National Biodiesel Board
605 Clark Ave.
PO Box 104898
Jefferson City, MO 65110-4898
(800) 841-5849 *phone*
(573) 635-7913 *fax*

National Biodiesel Board
1331 Pennsylvania Ave., NW
Washington, DC 20004
(202) 737-8801 *phone*

www.biodiesel.org

December 23, 2016

Via Electronic Mail

Gina McCarthy
Administrator
United States Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, N.W.
Mail Code: 1101A
Washington, DC 20460

ATTN: Docket ID No. EPA–HQ–OAR–2014–0827

Re: Request for Reconsideration of Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium-and Heavy-Duty Engines and Vehicles—Phase 2, Final Rule, 81 Fed. Reg. 73,478 (Oct. 25, 2016)

Dear Administrator McCarthy:

On July 13, 2015, EPA published its proposal for Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles-Phase 2, 80 Fed. Reg. 40,138. *See also* 80 Fed. Reg. 53,756 (Sept. 8, 2015). "Heavy-duty trucks are the second largest segment and collectively make up the biggest increase in the U.S. transportation sector in terms of emissions and energy use." NHTSA Aug. 16, 2016 Press Release, *EPA and DOT Finalize Greenhouse Gas and Fuel Efficiency Standards for Heavy-Duty Trucks: Standards address second largest segment of U.S. transportation in terms of emissions and energy use*, https://www.nhtsa.gov/press-releases/epa-and-dot-finalize-greenhouse-gas-and-fuel-efficiency-standards-heavy-duty-trucks. The National Biodiesel Board (NBB) submitted comments on this proposal, urging EPA to provide incentives to promote vehicles that can use alternative fuels, including higher biodiesel blends as Congress envisioned. The final rule provides some incentives for promoting alternative fuels and vehicles, but not renewable fuels or vehicles that support B20 or higher biodiesel blends. The agencies' response simply states that the comments are germane to the Renewable Fuel Standard (RFS) program. *See* EPA and NHTSA, Response to Comments for Joint Rulemaking, EPA-420-R-16-901, at 2120 (Aug. 2016). The response ignores the goals of the Energy Independence & Security Act, as outlined in NBB's comments, which are attached and incorporated by reference herein, in promoting renewable fuel production, distribution and use through various programs, not just the RFS. These goals include reducing reliance on petroleum fuels, promoting advanced fuels and technologies, and reducing

greenhouse gas emissions. Supporting engines and vehicles that utilize higher blends of biodiesel meets these goals.

Another problem with the agencies' response (or lack thereof) to the comments raised is that it ignores that the agencies initially declined to provide incentives under the greenhouse gas emissions and fuel economy requirements based on the incentives already provided under the RFS program, *which provided statutory minimum renewable fuel requirements*. The agencies' continued reference to this program is problematic because, today, EPA is not implementing the statutory volumes. Rather, EPA is restricting growth of biofuels under the RFS program, particularly biomass-based diesel, based on purported "constraints" of getting biofuel supply to consumers, including availability of vehicles that are approved for use of higher biodiesel blends. *See* 81 Fed. Reg. 89,746, 89,785-89,786 (Dec. 12, 2016). Indeed, while stating here that these comments are germane to the RFS program, EPA did not respond to NBB's comments on these same issues under the RFS program, agreeing only that fuel is not warranted under vehicle approvals. *See* EPA, *Renewable Fuel Standard Program Standards for 2017 and Biomass-Based Diesel Volume for 2018: Response to Comments*, EPA-420-R-16-019, at 160 (Nov. 2016). EPA cannot have it both ways. It cannot claim there are sufficient incentives for biodiesel under the RFS, but then refuse to increase those incentives because there are insufficient B20 or higher vehicles on the road. There was also no discussion regarding moving toward even higher biodiesel blends, which vehicle manufacturers should be addressing today.

Moreover, these programs should work in tandem, again, as envisioned by Congress. The RFS provides certainty to increase investment in production, while other provisions of the Act focused on increasing incentives for use, such as promoting alternative vehicles. For example, EPA recently proposed to address renewable electricity under the RFS program with the goal in mind to promote more electric vehicles, despite the fact that the Phase 2 final rule (among others) promotes electric vehicles already. Because they did not respond to these comments, it is unclear why EPA and NHTSA have declined to promote vehicles designed to use higher blends of renewable fuels in the same manner. Unlike the potential under EPA's proposal for electric vehicle manufacturers, diesel engine and vehicle manufacturers do not receive incentives under the RFS program, nor do they receive incentives under the greenhouse gas emissions and fuel economy rules.

The agencies should be looking to the future and vehicles that can use higher blends of biodiesel, which will eliminate many of the emissions and health effects of petroleum diesel. The agencies simply ignore that OEMs may limit the vehicles that are approved for B20, despite the clear benefits, and there is little incentive to ensure their future vehicles and engines will continue to be compatible with higher biodiesel blends. Indeed, engine manufacturers supported such a change, such as PACCAR.

Further, EPA recently announced that heavy-duty trucks continue to present concerns regarding elevated levels of air pollution. As outlined in NBB's comments, biodiesel provides currently available options to address both greenhouse gas emissions from the transportation sector and emissions of other pollutants from petroleum diesel. This is unlike EPA's final rule that continues to support alternative technologies that may continue to rely on fossil fuels, even if not petroleum diesel (or may present other environmental problems such as increased waste not found with renewable fuels). The program outlined by NBB in its comments are not at the same

level of the substantial credits that were finalized for plug-in hybrids, electric vehicles and fuel cell vehicles, which are all technologies the agencies admit are not likely to occur for a long time. The failure to address these issues does not respond to public comments, and the final rule must be reconsidered in light of these concerns.

NBB is the national trade association representing the biodiesel industry as the coordinating body for research and development in the United States, founded in 1992. NBB is a comprehensive industry association which coordinates and interacts with a broad range of cooperators, including industry, government and academia. NBB's membership is comprised of state, national and international feedstock and feedstock processor organizations, biodiesel suppliers, fuel marketers and distributors and technology providers. NBB has long worked with engine manufacturers to ensure compatibility of new vehicles to use biodiesel.

* * *

We are happy to discuss this matter further and address any questions you may have. Thank you in advance for your consideration of these issues.

Respectfully submitted,

Anne Steckel
Vice-President, Federal Affairs
National Biodiesel Board

Enclosure

cc: Tad Wysor, Office of Transportation and Air Quality
wysor.tad@epa.gov
Ryan Hagen, Office of Chief Counsel, National Highway Traffic Safety Administration
ryan.hagen@dot.gov

National Biodiesel Board
605 Clark Ave.
PO Box 104898
Jefferson City, MO 65110-4898
(800) 841-5849 *phone*
(573) 635-7913 *fax*

National Biodiesel Board
1331 Pennsylvania Ave., NW
Washington, DC 20004
(202) 737-8801 *phone*

www.biodiesel.org

October 1, 2015

Via Electronic Filing (www.regulations.gov)

Air and Radiation Docket and Information Center
U.S. Environmental Protection Agency
Mail code: 28221T
1200 Pennsylvania Ave., N.W.
Washington, DC 20460
ATTN: Docket ID No. EPA–HQ–OAR–2014–0827

Docket Management Facility, M–30
National Highway Traffic Safety Administration
U.S. Department of Transportation
West Building, Ground Floor, Rm. W12–140
1200 New Jersey Ave., S.E.
Washington, DC 20590
ATTN: Docket ID Nos. NHTSA–2014–0132, NHTSA-2014-0074

Re: Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, Proposed Rule, 80 Fed. Reg. 40,138 (July 13, 2015); Extension of Comment Period, 80 Fed. Reg. 53,756 (Sept. 8, 2015)

Dear Sir or Madam:

The National Biodiesel Board (NBB) is the trade association for the U.S. biodiesel industry. Made from a diverse mix of resources such as recycled cooking oil, soybean oil and animal fats, biodiesel is a renewable, clean-burning diesel replacement, and is the first and only commercial-scale fuel produced across the United States to meet EPA's definition of an Advanced Biofuel. We appreciate the opportunity to provide these comments on the proposed rule entitled "Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2." The proposed rule seeks to reduce greenhouse gas (GHG) emissions from medium- and heavy-duty engines and vehicles. Also important, however, is the goal of promoting this country's energy security—a key purpose of the Administration's

Climate Action Plan[1]—by reducing this country's reliance on foreign oil and by diversifying the mix of energy sources. We believe biodiesel is a viable part of the solution, and its use must be promoted to meet these goals. NBB submits these comments, because it does not believe that the proposal provides any real incentives to ensure increased use of biodiesel in diesel engines and vehicles.

NBB believes the proposal should encourage use of fuels from renewable sources, not just continue down the path of using alternative forms of fossil fuels. The following comments propose an option to include credits under the new Phase 2 GHG emissions reduction and fuel economy standards for those Original Equipment Manufacturers (OEMs) who have chosen to support and employ the use of B20 or higher biodiesel blends in their diesel vehicles and engines as one of the technological pathways they are pursuing to meet these standards and improve their environmental profile. We believe increased use of biodiesel presents a cost-effective means for achieving emissions reductions from the transportation sector, particularly as the use of diesel fuel is estimated to continue to increase to meet the demands of the medium- and heavy-duty vehicle industry.

1) Increasing Biodiesel Use is Key to Meeting the Administration's Climate Change Objectives.

The Obama Administration has made climate change a top priority, outlining a Climate Action Plan to address U.S. GHG emissions. *See* White House, *Climate Change and President Obama's Action Plan*, https://www.whitehouse.gov/climatechange (last visited Oct. 1, 2015). The transportation sector is estimated to be the second largest contributor (28 percent) to U.S. GHG emissions behind electricity (32 percent). *Id.* As part of the Action Plan, the Administration committed to "support the Renewable Fuel Standard and invest in research and development to help bring next generation biofuels on line." *Id.* "Heavy-duty vehicles (commercial trucks, vans, and buses) are currently the second largest source of greenhouse gas pollution within the transportation sector." *Id.* The Phase 2 program for medium- and heavy-duty engines and vehicles is intended to be in response to the Action Plan, seeking to reduce fuel consumption and GHG emissions. *See* EPA Fact Sheet, *Cutting Carbon Pollution, Improving Fuel Efficiency, Saving Money, and Supporting Innovation for Trucks,* EPA-420-F-15-900 (June 2015), *available at* www.epa.gov/otaq/climate/documents/420f15900.pdf.

Diesel fuel is a growing part of the transportation fuel sector. "Distillates continue to be seen as the predominant growth category" for long-term oil demand to 2040. Organization of the Petroleum Exporting Countries, *2014 World Oil Outlook*, at 217, 218 (2014), *available at*

[1] *See* The White House, *Improving the Fuel Efficiency of American Trucks - Bolstering Energy Security, Cutting Carbon Pollution, Saving Money and Supporting Manufacturing Innovation*, at 2, 5 (Feb. 2014), *available at* https://www.whitehouse.gov/sites/default/files/docs/finaltrucksreport.pdf.

http://www.opec.org/opec_web/static_files_project/media/downloads/publications/WOO_2014.pdf. "Commercial transportation needs will continue to grow despite efficiency gains, and will drive up U.S. demand for diesel and jet fuel." ExxonMobil, *The Outlook for Energy: A View to 2040*, U.S. Edition, at 12 (2015), *available at* http://cdn.exxonmobil.com/~/media/global/files/outlook-for-energy/2015/2015-outlook-for-energy-us-version.pdf; *see also* Energy Information Administration (EIA), *Annual Energy Outlook 2015 with Projections to 2040*, at 19 (Apr. 2015), *available at* http://www.eia.gov/forecasts/aeo/pdf/0383(2015).pdf (noting anticipated increase in diesel fuel production). "Reducing GHGs and fuel consumption from [the heavy-duty] sector will be vital toward addressing climate change and energy security." Karl Simon, EPA, *Moving to a More Efficient Future*, HTUF Meeting, Sept. 23, 2014, slide 20, *available at* http://www.calstart.org/Libraries/HTUF_2014_National_Meeting_Documents/KSimon_Keynote_9_23_14.sflb.ashx; *see also id.* at slide 6 (noting heavy-duty vehicle energy demand is estimated to grow by 65% over next 30 years and to constitute 40% of all transportation energy).

The United States has seen substantial growth in the availability of diesel vehicle options, which can also operate on biodiesel blends. With 47 new clean diesel car, truck and SUV models available in the 2015 model year, automotive industry experts have predicted that consumers will have more than 62 diesel vehicle models to choose from in North America by 2017. Add to that the more than 27 other automotive brands supplying numerous diesel engines and over 115 different diesel models for the medium- and heavy-duty truck, bus and RV markets, and there is tremendous potential for biodiesel blends to make a positive impact in reducing GHG emissions on the roadways. Industry experts predict that diesel vehicles will make up to 10 to 15 percent of the U.S. market by the year 2025, up from just over 3 percent in 2014. Because diesel-fueled vehicles deliver up to 40 percent better real-world fuel economy than their gasoline counterparts do, more and more automakers have turned to diesel vehicle platforms to help them meet the aggressive new U.S. Corporate Average Fuel Economy (CAFE) standards, which mandate a fleet average of 54.5 MPG by 2025.

While providing improved efficiency compared to gasoline, diesel fuel also has greater carbon emissions. The EIA estimates that diesel fuel and heating oil emit 22.4 pounds of carbon dioxide (CO_2) per gallon compared to 19.6 pounds for gasoline. EIA, *Carbon Dioxide Emissions Coefficients*, (Feb. 14, 2013), http://www.eia.gov/environment/emissions/co2_vol_mass.cfm. EIA also has reported increasing CO_2 emissions from energy consumption associated with distillate fuel oil since 2012. EIA, *Table 12.5 Carbon Dioxide Emissions from Energy Consumption: Transportation Sector* (Sept. 2015), *available at* www.eia.gov/totalenergy/data/monthly/pdf/sec12_8.pdf. Moreover, upstream GHG emissions from diesel are increasing as more diesel is refined from heavier crude oils or marginal sources, such as tar sands.

Biodiesel offers "considerable greenhouse gas emissions benefits over conventional gasoline and diesel fuel." Department of Energy (DOE) Energy Efficiency & Renewable Energy,

Alternative Fuels Data Center - Biodiesel Vehicle Emissions, http://www.afdc.energy.gov/vehicles/diesels_emissions.html (last updated Jan. 15, 2015). EIA estimates that B20 reduces the CO_2 emissions from burning one gallon of diesel fuel from 22.38 pounds of CO_2 to 17.90 pounds. EIA, *Frequently Asked Questions: How much carbon dioxide is produced by burning gasoline and diesel fuel?*, www.eia.gov/tools/faqs/faq.cfm?id-307&t=11 (last updated July 7, 2015).[2] The National Highway Traffic Safety Administration (NHTSA) has recognized that "B20 has been shown to reduce . . . carbon dioxide emissions by 15 percent" compared with petroleum diesel. *See* NHTSA, *Review and Analysis of Potential Safety Impacts of and Regulatory Barriers to Fuel Efficiency Technologies and Alternative Fuels in Medium- and Heavy-Duty Vehicles,* DOT HS 812159, at 34 (June2015), *available at* http://www.nhtsa.gov/staticfiles/rulemaking/pdf/cafe/812159-RevSafetyImpactsRegulatoryFuelEfficiencyTechMDHD.pdf (herein after "NHTSA Safety Study"). NHTSA identified no regulatory impediments to use of biodiesel.

In addition to the GHG benefits, biodiesel is "nontoxic and contains no hazardous materials." NHTSA Safety Study at 35. Biodiesel has lower carbon content than petroleum diesel and higher oxygen content, which allows it to burn more completely. Most volumes of biodiesel also have lower sulfur content than even ultra-low sulfur diesel (ULSD). As such, use of biodiesel also provides for reduced non-GHG emissions, including hydrocarbons (HC), particulate matter (PM), carbon monoxide (CO), and air toxics.[3] *See id.* at 34. These "reductions increase as the amount of biodiesel blended into diesel fuel increases." *Id.* A recent study of bus fleets found that use of B20 reduces PM emissions from buses by 17 percent compared to ULSD. *See* Mineta National Transit Research Consortium, *Combustion Chemistry of Biodiesel for Use in Urban Transport Buses: Experiment and Modeling* (Oct. 2014),

[2] EIA estimated that accounting for emissions from the biodiesel portion results in reduced emissions to 22.06 pounds. But, CO_2 emissions from the combustion of the biodiesel are generally considered biogenic, which include non-fossilized and biodegradeable organic materials: "The GHG emissions benefits of biodiesel are especially significant, because carbon dioxide (CO_2) released during fuel combustion is offset by the CO_2 captured by the plants from which biodiesel is produced." DOE, *Alternative Fuels Data Center - Biodiesel Vehicle Emissions*, http://www.afdc.energy.gov/vehicles/diesels_emissions.html (last updated Jan. 15, 2015). Unlike fossil fuels, a significant source of GHG emissions, EPA recognizes that cropland serves as a sink for CO_2 emissions in the U.S. *See* Karl Simon, EPA, *Moving to a More Efficient Future*, HTUF Meeting, Sept. 23, 2014, slide 6, *available at* http://www.calstart.org/Libraries/HTUF_2014_National_Meeting_Documents/KSimon_Keynote_9_23_14.sflb.ashx; *see also Rocky Mountain Farmers Union v. Corey*, 730 F.3d 1070, 1084-85 (9th Cir. 2013), *reh'g denied en banc*, 740 F.3d 507 (9th Cir.), *cert. denied*, 134 S. Ct. 2875 (2014) ("Crude oil presents different climate challenges from ethanol and other biofuels."). Moreover, while NBB agrees that EPA and NHTSA should focus on tailpipe emissions with respect to this rule, rather than lifecycle emissions, these tailpipe emissions also do not account for the overall reduction in lifecycle emissions associated with using renewable fuels over petroleum-based fuels, particularly as the industry increasingly moves toward waste-derived feedstocks. *See* NBB Comments on 2014, 2015, 2016 RFS proposal (EPA-HQ-OAR-2015-0111-1953). An analysis of the social cost of carbon shows that displacing petroleum with biodiesel is a cost-effective means of reducing GHG emissions. *Id.*, Attachment 4.

[3] Although some earlier studies may have reported a slight increase in NOx emissions associated with biodiesel use, fuel injection and exhaust gas recirculation and other after-treatment emissions control strategies in today's New Technology Diesel Engines (NTDE) have been found to address these emissions.

available at http://transweb.sjsu.edu/PDFs/research/1146-biodiesel-bus-fuel-combustion-chemistry.pdf. This study also confirmed that lower emissions of CO and CO_2 are related to lower ratios of carbon to oxygen in biodiesel fuels compared to ULSD. *Id.* at 53. The improved lubricity with using biodiesel may also mean less wear on engine parts and less maintenance. Moreover, the substantial emissions reductions and other benefits associated with increased use of biodiesel are achieved cost-effectively. The overall total cost of ownership for operating a diesel vehicle on biodiesel blends is less than promoting new vehicles and fueling infrastructure to accommodate other alternative fuels such as natural gas—a fossil fuel—and electric power—largely generated by fossil fuels.

2) Congress has Recognized the Importance of Biodiesel for Energy Independence

The Energy Independence and Security Act of 2007 (EISA) sought to move this country toward greater energy independence and security and "to increase the production of clean renewable fuels." Pub. L. No. 110-140, 121 Stat. 1492 (2007). EISA included the Ten-in-Ten Fuel Economy Act, which, among other things, required a fuel economy standard for commercial medium- and heavy-duty on-highway vehicles and work trucks and extended the flexible fuel credit program to include vehicles using B20. Pub. L. No. 110-140, Title I, Subtitle A, §§ 102(b), 103(a)(4), 109(b), 121 Stat. 1500-1501, 1506.

EISA also expanded the Renewable Fuel Standard (RFS) Program. When first enacted, Congress provided for "appropriate amount of credits for biodiesel" under the RFS program. Pub. L. No. 109-58, § 1501(a), 119 Stat. 1071 (2005). Congress then established "advanced biofuel" and "biomass-based diesel" categories, which include biodiesel. 42 U.S.C. § 7545(o).

Through EISA, therefore, Congress sought to promote the use of biodiesel, including increasing the amount present in blends to at least B20. The RFS program indicates that Congress intended these amounts to be even higher.

In fact, the biodiesel industry has epitomized the benefits envisioned by Congress in seeking to promote use of biodiesel under these various programs. The growth and expansion of the U.S. biodiesel industry in recent years represents a tremendous success story for fleets and individual consumers all across the United States. Today, nearly 2 billion gallons of biodiesel and renewable diesel displace an equivalent amount of petroleum diesel, helping to protect our domestic energy security while creating millions of dollars in economic impact here in the United States. Biodiesel is produced in nearly every state in the country and is supporting more than 62,000 American jobs. Using EPA's own estimates regarding GHG emissions, biodiesel has cut carbon pollution by 75.5 million metric tons with nearly 8.2 billion gallons used from 2005 to 2014—the same impact as removing more than 15.9 million passenger vehicles from America's roadways.

3) EPA's and NHTSA's Rules Should Support Increased Use of Biodiesel in Vehicles.

In the Phase 1 rule for medium- and heavy-duty vehicles, which the agencies propose to continue under the Phase 2 program, 80 Fed. Reg. at 40,158, the agencies purport to have implemented a uniform approach to fuels, despite recognizing that "this uniform approach to fuels may not take advantage of potential additional energy and national security benefits of increasing fleet percentages of alternative-fueled vehicles." 77 Fed. Reg. 51,499, 51,502 (Aug. 24, 2012). "More alternative-fueled vehicles on the road would arguably displace petroleum-fueled vehicles, and thereby increase both U.S. energy and national security by reducing the nation's dependence on foreign oil." *Id.*; *see also* 76 Fed. Reg. 57,106, 57,124-57,125 (Sept. 15, 2011). While treating fuel consumption and GHG emissions on a one-to-one basis, the agencies also noted that they would consider proposing standards that would more fully consider the reduction in use of petroleum-based fuels. 76 Fed. Reg. at 57,125. Indeed, EPA's credits appear to incentivize continued fossil fuel use over renewable resources, focusing on natural gas and electricity, which may be from coal-based power plants. Assuming a uniform approach may have made sense for Phase 1, it no longer continues to make sense.

a) Biodiesel is a drop-in alternative fuel from renewable sources, and is technically and economically feasible to use to reduce GHG emissions and increase energy security.

Biodiesel is essentially a drop-in fuel to current technologies for diesel fuel. Blends up to B5 are considered fungible with diesel fuel and do not require additional labeling. NHTSA has noted that "[b]lends up to B20 can be used in existing equipment without modification." NHTSA Safety Study at 33. NHTSA further noted that "most engines made after 1994 have been constructed with gaskets and seals that are generally biodiesel resistant." *Id.* at 36. NHTSA concluded:

> Biodiesel is a drop-in alternative fuel that can support MD/HDV progress toward GHG and criteria pollutant reductions without major capital investment or infrastructure barriers. There is a minor decrease in fuel efficiency due to the 8 percent lower energy density of biodiesel versus petroleum diesel, ***but the magnitude of the emissions decrease is substantially larger***.
>
> As for any bi-fueled vehicles, the potential for refueling with petroleum diesel reduces potential safety risks associated with vehicle stranding due to fuel supply shortage or refueling infrastructure limitations.

> In conclusion, the literature reviewed and DOE/AFDC resources indicate that ***biodiesel, as a viable drop-in alternative fuel, has both safety and environmental benefits***.

Id. at 36 (emphasis added). While EPA and NHTSA contend that the medium- and heavy-duty vehicle and engine program provides sufficient incentive to use alternative fuels, it does not adequately explain how the proposal promotes biodiesel use, which, as noted above, was contemplated by EISA and provides feasible and economic GHG emission reductions.

In 2011, the agencies contended that the fuel consumption measurements under the medium- and heavy-duty vehicle and engine rule provide incentives for alternative fuels. 76 Fed. Reg. at 57,124. The agencies assert this method shows a benefit of approximately 1 to 3 percent for biodiesel and ethanol blends. *Id.*; *see also* EPA, *Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles: EPA Response to Comments Document for Joint Rulemaking*, EPA-420-R-11-004, at 16-148 (Aug. 2011) (EPA-HQ-OAR-2010-0162-3635) ("Furthermore, the agencies believe that the fuel consumption benefits that FFVs will obtain in engine test cycles accurately reflects their energy benefits and thus provides sufficient incentives for these vehicles.").[4] While NBB agrees that biodiesel use provides greater GHG emissions reductions from the tailpipe, this ignores the distinction between CO_2 emissions from renewable resources compared to fossil fuels.

The regulations also appear to focus on natural gas, electricity, and E85 as alternative fuels, not vehicles that are approved to use B20 or higher blends. *Cf.* 40 C.F.R. §§ 1036.801 (defining "alcohol-fueled engine"), 1037.801 (defining "alcohol-fueled vehicle"). EPA's regulations also note that "[t]here can be multiple grades within a single fuel type," referencing gasoline and E10. 40 C.F.R. § 1036.801; *see also* 40 C.F.R. § 1037.801. EPA recognizes that "[o]nly where the vehicle or engine technology inherently demands a certain type of fuel do the standards account for that fuel use, by specifying the calculation procedure used to determine tailpipe emissions." 77 Fed. Reg. at 51,705. Moreover, unlike the light-duty rule, EPA does not require that the fuel actually be used, limiting the usefulness of the incentives purportedly provided under the rule.[5]

The agencies also indicated that they would not provide additional incentives similar to the light-duty rule because "the HD sector does not have the incentives mandated in EISA for light-duty FFVs, and so has not relied on the existence of such credits in devising compliance

[4] Comments on the Phase 1 proposed rule requested incentives for B20. EPA merely asserted that the engine test cycles accurately reflect the energy benefits of alternative fuels. *See* EPA-HQ-OAR-2010-0162-3635 at 16-148.

[5] Under the light-duty rule, flexible fuel vehicle credits only apply to model year vehicles after 2015 only if the manufacturer can show alternative fuel is actually being used in vehicles. *See, e.g.,* 77 Fed. Reg. 62,624, 62,830 (Oct. 15, 2012).

strategies for the early model years of this program." 76 Fed. Reg. at 57,123. Again, the agencies focused on E85 and natural gas in this discussion. *Id.* But, the agencies have ignored the reliance the biodiesel industry has made on Congress' and this Administration's promises. The U.S. biodiesel industry has worked to address fuel quality concerns, and has moved to increase production and diversify feedstocks. They continue to innovate by reducing their energy consumption, while expanding their production capacity.

In addition, the vast majority of OEMs of medium- and heavy-duty engines have found that blends up to B20 are compatible with their engines. Nearly 80 percent of U.S. manufacturers support B20 or higher blends in at least some of their equipment, and nearly 90 percent of medium-duty and heavy-duty truck models support B20. *See* NBB, *Biodiesel Industry Overview & Technical Update*, Slide 34 (Sept. 2015), *available at* http://biodiesel.org/docs/default-source/ffs-basics/biodiesel-industry-and-technical-overview.pdf?sfvrsn=14; *see also* NBB, *OEM Support* (Jan. 2015), *available at* http://biodiesel.org/docs/default-source/ffs-engine_manufacturers/oem-support-summary.pdf?sfvrsn=16. But, without adequate incentives, these OEMs may limit the vehicles that are approved for B20, despite the clear benefits as noted above. Moreover, there is little incentive to ensure their future vehicles and engines will continue to be compatible with higher biodiesel blends.[6] Indeed, certain OEMs have been reluctant to list B20 as an approved fuel for use or have declined to consider higher biodiesel blends as part of their engine and vehicle designs.[7]

EISA defined B20 as an alternative fuel eligible for flexible fuel vehicle credits under the CAFE program. Vehicles approved to utilize B20 should receive credit, incentivizing the entire new fleet to be approved for at least B20. Approval for higher biodiesel blends above B20 can receive increased credits. Indeed, EISA requires that NHTSA establish a program "designed to achieve the maximum feasible improvement." 49 U.S.C. § 32902(k). Diesel engines also are increasingly being used in the light-duty sector, and the agencies should consider similar means to further incentivize alternative fuel use in passenger vehicles.[8] To ensure the benefits of using biodiesel are realized, the agencies also can include a requirement that biodiesel actually be used in the U.S. marketplace, as indicated by annual U.S. biodiesel consumption figures.

---

[6] The reluctance of certain OEMs to approve or "design" their engines to utilize B20 or higher biodiesel blends are unrelated to the emissions benefits, but are attributed to purported concerns regarding consumer fuel purchase behaviors. EPA contends the incentives in the GHG rules are intended "to address barriers to the increased use in the marketplace." 77 Fed. Reg. 62,624, 62,823 (Oct. 15, 2012).

[7] These same manufacturers have openly opposed even State incentives. EPA should continue to make clear that its medium-duty and heavy-duty rules and the RFS do not preempt State incentives regarding biodiesel fuel.

[8] EPA references B85 in the preamble to the light-duty rule, but it is not clear how that is addressed in the regulations.

b) Credits could include a multiplier that reflects the biodiesel blend content approved for use by the OEM.

We propose that credits for OEMs supporting the use of B20 or higher biodiesel blends should apply to four of the five regulatory categories being guided by the proposed standards, namely:

1. Combination Tractors;

2. Heavy-Duty Pickup Trucks and Vans;

3. Vocational Vehicles which include all other heavy-duty vehicles such as buses, refuse trucks, and concrete mixers; and

4. Engines that power combination tractors and vocational vehicles.

There is no perceived involvement for biodiesel credits in regards to the fifth category of regulated vehicles under the proposed Phase 2 rule—Trailers Pulled by Combination Tractors.

Biodiesel is defined as meeting the ASTM International Standard D6751. Biodiesel blends up to B5 are essentially ubiquitous with diesel fuel in the market today. B20 is an optimal level for biodiesel blend acceptance by OEMs today as it provides a balance between vehicle performance, maintenance and emissions reductions, and proven industry specifications. Providing additional credits for higher biodiesel blends recognizes current use in niche market applications as well as helping to promote future technological developments.

These credits could be provided to OEMs which support the use of B20 or higher biodiesel blends as publicly stated in their Owners Manuals or other official documentation. A multiplier such as the MY2012-2015 light-duty incentive for dedicated alternative fueled vehicles and dual-fueled vehicles could be applied, but based on the level of biodiesel blend approved for use.[9] For example, for vehicles that the OEM has indicated can be run on B20, one gallon of fuel would be treated as 0.80 gallon to account for the 20 percent biodiesel.[10]

[9] As noted, EISA defined alternative fuel to include B20.

[10] Biodiesel is approved for use up to B100 in motor vehicles.

c) EPA cannot rely on the RFS program to contend no additional incentives are necessary.

Although the agencies previously declined to provide certain credits for alternative fuels, they should reassess this position. EPA limited the incentives for alternative fuels in the light-duty rule stating "[t]he RFS is a standalone program designed to increase the use of renewable fuels and to achieve GHG emission reductions primarily through upstream emission reductions." 77 Fed. Reg. at 62,823. In the Phase 1 medium- and heavy-duty rule, EPA stated that "[f]or the fuels covered by the Renewable Fuels Standard additional incentives are not needed in this regulation given the large volume increases required under the Renewable Fuel Standard." 76 Fed. Reg. at 57,124. Since then, however, EPA has proposed to reduce the statutory volumes and, moreover, to limit its proposed increases for biomass-based diesel. *See generally* Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017, 80 Fed. Reg. 33,100 (June 10, 2015). In short, EPA is not fully implementing the RFS program. NBB has opposed this proposal and requested EPA reassess the advanced biofuel and biomass-based diesel volumes.[11] Even if EPA revises these volumes, however, these programs can and should work in conjunction with one another.

Rather, EPA has cited to limitations on getting the fuel to consumers as rationale for reducing the statutory volumes under the RFS program.[12] *See generally* 80 Fed. Reg. at 33,101. EPA's proposal focused on the so-called "E10 blendwall," noting that there were insufficient numbers of FFVs and "an even smaller number of FFVs that have ready access to an E85 retail outlet." *Id.* at 33,114. Unlike ethanol, any blend of biodiesel is authorized for use in motor vehicles. Nonetheless, EPA also references B2/B5 blends in its RFS proposal, noting the "efforts" underway to continue to expand product offerings. *Id.* at 33,116. To avoid similar purported "constraints" or "limitations" in the future, EPA should reward those in the industry that are moving forward with respect to higher biodiesel blends as intended by Congress, rather than resort to its limited authority under the RFS waiver provisions as it is attempting to do with ethanol today.

Although the CAFE program had a special provision for light-duty vehicles, the agencies have indicated that this does not limit their authority. *See, e.g.,* 77 Fed. Reg. at 62,831. NBB agrees. Thus, EPA and NHTSA should consider additional means of supporting those OEMs that have approved B20 and providing incentives for use of higher blends. As noted above, one possible alternative is to give OEMs approving B20 or higher blends some credit for the benefits associated with the reduced GHG emissions and greater energy security benefits. To the extent EPA continues to believe, notwithstanding its current proposal for the 2014-2016 RFS and 2017

[11] NBB incorporates by reference its comments on EPA's 2014, 2015 and 2016 RFS and 2017 biomass-based diesel volume proposal (EPA-HQ-OAR-2015-2011-1953).

[12] NBB disputes its authority to do so, and disputes the notion of a "blend wall."

biomass-based diesel volume, the RFS provides adequate incentives, EPA can include requirements to establish that the fuel is being used (similar to its approach for MY2016 and later light-duty vehicles) and adjust the required volumes (and thereby available credits) to apply only to those above the minimum amounts required by the RFS.

4) EPA and NHTSA Properly Focus on Tailpipe Emissions Rather than Lifecycle Emissions.

EPA and NHTSA are proposing that the Phase 2 standards apply exclusively at the vehicle tailpipe. 80 Fed. Reg. at 40,158-40,159. In other words, "compliance is based on vehicle fuel consumption and GHG emission reductions, and does not reflect any so-called lifecycle emission properties." *Id.* at 40,159. NBB agrees that the agencies should not seek to undertake a separate analysis of lifecycle emissions here. 77 Fed. Reg. at 62,823. Indeed, the lifecycle analysis utilized by EPA for the RFS cannot assess actual emissions and should not be applied here.[13]

5) Comments on the Draft Environmental Impact Statement.

Although the agencies do not focus on lifecycle GHG emissions, NHTSA does address lifecycle emissions of biodiesel in the Phase 2 Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles Draft EIS (DEIS) (NHTSA-2014-0074-0034 at 6-15 to 6-16). NHTSA appropriately recognizes that "[w]hen used as a fuel in on-road vehicles, biodiesel offers significant GHG emission advantages over conventional petroleum diesel." DEIS at 6-15. It also references a more recent study showing lifecycle emissions can be decreased by up to 52 percent when using biodiesel as a replacement for petroleum diesel, which is based on soybean oil. The DEIS also references, however, the potential for land use changes. NBB continues to dispute the inclusion of land use impacts in the analysis as there is still no real-world evidence that the increased production of biodiesel has resulted in significant land use changes and the modeling that has been used remains inappropriate for measuring actual emissions. Moreover, the U.S. remains a sink for GHG emissions regarding the land use sector. While NHTSA references an analysis by Searchinger, as NHTSA also recognizes, the Searchinger article was disputed by the Department of Energy and should not be considered as a valid scientific analysis. Indeed, there are numerous factors that influence decisions regarding land use, and it would be too speculative to attempt to identify what emissions can be attributed to biofuel production. Further, as noted above, the industry has increased use of waste feedstocks, which has greater GHG emissions reductions. In any event, even considering such impacts, EPA still

[13] In the RFS rulemaking, EPA rejected inclusion of a global rebound effect in assessing emissions. *See* EPA *Response to Clean Air Taskforce, World Wildlife Fund, National Wildlife Federation, and Friends of the Earth's Petitions for Reconsideration of the Renewable Fuel Standards (RFS2)* (2011), *available at* http://www2.epa.gov/sites/production/files/2015-08/documents/rfs-response-to-petitions-02-17-11.pdf. NBB believes such analysis is speculative and unnecessary in light of the GHG emission reductions and energy security goals of the proposal.

found lifecycle GHG emission reductions compared to petroleum to be above 50 percent (and as high as 86 percent).

NBB also requests that NHTSA make certain corrections to the discussion on use of biodiesel blends in diesel equipment in the DEIS at 6-15. NBB agrees that vehicles on the road today are compatible with higher blends of biodiesel. No detrimental effects have been seen with blends up to B20. NBB disagrees, however, with the notion that engines are only "warrantied" (or not warrantied) for certain fuels. OEMs generally identify the fuels they recommend for use in the owner's manuals, but we believe this is unrelated to any warranties provided on the engines themselves. OEMs generally do not warranty fuel at all, no matter if that fuel is biodiesel, diesel, gasoline or otherwise. Rather, the OEMs only warrant the actual parts and workmanship of the vehicle or engine that they themselves produce, and they simply provide recommendations for the types of fuel, lubricants, etc. that are suggested for use in those vehicles.[14]

In addition, NHTSA states that "[b]iodiesel performance improves in cold temperatures as the blend is reduced." DEIS at 6-15. But, additional measures taken by the industry such as cold-flow additives, blending with #1 diesel fuel, and heated tanks/lines have demonstrated the ability to use blends up to B20 even in the coldest months and regions of the country.

* * *

NBB appreciates the opportunity to submit these comments. We believe that EISA and this Administration's policy requires promotion of increased use of biodiesel to help meet the goals of the GHG and Fuel Efficiency Standards, and we look forward to working with both EPA and NHTSA on this important issue.

Sincerely,

Larry Schafer

[14] For example, Caterpillar states within its Commercial Diesel Engine Fluids Recommendations that: "When auxiliary devices, accessories or consumables (filters, oil, additives, catalysts, fuel, etc.) made by other manufacturers are used on Caterpillar products, the Caterpillar warranty is not affected simply because of such use. Failures that result from the installation or usage of other manufacturers auxiliary devices, accessories or consumables, however, are not Caterpillar factory defects and therefore are NOT covered by Caterpillar's warranty."