LOW CARBON
FUELS COALITION
980 Ninth Street, 16th Floor
Sacramento, CA 95814
(916)668-4636
www.lcfcoalition.com

November 17, 2014

Michael Waugh
Chief, Transportation Fuels Branch
California Air Resources Board
1001 I Street
Sacramento, CA 95812

Katrina Sideco
Air Resources Engineer, Fuels Section
California Air Resources Board
1001 I Street
Sacramento, CA 95812

Sent via email to ksideco@arb.ca.gov

Dear Mr. Waugh and Ms. Sideco,

Thank you for the opportunity to provide comments regarding the restructuring and re-adoption of California's Low Carbon Fuel Standard ("LCFS"). This letter provides the comments of the Low Carbon Fuels Coalition. The Coalition represents a broad range of low carbon fuel providers including producers and developers of biodiesel, ethanol, renewable natural gas, waste-derived fuels and retail low carbon fuel providers. The Low Carbon Fuels Coalition tracks regulations and legislation, advocates for policies that benefit the entire low carbon fuels industry, and facilitates industry success through consensus and coalition building.

We applaud your continued work to implement and improve the LCFS. As a direct result of the LCFS, California is leading the world in reducing greenhouse gas ("GHG") emissions from vehicles, and diversifying the transportation sector. We look forward to the LCFS program's continued success and are committed to assisting you in this endeavor.

LOW CARBON FUELS COALITION
980 Ninth Street, 16th Floor
Sacramento, CA 95814
(916)668-4636
www.lcfcoalition.com

California's first three years of LCFS experience have proven program critics wrong by strengthening rather than weakening the state's economy. The LCFS is driving tangible and valuable business activities by incentivizing technological innovations that reduce carbon intensity ("CI"). Companies are developing new CI fuels, investing in infrastructure to expand availability of low CI fuels, and making investments to reduce the CI of conventional petroleum fuels and biofuels.

The LCFS is also providing the collateral benefit of reducing the US trade deficit. While innovations and high crude oil prices have enabled the continued extraction of fossil fuels from aging domestic oilfields, the US still imports approximately half of its crude oil requirements, resulting in a net export of about $500 million per day to foreign coffers.[1] By diversifying the California transportation market, the LCFS enables the expansion of low CI fuels derived from US biomass and waste materials, as well as other US based low carbon fuel technologies.

As the Air Resources Board (ARB) moves toward the re-adoption of the LCFS in early 2015, we recommend that the program be strengthened in ways that will increase and accelerate private sector investment activities. To that end, we recommend that the following actions be part of the re-adoption of the LCFS.

1. Compliance Curve- We strongly support ARB's proposal to maintain the original LCFS CI reduction at 10% by 2020. We further encourage the ARB to establish stronger compliance curves to continue progress beyond 2020. Of the proposed compliance curves, the straight line is our preferred approach, as it unambiguously sends the desired market signal and incentivizes early compliance. Given the availability of banked credits, the straight line approach is feasible and will immediately motivate the market. The entire US fuels market is watching California's progress and will benefit from aggressive leadership given the increasing severity of climate change.

2. Price Cap- We support the adoption of transparent and predictable market rules to

[1] The US is a massive net importer of crude oil at a monthly value that ranged from 20-25 billion dollars per month during 2013. A small portion of this trade deficit is offset by finished petroleum product exports which ranged from 1-7 billion dollars per month during the same period. See US Energy Information Administration, Monthly Crude Oil Trade and Monthly Petroleum Products Trade, http://www.eia.gov/todayinenergy/detail.cfm?id=15151#tabs_SpotPriceSlider-2 (last viewed November 1, 2014).

LOW CARBON
FUELS COALITION
980 Ninth Street, 16th Floor
Sacramento, CA 95814
(916)668-4636
www.lcfcoalition.com

ensure that temporary shortages in the supply of low CI fuels or LCFS credits do not disrupt the market. Adoption of a Credit Clearance Market will protect markets in the event of a lack of liquidity. We support the proposed figure of \$200/ton as the price that triggers the credit clearance mechanism but do not support any downward compromise from this figure. In addition to the 3% interest rate ARB proposes on any carryover debt, adjusting for inflation at an additional 2-3% is warranted. Similarly, a price floor will sustain investor confidence and facilitate investment in the full range of low CI projects. We would propose that the floor be set based on an index that calculates a conservative present value for the social cost of carbon. Specifically, the U.S. Environmental Protection Agency ("EPA") has calculated the social cost of carbon for 2015 at \$39 per MT of $CO_2e$.[2] These steps will solidify investor confidence in the LCFS market opportunity.

3. Program Integrity- In line with creating transparent and predictable market rules, ARB should adopt rule proceedings in the event that fraudulent credit trades or other invalid activities are discovered in the market. Clearly defined rules dictating culpable parties and penalties will help market participants to behave within acceptable compliance boundaries, and may facilitate the discovery of fraudulent credits by ARB. We would recommend that ARB carefully consider the experience of the EPA in its enforcement of the Renewable Fuel Standard ("RFS"). Delayed prosecutions and a lack of attention to the collateral damage caused to good faith market participants undermined respect for the RFS program and the value of RFS credits. We would encourage ARB to insulate good faith market participants from disproportional impacts and to avoid wholesale invalidation of credits. Due to the complex and novel nature of environmental attribute markets, regulators and enforcement officials must exert concerted efforts to maintain the integrity of credits and respect for the overall program.

4. Predictable CI Scores- While lifecycle analysis is a continuously developing science, our members would like to emphasize that CI pathways should not be in constant flux. Long-term fuel off-take agreements are essential to industry expansion. These agreements require predictable LCFS CI scores rather than fluctuating and uncertain CI scores. Any updating of CI scores should be on a schedule that is firmly established in advance. Providing a clearly defined

[2] U.S. Environmental Protection Agency, http://www.epa.gov/climate/climatechange/EPAactivities/economics/scc.html (last reviewed November 1, 2014).

LOW CARBON
FUELS COALITION
980 Ninth Street, 16th Floor
Sacramento, CA 95814
(916)668-4636
www.lcfcoalition.com

process and timeline by which new science is incorporated into pathways will provide more investor certainty, and inform alternative fuel project development.

5. Expanded Credit Market- Expanding the credit trading market to third parties and developing an exchange will be consistent with the American free enterprise system, increase credit price transparency and the frequency of trades, reduce demands on ARB staff to participate in the market, allow ARB to focus on the regulation of credit transactions and credit verification, and facilitate harmonization with a LCFS credit market spanning multiple jurisdictions.

We look forward to working with you as you continue to strengthen and improve the LCFS. Please let me know if any clarification of these comments would be helpful.

Sincerely,

Graham Noyes
Acting Executive Director
Low Carbon Fuels Coalition