



December 15, 2010

Mary Nichols, Chairman  
California Air Resource Board  
1010 "I" Street  
Sacramento, CA 95812

**Re: Proposed Amendments to the Regulations to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In-Use On-Road Diesel Fueled Vehicles and Off-Road Diesel Fueled Fleets**

Dear Chairman Nichols:

Cleaire Advanced Emission Controls is a leading supplier of diesel retrofit systems for the California and U.S. market. We are a California based company with headquarters, testing, and research and development in the San Francisco Bay Area, and manufacturing operations in the San Diego area. Our company was founded with the sole focus to provide diesel retrofit technologies to support California's Diesel Risk Reduction Plan.

Over the last 9 years, we have invested our resources with great intensity in order to develop a portfolio of products to retrofit on and off-road diesel engines. Currently we hold eight product verifications and we have sold more than 11,000 diesel retrofit systems. We are the market share leader in the California diesel retrofit market in both verifications and units deployed.

We have reviewed the staff proposal and have talked with a number of staff members on several different occasions. Based on our conversations and understanding of the rules we offer several comments.

First, we are supportive of the current rule (submitted by ARB staff on October 29, 2010) and above all we urge you and your Board to adopt a rule without further delay. As one of many stakeholders in this process, we need the certainty provided by a rule in order to continue to operate our business.

Second, we would like to make you aware that Cleaire has developed a diesel particulate filter (DPF) system called the LongMile<sup>®</sup> for on-road engines that passively regenerates at very low temperatures. We have analyzed exhaust temperature data from more than 200 school buses, which shows that a passive DPF system will work on the vast majority of the buses. Today, our industry offers a variety of passive and active DPF systems for school buses.

We would also like to offer several specific suggestions for consideration:

1. Include the smaller school buses 14,000-26,000 lbs into the regulations. Robust, proven retrofit technologies exist for all buses regardless of size, and the emission

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impact on the ridership (the students) is also important regardless of the size of the bus.

2. Extend the 'retrofit for life' provisions to allow more of the off-road fleet to be voluntary retrofitted early in exchange for being allowed to operate longer. The current rule proposal calls for 15% of the fleet to be eligible for 'retrofit for life', however, we suggest you increase this to 25%, while limiting the number of Tier 0 and Tier 1 engines that can be included. This suggestion is a voluntary option that fleets may exercise at their discretion. The result would be more emissions reductions in the near term and needed business for the retrofit industry.
3. Allow retrofitted equipment that is sold or otherwise transferred from one fleet to another to also have its 'retrofit for life' or other credit be transferrable as well. This policy will add value to the retrofitted equipment, and will further motivate early action by providing confidence that investments can be recovered.

We close by urging you again to adopt the regulations. By doing so, you will provide certainty to all stakeholders in this process, and allow us to deliver the clean air benefits intended by the Diesel Risk Reduction Plan.

Sincerely,

A handwritten signature in black ink, appearing to read "Bradley L. Edgar". The signature is fluid and cursive, with the first name "Bradley" and last name "Edgar" clearly distinguishable.

Bradley L. Edgar, Ph.D.  
President and CTO  
Claire Advanced Emission Controls