September 18, 2014

Wes Ingram

Fuels Evaluation Section

California Air Resources Board

Submitted electronically via ARB webpage at http://www.arb.ca.gov/fuels/lcfs/2a2b/2a-2b-com.htm

**Re: Official written comments from the National Biodiesel Board on Low Carbon Fuel Standard Fuel Pathway for Corn oil biodiesel from corn oil co-produced with wet distiller's grains with solubles (BIOD021)**

Dear Mr. Ingram:

We commend the California Air Resources Board (ARB) for establishing this additional pathway for biodiesel made from existing renewable feedstocks. This pathway will increase the availability of low-carbon biodiesel available to meet greenhouse gas (GHG) reduction goals under the Low Carbon Fuel Standard (LCFS).

As the biodiesel industry grows in volume production, our member producers make more efficient utilization of installed production capacity. Growth in the biodiesel industry also results in innovation and more optimal utilization of existing feedstocks. Corn oil from ethanol plants, also known as distillers’ corn oil, is a shining example of successful growth of the biodiesel industry leading to innovation and development of new feedstocks. 2013 was a tremendous year for biodiesel. The enthusiastic growth of biomass-based diesel was matched by record increases in feedstock diversity and GHG reduction. While the national industry grew by 55 percent as a result of the federal Renewable Fuel Standard, the most significant volumes of new feedstocks came into use from distillers corn oil, used cooking oil, animal fats, and various other sources. Together, these wastes and new feedstocks grew by 88 percent in 2013[[1]](#endnote-1). Among these, distillers’ corn oil has been growing most dramatically.

The US biodiesel industry came into being to solve economic problems related to a glut of soybean oil stranded on the domestic market. Domestic production and crush of soybeans to produce livestock feed created a surplus of soybean oil in excess of that used for food products. While export markets for whole soybeans thrive, importers find greater profit margin in transporting whole beans to produce protein meal and vegetable oil in foreign markets. Potential importers of US-produced soybean oil face a lower (and therefore infeasible) rate of return compared to importing whole beans. Therefore, a domestic use of this surplus soybean oil was needed. As the biodiesel industry works collectively to establish policy, infrastructure, and OEM (Original Equipment Manufacturer) support for biodiesel as a fungible compliment to diesel fuel; we have realized that growing a diverse biodiesel industry can solve additional problems related to energy security and GHG emissions. The momentum derived from finding a use for surplus soybean oil has morphed into finding other feedstocks that can add to biodiesel’s ability to reduce GHGs, displace imported oil, and support domestic jobs. Distillers’ corn oil is an example of industry innovators responding to that call. Before 2010 there was relatively little corn oil being extracted from distillers’ grains. In 2013, over 1 billion pounds of distiller’s corn oil were used to produce biodiesel and 2014 is on track to surpass 2013.[[2]](#endnote-2) The policy signals to increase biodiesel production resulted in rapid growth of corn oil extraction. No new crops need to be produced in order to acquire this corn oil. No change in ethanol output is required. Distillers’ corn oil is pulled out of the byproduct stream of ethanol production with no negative impact on the economic value of that byproduct. While the nutritional value of distillers grains with solubles (DGS) is slightly changed, with offsetting impacts on feed quality depending on the species; considerable research indicates that the new lower fat DGS have approximately the same value in the feed market as conventional DGS.[[3]](#endnote-3),[[4]](#endnote-4),[[5]](#endnote-5) Ethanol producers realize higher economic return from their process, because federal and LCFS policy create incentive to create biodiesel from their byproduct stream. The incentive to increase biodiesel production is the essential factor in making this utilization of byproduct a reality. Other uses for distillers corn oil, such as livestock feed would not provide the incentive to extract this oil without policy driving biodiesel.

For the reasons stated above, ARB’s decisions regarding allocation of emissions for producing distillers’ corn oil are correct. Also correct is ARB’s determination that distiller’s corn oil is available for biodiesel with no indirect land use change. Distillers’ corn oil did not exist as an economic commodity before the draw to use it for biodiesel production. Therefore, it is not being taken away from another market. The relative identical price of DGS with or without oil extraction proves oil extraction has no economic impact on DGS users. Furthermore, ARB should consider factoring in the existence of distillers’ corn oil in reducing the indirect impact of other biodiesel feedstocks. The evolution of the biodiesel industry and its origins based on soybean oil utilization spurred these developments in corn oil extraction. While the National Biodiesel Board disagrees that the response to domestic biodiesel production from vegetable oil is the expansion of oilseed production internationally; we assert that corn oil extraction is a market response to successful growth of the biodiesel industry. The growth of corn oil extraction is proof that the biodiesel industry can innovate to find new feedstocks without disrupting other markets. The discovery of distillers’ corn oil going into biodiesel as well as that going into animal feed markets should be counted as additional to the global fats and oil markets as a credit to the biodiesel industry. This ultimately reduces the indirect impact of biodiesel from various feedstocks.

Specific to the documents posted on the ARB website regarding this new pathway, we note that the pathway addresses corn oil extraction in nine specific states. We would suggest inclusion of corn oil produced in all of North America. Emissions from transportation are relatively small differences in the lifecycle. Inclusion of more states and Canada would further incentivize production of low-carbon fuel. Similarly, biodiesel produced in all of North America should be included for maximum inclusivity of the broadest possible pathway. Additional pathways for specific regions with lower emissions could be added later.

The addition of this new pathway is beneficial, because it will allow the use of corn oil from ethanol plants that sell wet DGS. It is also beneficial to allow flexibility in using this new pathway for plants that may sell some of their DGS as wet or dry. We stress the importance of maintaining the previous pathway for plants that dry their DGS. Businesses have made strategic investments based on existing pathways. It is important to preserve consistency in the treatment of corn oil from dry DGS for the sake of building a sustainable biodiesel industry as well as implementing a successful LCFS.

We look forward to improving the accuracy of all biodiesel pathway assessments and the recognition of new and beneficial biodiesel feedstocks. We welcome any question you have about these comments or requests for further clarifying data.

Sincerely,

Don Scott

Director of Sustainability

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1. Energy Information Administration <http://www.eia.gov/biofuels/biodiesel/production/> provides feedstock data for biodiesel. [↑](#endnote-ref-1)
2. Ibid. [↑](#endnote-ref-2)
3. Centrec Consulting Group, (1012) “Reduced-oil distillers’ dries grains with solubles”, for the National Biodiesel Board. [↑](#endnote-ref-3)
4. The Plains Nutrition Council, 2013 Spring Conference. 2013: Amarillo, TX. [↑](#endnote-ref-4)
5. University of Nebraska Extension, 2013 Beef Cattle Report, UNE Agricultural Research Division, Editor. 2012: Lincoln, NE [↑](#endnote-ref-5)