

29 October 2014

California Air Resources Board  
Alexander Mitchell  
Air Pollution Specialist  
**Sent via** amitchel@arb.ca.gov

Re: Public Meeting to discuss Alternative Diesel Fuels (ADF) Regulation  
October 20, 2014

Dear Mr. Mitchell:

Thank you for the opportunity to provide comments to the California Air Resources Board (CARB) regarding its proposed Alternative Diesel Fuels (ADF) regulation. The following comments are respectfully presented to CARB for consideration from Neste Oil US, Inc., a Texas based company, which is a subsidiary of Neste Oil Oyj.

In the October proposal, staff offered a revised analysis of NOx emissions from biodiesel use that considered potential impacts from the use of new technology diesel engines (NTDEs) and renewable diesel. Specifically, staff determined that increased penetration rate of NTDEs combined with increased volumes of RD warrants a higher significance threshold for biodiesel blend use under which there are no significant increases in environmental NOx.

**Question 1: How does staff reconcile the drivers of mandated use of NTDEs with the voluntary use of low-NOx renewable diesel?**

Staff has properly analyzed the increasing use of NTDE as a positive mitigation factor on NOx emissions from biodiesel blends. This is based on both historical trends as well as existing regulatory requirements. The current amendments to the Truck and Bus Regulation (title 13, CCR, section 2025) require non-exempt diesel vehicles to reduce emissions of particulate matter and oxides of nitrogen and other criteria pollutants by replacing, upgrading, or retrofitting engines to comply with increasing engine emission control standards. Therefore, it is reasonable for staff to assume that NTDE penetration will continue to increase and would continue to have an impact on NOx reductions of alternate fuels and fuel blends.

However, there is no such corresponding requirement for the consumption of renewable diesel. Instead, staff points to historical data of renewable diesel consumption and the drivers associated with the State's Low Carbon Fuel Standard. While the LCFS might be a current demand driver in favor of low-NOx renewable diesel, there is no continuing certainty or reliability that such volumes would be available for NOx reduction considerations in California considering global fuel market variations, state and federal regulatory uncertainties, and similar but more codified demand for low-NOx physical characteristics from other jurisdictions and markets.

The current proposal assumes and relies on a lower-NOx profile of the diesel pool without controlling whether or not it would actually be achieved.

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## **Question 2: What is the basis for staff to assume that continued volumes of renewable diesel will be available to justify the change in the biodiesel blend threshold?**

The Low Carbon Fuel Standard, by its stated purpose, is fuel neutral - that is it does not advocate one type of fuel or carbon reduction method over another. Rather, it leaves the compliance options open to the regulated parties. While it may be true that renewable diesel has been a compliance option under the LCFS to date, there remains no reliable driver to ensure continued (or even increasing) volume trend for the purposes of the ADF.

Much uncertainty remains surrounding the LCFS program and its ability to attract low-NOx diesel fuel to California:

- The inability of CARB to timely develop and approve new renewable diesel pathways will have a strong limiting effect on future renewable diesel volume increases;
- The uncertainty surrounding the carbon reduction schedule will continue to create low-carbon market demand uncertainty and price uncertainty; and
- The potential implementation of an LCFS credit price cap could have a limiting effect on fuel price offerings, thereby reducing fuel availability in favor of more price-attractive markets.

These uncertainties are compounded by federal issues including RIN price instability and changes to federal tax policy regarding renewable fuels and biofuel blending - changes to which will likely have significant economic impact considerations for low-NOx renewable diesel fuel producers irrespective of the LCFS or ADF.

It is not unreasonable to assume that other global markets and jurisdictions that have a codified preference and stable corresponding policy for both the low-carbon and low-NOx characteristics might be more appropriate for renewable diesel availability than a market and jurisdiction that assumes such availability without both drivers.

## **Question 3: What is staff's basis for not considering low-NOx diesel fuels in addition to renewable diesel?**

Previous draft regulation proposals provided physical property specifications for fuels that staff considered low-NOx diesel base fuel. That aspect of the proposals was technology neutral and allowed for traditional diesel refiners (as well as new technology diesel fuels) to produce a low-NOx fuel as a blend component to mitigate NOx emissions from alternate diesel fuel blends.

The hardware solutions to reduction in diesel emissions have been implemented by the Truck and Bus regulation. Additional progress reasonably remains available on the fuel side. Increased availability of low-NOx diesel base fuels can partner with hardware NDTE solutions to achieve NOx emission and other pollutant criteria objectives.

Inclusion of either required blends of low-NOx diesel or ability for fuel suppliers to remain compliant via blending choices would be positive steps in managing diesel emissions.

## **Question 4: What is the basis for staff to assume that low-NOx renewable diesel is (or will be) blended into the existing diesel stream on an equal or pro rata basis?**

Hydrocarbon, renewable diesel meets ASTM D975 and CARB diesel specifications. Accordingly, it can be used neat or in a blend. The positive cold-flow properties, higher cetane, and lower aromatics allow users of low-NOx renewable diesel to value its physical performance separate and apart from just its low-carbon characteristics.

It is not unreasonable to assume that low-NOx renewable diesel consumption might increase on a state-wide basis, but at the same time both regional considerations as well as customer performance objectives might require focused and higher use, thereby creating usage imbalance and limiting the blend level in the remaining traditional diesel blend pool.

## **Question 5: Will CARB lead in resolving the FTC labeling roadblock to meeting California's low-NOx diesel fuel volume needs?**

The US Federal Trade Commission has a labelling rule that requires labeling of quantities of higher than 5 percent of low-NOx renewable diesel despite the fact that it is otherwise a fungible fuel with minimal consumer concerns or vehicle or infrastructure limitations. Absent CARB's leadership in developing an alternate labeling solution, or eliminating the need for such labeling within the state, increased use of low-NOx renewable diesel and increased blend levels remain an obstacle to the assumption that such fuel will widely be available as a NOx mitigant for alternative diesel fuel blends. We suggest CARB consider taking the lead in working with the FTC to resolve, rather than placing that burden on individual low-carbon, low-NOx fuel providers who are responding to the state of California's volume and emissions requirements.

## **Conclusion**

Neste Oil remains committed to its successful strategy of focusing on the production of cleaner traffic fuels. It agrees that NEXBTL Renewable Diesel can be a compliance option for both carbon reductions and tailpipe criteria emission reductions. Neste Oil is supportive of California's need to regulate NOx emissions and encourages staff to design the regulation considering the questions raised above that allows regulated parties reasonable certainty and reliability. If staff sees increased use of renewable diesel as an important part of ADF compliance, Neste Oil encourages staff to separately codify those requirements or options so that regulated parties and low-NOx fuel providers can properly evaluate available compliance options.

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