane® and other zero emission enabling technologies can provide a real bridge to the zero emission transit future that ARB envisions, but only if the agency finds an effective means of encouraging it. With the change to the amendment that we suggest, Hythane® and other zero emission enabling technologies can not only provide a link to a cleaner transit bus future, but can also deliver real verifiable surplus NOx emission reductions almost immediately.

Please don't hesitate to contact me if you have any questions or would like further information on Hythane®.

Sincerely yours,

Roger W. Marmaro
President