

DEC 09 2011

Ms. Mary D. Nichols
Chairman
California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, California 95812
UNITED STATES OF AMERICA

Dear Chairman Nichols:

We are writing to seek clarification on several technical issues related to the October 26, 2011, implementing regulations for California's Low Carbon Fuel Standard (LCFS). We understand that you are preparing for the mid-December public hearing, but would be grateful for assistance to help us improve our understanding on the following questions:

1. *How will the California Air Resources Board (CARB) collect and verify carbon intensity (CI) data for the LCFS? Will jurisdictions that fail to provide transparent, verifiable information be assessed a higher CI?*

While Canadian industry and governments provide transparent, verifiable CI data, other jurisdictions may not be as forthcoming. We would encourage CARB to construct an implementing measure that incentivises transparency and penalises those who fail to do so. This will ensure that the CI of crude oils used are not based on estimates nor concealed within country or regional averages.

2. *How will the LCFS implementing regulations acknowledge other carbon management systems? In particular, will credits be allocated under the LCFS for other carbon management policies, such as carbon pricing?*

We note that the Province of Alberta has three carbon compliance options for industry: a 12 percent physical emissions reductions; the purchase of an accredited Alberta offset; or, a payment of \$15 per tonne to a fund that supports the development and application of transformative technologies.



Government
of Canada

Gouvernement
du Canada

Alberta
Freedom To Create. Spirit In Action.

3. *Has CARB assessed the economic impacts of the LCFS, including the extent of the potential costs of LCFS reporting?*

The impact of the reporting requirements on regulated parties is unclear.

4. *How did CARB calculate the CI value assigned to thermally enhanced oil recovery (TEOR); mining; and upgrading? How was the percentage of TEOR; mining; and upgraded crude oil calculated for Canada?*

It is unclear how CI assignment relating to TEOR, mining and upgrading, (20gCO₂/MJ) was calculated. Additionally, the regulation may be assuming that all heavy crude oil from Canada is derived from the oil sands. However, 11 percent of Canada's oil sands crude production is "cold production".

5. *Why does the LCFS include upgrading in the CI determination for oil sands crude and not for conventional heavy crudes?*

Upgrading takes place with all heavy crudes either in standalone facilities or in integrated refineries with upgrading capacity. Given this, oil sands crude and other heavy crudes would have similar CIs for this stage.

6. *Are the proposed baseline CI values and "Lookup Tables" an interim methodology-in place until Adam Brandt's life cycle assessment (LCA) tool is finalised?*

We understand that CARB has contracted Adam Brandt to develop an LCA tool to evaluate all crudes consumed in California using consistent criteria. Canada is concerned that if implementation is delayed, then the relatively imprecise values under the interim approach could persist over the longer term.

7. *How will the designated Executive Officer determine: (i) if a fuel's CI is higher than the Lookup Table value, and (ii) whether a new pathway is required?*

In order to determine incremental deficits resulting from failure to meet the State's GHG reduction targets, regulated parties must calculate the CI of their fuels. Treatment of higher GHG emitting fuels is somewhat uncertain, given that California's LCFS implementing measure was set up to deal with lighter fuels.



8. *Have all references to the High Carbon Intensity Crude Oil (HCICO) provision been removed from the proposed amendments to the LCFS?*

While all reference to the HCICO provision appear to have been removed from the LCFS, recent correspondence from CARB has continued to use the term HCICO in the context of the revised LCFS.

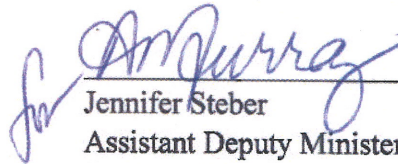
We sincerely appreciate the efforts that you and the CARB team have undertaken to ensure that the implementing measure is fair, proportional, and grounded in science. We wish to assure you that Canada fully supports the LCFS' policy goal of reducing GHG emissions and seeks to remain a stable, reliable and responsible crude oil supplier.

We look forward to better understanding the details of the LCFS and its implications for Canadian crude oil.

Yours sincerely,



Mark Corey
Assistant Deputy Minister
Energy Sector
Natural Resources Canada



Jennifer Steber
Assistant Deputy Minister
Resource Development Policy Division
Alberta Energy



Government
of Canada

Gouvernement
du Canada



Freedom To Create. Spirit To Achieve.