



BP America, Inc

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Via Email

Sam Wade
California Air Resources Board
1001 I Street, Sacramento, CA

Re: BP Comments on CARB's December 13, 2016 LCFS Workshop on Co-Processing of Biogenic Feedstocks in Refineries

Dear Sam:

BP appreciates the opportunity to provide feedback on the California Air Resources Board (CARB) Low Carbon Fuel Standard (LCFS) Co-Processing workshop on December 13, 2016.

BP has experience with co-processing of bio-genic feedstocks within its refining operations across three continents. As such, we take great interest in the development of regulatory incentives that may encourage participation within this field. We wish to make the following comments regarding the December 13th public workshop.

Work Group Objectives

With respect to the objectives laid out for the above workshop, there was an absence of any reference to the identification of *supply and logistics* barriers and potential solutions to incent co-processing deployment.

BP is a major fuel supplier to the state and an obligated party under the California LCFS program. We regularly import fuel from our refinery in Washington State. Co-processing by its very nature means that the bio-component cannot be segregated from fossil fuel and as such, co-processed product should enter a fungible system much in the same way as biogas or green electricity would do.

The fungible nature of co-processed liquid fuel means that it would be extremely challenging, and a disincentive to potential investment in out of state refinery co-processing, if every physical bio-molecule had to be tracked to and used within California in order to qualify for California LCFS credits.

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Comments to California Air Resources Board on LCFS

Given the above, BP would request that CARB consider supply and logistics challenges for out of state co-processing as part of the scope of the co-processing work group.

BP's recommendation to CARB would be for the adoption of a mass balancing approach with ability to match (on paper) out of state co-processed production volume against in-state sales of finished fuel. This approach to mass balancing biofuel in the supply chain is not a novel idea. Such an approach is being supported by EU member states and International Sustainability & Carbon Certification ¹(ISCC) within Europe. There is also precedent for this approach with non-liquid fuels such as biogas within the California LCFS program.

Ultimately, if the end goal is to encourage CO₂ reduction through the ability to generate LCFS credits, then consideration is needed for LCFS obligated parties with refining operations outside of the state of California. We believe that overcoming potential supply and logistics barriers through the application of mass balancing bio co-production against in-state sales/obligation will help achieve this goal.

Other opportunities for co-processing

BP is supportive of efforts to encourage green hydrogen from Renewable Natural Gas (RNG) for use in refinery co-processing. In particular, the ability to match paper contracts in a manner similar to how RNG is treated for fleet end usage (as presented within the workshop) would be an acceptable, pragmatic approach. However, we would suggest that there is potentially a much broader application for green hydrogen than simply linking the scope to co-processing and would suggest that the concept of green hydrogen from RNG be given a broader consideration for refinery production.

Renewable volume quantification

On the subject of renewable volume quantification, there appeared to be consensus from the subject matter experts presenting at the workshop that ¹⁴C testing is problematic and that a mass balanced approach held many advantages over the aforementioned method of quantification. BP fully supports taking a mass balancing approach for renewable volume quantification.

As always, please feel free to contact me if you wish to discuss these comments in more detail.

Sincerely,

Ralph J. Moran
BP America, Inc

¹ <http://www.iscc-system.org/en/>