Biotechnology Industry Organization Comments to the California Air Resources Board

On the Notice of Public Availability of Modified Text and Availability of Additional Documents and Information for the Proposed Re-adoption of the Low Carbon Fuel Standard June 19, 2015

The Biotechnology Industry Organization (BIO) appreciates the opportunity to submit comments on the modified text and additional documents and information for the proposed re-adoption of the Low Carbon Fuel Standard (LCFS).

BIO is the world's largest trade association representing biotechnology companies, academic institutions, state biotechnology centers and related organizations across the United States and in more than 30 other nations. BIO members are involved in the research and development of innovative healthcare, agricultural, industrial and environmental biotechnology products. BIO represents nearly 90 companies leading the development of new technologies for producing conventional and advanced biofuels that could be used in the California market. Through the application of industrial biotechnology, BIO members are improving conventional biofuel processes, enabling advanced and cellulosic biofuel production technologies and speeding development of new purpose grown energy crops.

BIO and its members support California's efforts to reduce the carbon intensity of transportation fuels through the LCFS regulation. Unfortunately, the proposed modifications to provisional pathways in sections 95488 (c) (3) and (c) (4) (1) (2) would create a serious barrier to entry for any new advanced biofuel coming to market. Indeed, these modifications would be an undue burden on the very fuels that California seeks to incentivize.

As CARB states on p. 53 in the provisional pathways section 95488, "applicants are required to have been in full commercial production for at least one full calendar quarter before applying for a new pathway".

BIO believes that requiring months of commercial production status just to apply for a new pathway seriously disadvantages new fuels and disincentivizes refiners from incorporating new feedstocks into their blending mix for a multitude of reasons, for example, the undue administrative burden placed on the refiner to test and qualify a new feedstock. Further, biofuel refiners use an array of feedstocks – from soy oil, cooking oil, tallow, etc. They also blend feedstock to produce biodiesel and renewable diesel. The way that feedstocks are processed at a facility in the span of three months would make it almost impossible to provide consistent data for a new feedstock in that timeframe. Moreover, the pre-qualification would significantly delay the timeframe to monetize credits --- it can take an operation one year before its pathway is secured from ARB --- and with the provisional credit proposal, there would be an even longer delay.

As CARB states on p. 54 in the provisional pathways section 95488, "the applicant is provided only "provisional" credits and may not sell credits for 2 years".

BIO strongly urges CARB to allow credit trading for provisional pathway approvals as soon as provisional status is granted. CARB's current proposal would be extremely harmful to new entrants in the market since it would deny monetization of credits for two years. Without the ability to monetize, the economic incentive to sell new advanced biofuels in California is basically gone. In addition to the devastating economic impacts, new feedstock providers who partner with numerous refiners have to start the two year clock anew with each refining partner, which would create a proliferation of pathways for ARB to review.

To conclude, we strongly urge the Air Resources Board to reformulate the pathways section in a way that encourages new feedstocks and fuels to commercialize and contribute to a low carbon economy. If additional verification of carbon intensity data is needed, is it possible to set a requirement to submit operational data after two years and make the carbon intensity adjustment

at that point? Please do not hesitate to contact BIO for any additional data or information that may help to further the success of the LCFS. Thank you.