

Pat McDuff

18-7-4

September 27, 2018

Ms. Mary D. Nichols
California Environmental Protection Agency
Air Resources Board
1001 I Street
Sacramento, CA 95814

**Subject: "Responses to Comments", Response FF2-0
& An Alternate View on Bifurcation**

Dear Ms. Nichols,

We have reviewed CARB's "Responses to Comments", dated September 17, 2018 and focused on the subject response. California Fueling maintains its position regarding the practical concerns associated with the proposed ADF bifurcation concept. **The clarifications noted in CARB's subject comments differ significantly from our views and are worthy of further consideration before ruling on bifurcation.**

Summary

The infrastructure to blend biodiesel into diesel fuel is limited and cumbersome (see Attachment I for a pictorial view). There has been little to no capital investment made at fuel terminals to blend NOX Mitigant required levels of biodiesel which are splash blended. As a result, there's an inherent bottleneck to supplying biodiesel blends. CARB's forecasts show growth of biodiesel over time yet don't address the constrained assets to deliver those biodiesel volumes to the marketplace.

The most significant biodiesel users are the trucks stops (on-road diesel). With a constrained biodiesel distribution system and the inevitability of bifurcation, all efforts are likely to be on-road focused leaving the off-road market neglected. The off-road vehicle population is more aged, and those older engines typically emit more criteria pollutants. If biodiesel does not make its way into the off-road market or if off-road volumes decrease, emissions will increase in areas of high off-road vehicle populations.

Bifurcation takes the approach of addressing separate markets, on and off-road B20, whereas the entire biodiesel market should be considered as a whole. Lastly, there are outstanding questions associated with New Technology Diesel Engines (NTDE's), emissions from such when operating on B20, and the potential negative environmental impact. In the best interest of the environment, bifurcation should not be considered at this time. It's far easier to add bifurcation at a later date as opposed to sending a message to the marketplace now

that bifurcation will be implemented which will slow the advancements of B20 in the off-road market.

California Fueling has significant market experience promoting the use of B20 through our CARB approved NOX Mitigants. We have made our concerns known to CARB. We would appreciate if CARB could investigate our positions, determine if they are correct and, in the meantime, not rule on bifurcation until a full investigation can be completed. Following is an excerpt from the subject document (www.arb.ca.gov/regact/2018/lcfs18/rtcea.pdf) which outlines the differences in viewpoints.

Comments FF2-0 states as follows:

“The commenter suggests that bifurcation of the ADF NOx mitigation sunset could increase criteria pollutant exposure in areas of high off-road vehicle populations, presumably due to decreased access to and use of B20 and corresponding increases in conventional diesel use. Staff disagrees with the commenter’s suggestion that access to B20 would likely be reduced for off-road applications following the sunset of in-use requirements for biodiesel in the on-road sector. **Because diesel fuel for on-road and off-road applications is already segregated to accommodate the road tax exemption for off-road vehicles and equipment, no additional tankage or rail cars are reasonably likely be needed to support staff’s bifurcation proposal. For the same reason, no additional costs related to additional storage capacity would likely be incurred to store additized B20 for off-road applications following the sunset of in-use requirements for on-road vehicles. Therefore, access to B20 would not be likely to be reduced, and a decrease in off-road B20 volumes in any portion of the diesel market, and any associated increases in criteria pollutants, would not be reasonably foreseeable.**”

Clarifications are as follows:

1. “diesel fuel for on-road and off-road applications is already segregated”
 - a. Clarification: on-road and off-road diesel **are not** segregated fuels; the diesel portion of on and off-road fuel is identical. What makes off-road diesel different from on-road is that dye is added to diesel at “terminals” as fuel is loaded into a tank truck. Red dye is not added to diesel fuel in bulk tankage.

Terminals handle biodiesel, but in most cases do so to blend B5 only. To our knowledge, there is **one** fuel terminal that blends B20 in tankage. If bifurcation was adopted, this terminal would be faced with blending off or on-road diesel, but not both unless an additional tank was placed in service.

2. “no additional tankage or rail cars are reasonably likely to be needed to support staff’s bifurcation proposal”

- a. Clarification: in an ideal world CARB is correct, the addition of NOX Mitigant would occur like red dye, added just before a tank truck is loaded at a terminal. To our knowledge, there is one fuel terminal in California that has the ability to do so. For the most part, NOX Mitigant is not added at a terminal but at a separate location where biodiesel is stored. B20 blending occurs “under the rack”, downstream of the terminal. The process to tank truck blend biodiesel with diesel “under the rack” is known as “splash blending”, mixing one component, diesel fuel, with another, biodiesel.

NOX Mitigant is presently added into bulk biodiesel storage tanks which are not located at fuel terminals. With bifurcation, there’s an added element of complexity. Two types of biodiesel would be required – one with NOX Mitigant, for off-road diesel, and one without, for on-road diesel. Segregation of on and off-road biodiesel would have to occur. As a result, twice as many biodiesel storage tanks, railcars, etc would be required to provide two types of biodiesel. The only workaround is if NOX Mitigant, like red dye, would be added as biodiesel is loaded into a tank truck. To our knowledge, the workaround option has not been adopted in the marketplace because of the costs associated with the equipment to do so.

3. “For the same reason, no additional costs related to additional storage capacity would likely be incurred to store additized B20 for off-road applications following the sunset of in-use requirements for on-road vehicles.”
 - a. Clarification: Based on 2.a. above, bifurcation would require twice as many biodiesel tanks. Twice as many tanks means double the costs. Additionally, B20 is not stored in bulk storage (aside from when it’s delivered to the end user), it’s splash blended as noted above.
4. “Therefore, access to B20 would not be likely to be reduced, and a decrease in off-road B20 volumes in any portion of the diesel market, and any associated increases in criteria pollutants, would not be reasonably foreseeable.”
 - a. Clarification: There is not an infinite number of biodiesel tanks available in California. Biodiesel is being stored at facilities across the state. If a bifurcation concept is adopted biodiesel providers will face the following choices:
 - i. Lease more biodiesel tankage and invest in equipment to add NOX Mitigants, or

- ii. Focus on the bigger on-road B20 market, which is twice as big as the off-road market, not lease any more tankage or railcars and not purchase NOX Mitigant.

In our estimates, further capital will not be invested, and the focus will be on-road diesel. Supporting this conclusion is the fact that only one terminal has invested in the equipment to add NOX Mitigant as tank trucks are loaded with B20.

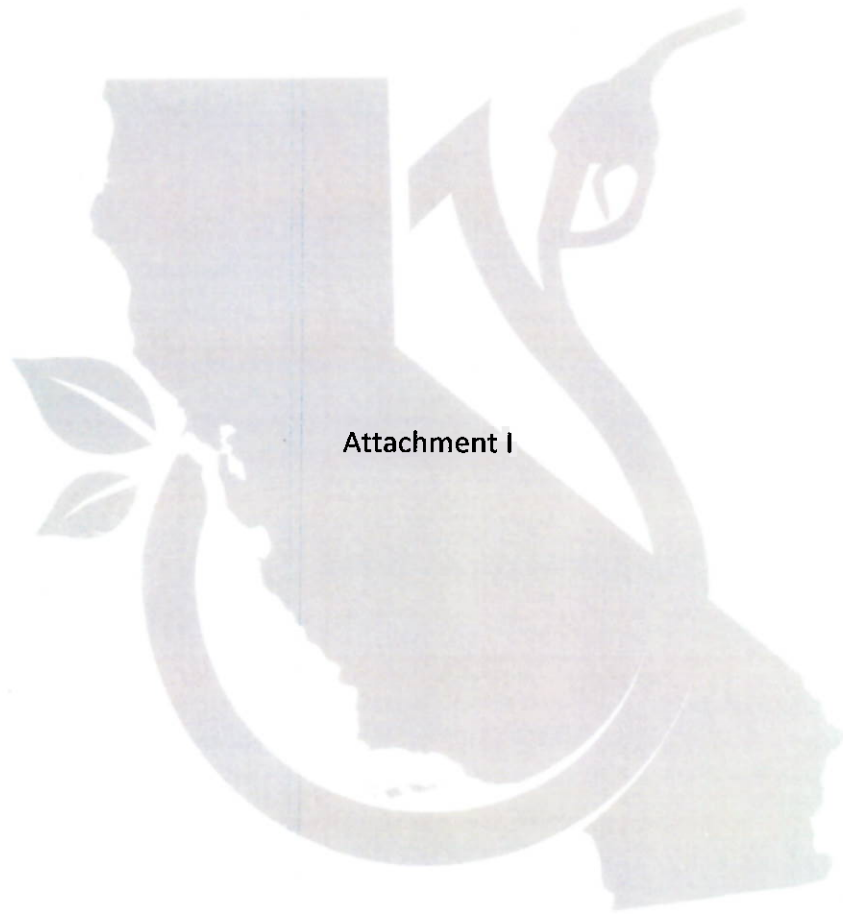
Closing

Bifurcation means another fuel in an already congested marketplace. The B20 market is in development; there's much work to be done to increase its market penetration. Presently, the majority of B20 is used on-road. If bifurcation is adopted now, less effort will be placed on developing the off-road B20 market. The inevitability of bifurcation is that off-road B20 will require a separate fuel in the marketplace. CARB has ruled on the side of conservatism on most LCFS and ADF related issues. The more conservative decision, based on the facts available at present, would be to walk back bifurcation until the B20 market further develops. What's the harm in holding off on bifurcation when doing so poses no risk?

Sincerely,



Patrick J. McDuff
CEO



Attachment I

Fuel Terminal



- On and Off-Road Diesel is loaded on tank trucks. For off-road diesel, red dye is added into the piping (see below) just before the fuel enters the tank trucks.



Biodiesel Terminal

Scenario 1



- Biodiesel is stored in railcars. NOX Mitigants are added to railcars. Biodiesel with NOX Mitigant is then loaded into tank trucks. Diesel fuel is typically not stored at biodiesel facilities. Biodiesel is then splash blended with diesel to make B20
- Example: a tank truck will load 6,000 gallons of diesel fuel at a fuel terminal. The tank truck will then proceed to a biodiesel storage facility and load 1,500 gallons of biodiesel. The result: 7,500 total gallons of B20.

Biodiesel Terminal

Scenario 2



- Biodiesel is stored in tanks and loaded into tank trucks at separate facilities that do not store fuel(s). NOX Mitigant is added to biodiesel bulk storage tanks in this example. Most biodiesel storage facilities don't have the means to add NOX Mitigant as biodiesel is added into tank trucks.

Splash Blending



- Tank trucks will go to a fuel terminal and load diesel. That same truck will then travel to a biodiesel storage facility and load. Alternatively, biodiesel can be loaded first after which diesel is loaded. The two components, diesel and biodiesel, are readily miscible.

End Users of B20



- The biggest consumer of on road B20 are the truck stops



- The off road B20 market is in development