

December 15, 2011

The Honorable Mary Nichols Chairman, California Air Resources Board 1001 I Street P.O. Box 2816 Sacramento, CA 95812

Dear Chairman Nichols,

Re: California Air Resources Board Low Carbon Fuel Standard (LCFS) and its Treatment of Crude Oil

The Canadian Association of Petroleum Producers (CAPP) represents companies, large and small, that explore for, develop and produce natural gas and crude oil throughout Canada. CAPP's member companies produce more than 90 per cent of Canada's natural gas and crude oil. CAPP's associate members provide a wide range of services that support the upstream crude oil and natural gas industry. Together CAPP's members and associate members are an important part of a national industry with revenues of about \$100 billion-a-year.

Low Carbon Fuel Standards (LCFS) are intended to reduce the role of petroleum products from any crude source in the transportation system by increasing the role of alternative fuel sources such as biofuels and electricity. CAPP does not take issue with efforts in support of and objectives to achieve carbon reductions by jurisdictions.

CAPP has reviewed the low Carbon Fuel Standard 2011 Program Review Report and with special interest, the chapter covering the treatment of High Carbon Intensity Crude Oil (HCICO). We understand that several alternative approaches to HCICOs were considered and that the California Air Resources Board (CARB) proposes a "California Average Approach". CAPP understands that this approach will calculate the average Carbon Intensity (CI) of crudes in the California basket on an annual basis and compare it with the baseline year. This approach is intended to deal with any increases in the share of high CI crude oils used in the state by requiring companies to make proportionate reductions should the average CI increase.

Calculation of Carbon Intensity

We appreciate that the specific treatment of oil sands crude as a HCICO has been removed, to the best of our understanding, but continue to believe that the appropriate treatment for crude oils in an LCFS is to maintain a single carbon intensity value for all crude sources. A significant issue is how

to transparently and accurately calculate the carbon intensity value of other crude sources. The fact that there is a broad range of possible intensities associated with the production and transportation of crude oil, and the methods to determine these intensities are not applied consistently results in an apples-to-oranges comparison of GHG emissions intensities. For example; boundary definitions, allocation type and treatment of inputs within the life cycle analysis may vary depending on the study and methodology.

CAPP questions how CARB intends to collect and verify the CI data from all jurisdictions. While the Canadian oil and gas industry provides transparent and verifiable CI data, many other jurisdictions do not. The absence of credible and verifiable data on emissions associated with their production creates the risk of inaccurate calculation of life cycle values. As a minimum, should CARB continue to pursue differentiation of crude sources, CAPP believes it is imperative that CARB develop a measure that requires a high level of transparency in reporting CI data and provides a clear penalty for those jurisdictions that do not.

CAPP is unclear on the calculations applied to Canadian crudes as the proposed approach uses production averages for Canada that are not representative of the actual Canadian production mix which today includes close to half from conventional oil and half from the oil sands. The relative weight of thermally enhanced oil recovery (TEOR), mining and upgrading is higher than the actual value. For example, the regulation appears to value all heavy crude is derived from TEOR methods, whereas 11 percent of oil sands crude is in fact 'cold production' that does not use TEOR. In addition, it appears that the regulation includes upgrading in the CI valuation for oil sands crude, but does not include upgrading for conventional heavy crudes.

Technological Innovation

Over the past 40 years, the Canadian oil sands industry has continuously developed leading edge technologies and incorporated these technological improvements to make significant reductions in GHG emissions intensity on a per barrel basis. These advances have resulted in a 29% reduction in GHG intensity since 1990 (Environment Canada – 2011 National Inventory Report). The length of time over which this technological innovation has been occurring clearly shows that Canadian oil sands producers are motivated to ensure continual improvement.

Recognition of Other Carbon Management Systems

An ongoing concern for CAPP is the persistent lack of recognition for existing carbon management systems, leading to duplication of policy. CAPP believes that emissions should be managed in the jurisdiction in which they occur. In the Canadian context, we would draw CARB's attention to the existing Alberta regulation that places a clear and unambiguous price on carbon emissions.

CAPP commends California for addressing GHG emissions reduction policy, but strongly urges a reconsideration of the policy details. CAPP is emphasizing that treating all crude oils equally reduces the risk of unforeseen consequences, such as crude shuffling and the associated increase in overall GHG emissions, and will result in a better, more streamlined and administratively simpler policy. We appreciate the opportunity to provide these comments and look forward to continuing engagement on these issues.

Yours truly,

Greg L. Stringham

Vice President, Markets & Oil Sands

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