NATURAL RESOURCES DEFENSE COUNCIL

March 11, 2011

Michelle Buffington
Stationary Source Division
California Air Resources Board
1001 "I" Street
Sacramento, California 95814

Re: Request for Low Carbon Fuel Standard (LCFS) Advisory Panel Member's Priorities

Dear Mrs. Buffington,

The Natural Resources Defense Council (NRDC) identifies our top priorities for the LCFS Advisory Panel to consider, in response to California Air Resources Board (ARB)'s solicitation. We note that in the first meeting, the ARB staff identified and clarified thirteen (13) priorities areas already required by §95489(a) for the Advisory Panel to be reviewed. Where applicable, we identify where NRDC's priorities overlap with these required review areas.

Broadly, NRDC recommends that the Panel best serve ARB by (1) reviewing the areas broadly encompassed under §95489, (2) assessing and resolving potential concerns or gaps, and (3) making recommendations that will improve the program's implementation and success. We also urge ARB to ensure that the Advisory Panel remains productively focused on mechanisms to improve the LCFS, while avoiding having the Panel become a forum to reargue major policy decisions and structural design elements of the LCFS. The latter decisions and elements were already considered and heard during the multi-year, formal rulemaking process and voted on by ARB's Board. Instead, the Advisory Panel should move forward by accomplishing its purpose of reviewing the LCFS program and making recommendations on how the program can best meet its objective -- which is to reduce carbon emissions from the transportation fuels sector by 10% carbon-intensity by 2020. NRDC looks forward to working productively with Advisory Panel members to accomplish this goal.

NRDC's main priorities for the LCFS Advisory Panel include (in no particular order):

1. **The reviews required under §95489(a)(1), (2), (5), and (6) must include an assessment of the contribution to compliance from non-liquid low-carbon fuels.** Under the LCFS performance-based system, regulated parties have the opportunity to obtain credits both from liquid and non-liquid fuel suppliers. Current forecasts in non-liquid transportation fuels, including electricity and natural gas, point to the potential for a significant portion of compliance to be met through use of non-liquid, alternative fuels.

For example, the CEC forecast estimates that 2,500 to 2,900 GWh of electricity will be used in transportation applications in 2015, translating to 1.4 to 1.6 MMT CO_2 reductions under the LCFS.[1] NRDC rough estimate, based on this forecast, is that electricity could contribute 25 to 30% of the regulated parties' LCFS total compliance obligations in 2015. The panel should be provided with information on the potential contribution from all transportation fuel supplies in evaluating the fuel availability issue and whether adjustments to the compliance schedule are necessary (§95489)(a)(2)). An understanding of whether there are challenges for specific regulated parties versus the industry overall should also be conducted as part of the review. The Panel should focus on recommendations that help accelerate and streamline participation by non-liquid fuel suppliers in the LCFS program.

2. **Ensuring that low-carbon fuel providers have a viable credit trading platform to obtain value.** As part of the panel discussions, ARB should incorporate recommendations on how best to create a viable LCFS trading platform. As discussed during the first Advisory Panel meeting, the platform should reduce barriers to participation by low-carbon fuel suppliers. Improved mechanisms are necessary for the LCFS program to facilitate transparent price discovery and credit trading. NRDC refers ARB to the letter sent on October 8, 2009 on this issue.[2] This priority can be incorporated within the scope of §95489(a)(5) and (11).

3. **Considering Additional Mechanisms and Complementary Policies to Increase Ultra Low Carbon Fuel Volumes.** As required as part of the review under §95489(a)(6), NRDC recommends that Advisory Panel identify additional mechanisms and complementary policies that would result in greater amounts of ultra-low carbon fuels being produced and entering California. The Advisory Panel should consider information provide by actual developers and investors (both large institutional investors as well as venture capitalists).

4. **Preventing the 2006 gasoline and diesel average baseline values from worsening over time through the successful implementation of the high-carbon intensity crude oil provision.** The problem of a worsening gasoline and diesel baseline due to increased use of high carbon-intensity crude oils (HCICO) was identified and recognized early-on in the creation of the California LCFS. The University of California team, in their 2007 study, stated: "ignoring these differences in upstream emissions would invalidate the purpose of the LCFS to a significant degree."[3] Indeed, NRDC's current estimates point to the entire GHG emission benefits of the U.S. Renewable Fuels Standard being potentially offset by the increased use in high carbon-intensity crude oils enabled by current Keystone XL and TransCanada pipeline expansions alone. The HCICO provision (§95486(b)(2)(A)) of the LCFS helps ensure that the credit and debit accounting is kept

[1] P. 18, CEC (2009), *Transportation Energy Forecasts and Analysis for the 2009 Integrated Energy Policy Report*, http://www.energy.ca.gov/2010publications/CEC-600-2010-002/CEC-600-2010-002-SF.PDF

[2] "Re: Comments on the design of the LCFS credit market," Coalition of environmental and health-based non-governmental organizations, October 8, 2009.

[3] A.E. Farrell, D. Sperling (2007), "A Low-Carbon Fuel Standard for California: Part 2, Policy Analysis" August 2, 2007. UC Davis, Institute of Transportation Studies.

accurate and overall program benefits remain whole. ARB is currently in the process of developing mechanisms to implement this provision while working to reduce potential industry burden. ARB is currently (1) developing a screening tool that flags potential HCICOs, (2) limiting the vast majority of crude oil types based on their production method and flaring rates, (3) associating the emission factors of sources to the marketing crude type name for ease of reporting, (4) establishing a contract to develop a spreadsheet modeling tool and default carbon-intensity emissions factors (5) delaying the start of the provision, and (6) providing an interim carbon-intensity value with the opportunity to update with actual data submissions. As the HCICO Screening Workgroup works to implement the provision, NRDC recommends the Panel consider:

- What additional improvements can be made that will that will ensure accurate accounting for HCICOs while streamlining compliance
- What, if any, implementation challenges remain if ARB completes the planned work
- The impacts to the LCFS program if HCICOs are not differentiated from the baseline
- Whether equitable treatment is provided within the LCFS and for the alternative fuels market if large emission differences in crude oils are ignored
- Whether there are additional gaps in information or data that ARB should develop or require

This priority can be incorporated within the scope of §95489(a)(1) and (11).

5. **The Advisory Panel should be provided with an update on the progress of the Sustainability Working Group.** When the Air Resources Board (ARB or Board) approved the Low Carbon Fuel Standard (LCFS) on April 23, 2009, the Board directed staff in Resolution 09-31 to work with appropriate state agencies, environmental advocates, regulated parties, and other interested stakeholders to present a work-plan to the Board by December 2009 for developing sustainability provisions to be used in implementing the LCFS regulation. This work-plan has been finalized by staff, providing a framework for the Sustainability Workgroup (SWG) to produce recommendations - by December 2011 - on how sustainability provisions could be incorporated and enforced in the LCFS program.

We thank ARB staff and management for their time and consideration of these priorities.

Sincerely,

Simon C. Mui

Dr. Simon C. Mui
Scientist, Clean Vehicles and Fuels