Diesel Technology Forum

April 30, 2008

TO: Christina Zhang-Tillman, California Air Resources Board

SUBJECT: Diesel Technology Forum Comments on CARB's Proposed Concept Outline for the California Low Carbon Fuel Standard Regulation

Thank you for the opportunity to submit comments on the California Air Resources Board's (CARB) Draft Outline for California's Low Carbon Fuel Standard (LCFS) Regulation.

The Diesel Technology Forum (DTF) is a non-profit educational association that works to increase awareness about the advances in clean diesel technology. Our members include engine, vehicle and parts manufacturers as well as fuel producers. While these companies all supply products for diesel fueled vehicles and equipment, it should be noted that most are also suppliers for vehicles and equipment using other fuel sources.

SUMMARY: We respectfully recommend that CARB modify the LCFS Regulation to use gasoline as its sole fuel baseline standard and treat all fuel substitutes for light duty vehicles equally based upon their ability to lower the carbon content of light duty fuel pool by 10%.

BACKGROUND: As you know, diesel technology has undergone a dramatic transformation over the last several years, resulting in technology which has 90+ percent fewer emissions than that which was used just 20 years ago. Thanks to the nationwide arrival of ultra-low sulfur diesel fuel in 2006, new clean diesel vehicles have the most efficient internal combustion engines ever manufactured and highly effective emissions control technologies, resulting in virtual immeasurable emissions of PM and NOx from new diesel vehicles. In a few short months, this new technology will be available in passenger cars which meet California's stricter emissions standards, enabling Californians to again enjoy the greater fuel efficiency, performance, durability and comparably lower GHG emissions of clean diesel vehicles without compromising on environmental performance.

COMMENTS: The Diesel Technology Forum applauds California's leadership by committing to significant GHG emission reductions. The Low Carbon Fuel Standard provides an opportunity to gain meaningful, quick reductions while more challenging, long term solutions are further developed. This simultaneous pursuit of short, medium

5291 Corporate Drive - Suite 102 · Frederick, MD 21703 · Phone: (301) 668-7230 · Fax: (301) 668-7234
www.dieselforum.org

and long term solutions will help CA reach its ultimate goals through incremental progress that fosters further progress and momentum as time unfolds.

For this reason, DTF opposes CARB's decision in Section 2 of the Proposed Concept Outline on fuel standards to require separate 10 percent carbon intensity reductions from diesel and gasoline pools rather than from the total petroleum fuel pool. The driving force behind the LCFS is to reduce transportation-related CO_2 emissions. Diesel vehicles are inherently 20-40% more fuel efficient than their gasoline counterparts, which UC Davis and UC Berkeley researchers translate into an estimated 22% less CO_2 emitted per mile than comparable gasoline fueled vehicles.

As light-duty diesel vehicles grow to represent a greater percentage of the passenger car market, California will be realizing transportation-related CO_2 emission reductions through the use of more efficient technologies using less fuel (and thus less carbon) than what would otherwise be the case without compromising air quality. Several automobile manufacturers have announced their success in meeting gasoline-equivalent Tier II Bin 5 and CARB LEV II emission standards, leading to the introduction of several new clean diesel cars in the next 18 months. (See Appendix A)

Diesel's inherent benefit as a low carbon-intensity fuel has been recognized within the California Air Resources Board. Michael O'Hare, University of California-Berkeley researcher has even stated that "we like substituting diesel for gasoline in any vehicles burning gas now.... because diesels are more green." Even U.S. Representative John Dingell, Chair of the House Energy & Commerce Committee in Congress recognized the inherent CO_2 emissions benefits that could be realized with the greater use of diesel fuel for passenger transport as evidenced by his draft carbon tax legislation which placed a $.50/gallon tax on gasoline, jet fuel, and kerosene but exempted diesel fuel since "fuel economy benefits of diesel surpass even its emissions benefits."

CARB's decision to require separate 10% carbon reductions in both the diesel and gasoline fuel pools rather than the total petroleum based pool fails to account for carbon reductions that would be realized through the greater displacement of gasoline with diesel in the fueling of passenger vehicles. This would be unfortunate if included in any final rule for a variety of reasons, including:

- Ultra low sulfur diesel fuel is already available statewide AND clean diesel vehicles which meet California's stricter emissions standards will be available to consumers this year and could help CA achieve reductions immediately.
- CARB's decision to regulate diesel fuel in addition to gasoline is contrary to the policy analysis released by Alexander Farrell and Daniel Sperling at UC Berkeley and UC Davis on August 1, 2007 which recommended that "providers of transportation fuels regulated by or participating in the LCFS should be held to the same standard, which is the target value for all transportation fuels."
- Under CARB's proposed draft rule, other fuel sources that might grow based upon a shift from passenger cars powered by gasoline are not required to reduce

their carbon intensity. DTF believes all fuel sources used by light-duty cars in place of gasoline should be treated equally, ensuring a truly fuel neutral approach.

- The California Energy Commission (CEC) has estimated that if light duty diesel vehicles were 10% of the 2020 fleet, carbon intensity of the fuel pool could be reduced by 2 million metric tons which is equivalent to avoiding the burning of 175 million gallons of gasoline, or removing 250,000 gasoline vehicles from the road.
- It is widely believed that future generations of renewable diesel fuel which can be blended with petroleum diesel and transported through the EXISTING fuel infrastructure will be available in a few short years – thereby enabling significant, additional CO_2 reductions.

In the end, it is important that CARB's final LCFS regulation be written to best achieve its goals and avail Californians of all possible options for meeting these goals. California has been a driving force behind the development of today's clean diesel technology. It seems only reasonable that Californians would want to ensure that the fruits of these efforts were captured in achieving the state's longer term environmental goals.

Sincerely,

Allen R. Schaeffer

Allen R. Schaeffer
Executive Director

Cc Mary D. Nichols
Daniel Sperling
Jerry Hill
Dorene D'Adamo
Barbara Riordan
John R. Balmes, M.D.
Lydia H. Kennard
Sandra Berg
Ron Roberts
John G. Telles, M.D.
Ronald O. Loveridge