



June 19, 2015

Mr. Sam Wade  
Transportation Fuels Branch  
California Air Resources Board  
1001 I Street  
Sacramento, CA  
95814

**Subject: LCFS 15 Day Changes**

Dear Mr. Wade

On behalf of the undersigned organizations, we are writing to express our strong support for the re-adoption of the Low Carbon Fuel Standard in July, 2015 by the California Air Resources Board. We view the LCFS as critical to attaining California's health-protective climate and clean air goals, as well as supporting innovative California businesses and workers helping to bring more clean, low-carbon transportation solutions to market.

According to the American Lung Association's *State of the Air* 2015 report, California is home to the five most polluted American cities by unhealthy ozone and particle pollution days, and the seven cities most polluted by annual levels of particle pollution. Over 80 percent of smog-forming NOx emissions are associated with the manufacture, transportation and combustion of petroleum fuels. Petroleum is also responsible for nearly half of California's greenhouse gas pollution. The health burdens posed by unhealthy fuels can affect all residents, but especially those communities living near refineries and other major pollution sources. The LCFS provides an opportunity to reduce the overall impact of air pollution in California by encouraging cleaner investments by the fuels industry, including switching from high carbon, harmful fuels and inputs to healthier, lower carbon alternatives like electricity, hydrogen and advanced renewable, as well as incentivizing clean-up of existing petroleum refineries.

Our comments below focus on the 15 Day Change Package released on June 4, 2015:

**Extending the use of Hydrogen in addition to the lift truck proposal:** We support the inclusion of the hydrogen lift truck provision and encourage ARB to continue to explore opportunities to expand the market and opportunities to deploy electric-drive technologies, including those powered by low-carbon, renewable hydrogen fuel, within the context of the LCFS. The proposal to clarify the pathway for hydrogen forklifts is an appropriate provision for inclusion in the program to reduce reliance on higher-carbon fuels. In addition, we encourage ARB to ensure the program allows for reporting of hydrogen fuel use in other possible off-road applications (e.g., airport tugs, etc.) and for on-road applications in fuel cell transit buses or other light- medium- and heavy- duty fuel cell vehicle platforms. Like the proposed EER values for Heavy-Duty electricity-fueled vehicle platforms, the program should allow similar applications for fuel cell transit buses and other fuel cell vehicle platforms in the medium- and heavy- duty applications category. In extending provisions for the use of hydrogen as a transportation fuel we would ask CARB to further encourage the use of renewable hydrogen.

**Refinery Investment Credit Pilot Program:** Our organizations support the intent of this provision, which is to encourage adoption of cleaner, lower carbon-intensity technologies at refineries that can reduce emissions of greenhouse gases, criteria air pollutants and toxic air contaminants that disproportionately impact residents living near refineries. We also agree with other stakeholders that the program can also encourage refinery investments that promote jobs.

We believe that the structure of the application and public review process is appropriate in that refiners would be required to document any changes in criteria air pollutants or air toxics and that the applications for credits would be open to public review and comment. As the provision is implemented over the coming years, we encourage ARB to:

- Prioritize the evaluation of project applications that provide the greatest reductions in greenhouse gas, criteria air pollutants and toxic air contaminants on-site at refineries.
- Ensure adequate notice and public data is given to allow communities neighboring refineries and stakeholders to evaluate and comment on proposed pathways in an open and transparent process.
- Ensure adequate staffing and resources is provided to effectively implement the provisions in a manner that enables adequate monitoring and evaluation of the applications and pathways, identifies good projects that accomplish the above goals, and prevents gaming by regulated parties such as merely “shuffling” emissions associated with processing dirtier, higher carbon feedstocks and products into the “export” category, for example.
- Only credit actual, net reductions across the refinery facilities while avoiding crediting projects in piecemeal fashion, whereby emissions in only one processing unit of the facility decrease while other units increase emissions. In implementing the provisions, ARB should require and ask that applicants provide a broad enough system boundary and data set to capture net emission changes across the refinery operation(s).
- Increase knowledge and information about technologies and trends that can improve environmental performance of the current petroleum supply chain, as well as shed light on technologies and trends that can worsen them. For example, clean investments in improved energy efficiency at refineries may be offset over time if refineries increase overall processing energy for dirtier, heavier crudes.

Our organizations look forward to working with the Board and staff to carefully implement these, and all provisions of the LCFS, to ensure that the program achieves its goals of providing healthier, cleaner fuel choices for all Californians.

Sincerely,

Will Barrett  
Senior Policy Analyst  
**American Lung Association in California**

Simon Mui  
Senior Scientist and Director, California Vehicles and Fuels  
**Natural Resources Defense Council**

John Shears  
Research Coordinator  
**The Center for Energy Efficiency and Renewable Technologies**