



April 22, 2024

The Honorable Michael Regan
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460

Docket ID No. EPA-HQ-OAR-2023-0574

Re: California State Nonroad Engine Pollution Control Standards; In-Use Locomotive Regulation;
Requests for Authorization; Opportunity for Public Hearing and Comment

Dear Administrator Regan,

Clean Fuels Alliance America (Clean Fuels) is the U.S. trade association representing the entire biodiesel, renewable diesel, and sustainable aviation fuel supply chains including producers, feedstock suppliers, and fuel distributors serving the on- and off-road applications, rail, marine, and heating oil markets. Made from an increasingly diverse mix of resources such as recycled cooking oil, soybean oil, and animal fats, the clean fuels industry is a proven, integral part of America's clean energy future.

Clean Fuels serves as the industry's primary organization for technical, environmental, and quality assurance programs and is the strongest voice for its advocacy, communications, and market development. Within the rail industry, we have had multiple discussions with various railroads, all of which indicate a desire to decarbonize, with biofuels being a key piece in those efforts, as we all work on meeting and exceeding the U.S. decarbonization milestones. Unfortunately, if EPA chooses to authorize California's In-Use Locomotive Regulation it will halt our existing decarbonization efforts.

According to the Clean Air Act Section 209(b) – State Standards¹, no waiver shall be granted if the Administrator finds that (A) the determination of the State is arbitrary and capricious, (B) such State does not need such State standards to meet compelling and extraordinary conditions, or (C) such State standards and accompanying enforcement procedures are not consistent with 42 U.S. Code § 7521 - Emission standards for new motor vehicles or new motor vehicle engines.

Clean Fuels believes that biodiesel and renewable diesel not only are the most promising technology both technically and economically, but also are available today and in the future to

¹ 42 U.S. Code § 7543 - State Standards

Missouri Headquarters
605 Clark Ave
PO Box 104898
Jefferson City, MO 65110

800.841.5849

Washington, D.C., Office
1331 Pennsylvania Ave, NW
Suite 505
Washington, D.C. 20004

888.246.3437

cleanfuels.org

ensure that the rail sector is meeting or exceeding U.S. decarbonization milestones. Unfortunately, mandating zero-emission locomotives by 2030, when there are currently no zero-emissions locomotives available, will prevent the biodiesel and renewable diesel market from moving forward with proven decarbonization efforts and investments in the state.

The clean fuels industry is on a path to sustainably double the market to 6 billion gallons annually by 2030, eliminating at least 35 million metric tons of CO₂ equivalent greenhouse gas emissions annually. With advancements in feedstock, use will reach 15 billion gallons by 2050 or sooner. According to the most recent data from Argonne National Laboratory biodiesel and renewable diesel reduce carbon emissions by at least 70 percent on average relative to petroleum diesel. These fuels are among the cleanest and lowest-carbon fuels commercially available to help reduce greenhouse gas (GHG) emissions today.

To date, biodiesel and renewable diesel remain the most pragmatic and scalable solution available to railroads to reduce their carbon footprint. In 2023, it is estimated that rail's biofuel uptake was approximately 3%, which is well over 100 million gallons, almost double the number of gallons in 2021. If that trend continues, we anticipate that the rail industry may be above an average of B20 by 2030. As clean fuels make continued progress to decarbonize CA's rail sector, the state's request does not illustrate that there are compelling and extraordinary conditions as our fuels are already available and being utilized to reduce GHG emissions.

Furthermore, it has been shown that immediate investment in a mature, currently commercialized biomass-based diesel fuel yields higher annual greenhouse gas emissions reductions than waiting for technologies that are still considered immature or, in the case of zero emission locomotives, non-existent. When considering options to help reduce GHG emissions, there are two essential elements to consider: the amount of the reduction and when it happens. This is because carbon emissions are persistent and accumulate. A reduction in GHG emissions now can avoid decades of associated heating, thus having significantly more value than carbon reductions made in the future. The time value of carbon is key, and the next decade is critical.² The importance of reducing carbon today cannot be understated as the Intergovernmental Panel on Climate Change (IPCC) clearly reaffirmed in their Sixth Assessment Report: Carbon reductions today are more important than carbon reductions in the future.³

In addition to reducing greenhouse gas emissions, biodiesel and renewable diesel have a positive impact on disadvantaged communities. California states it is trying to protect communities that are located around railyards by reducing criteria pollutants like particulate emissions that are known to be the leading pollutant driving environmental justice concerns. This means that using these fuels today can lower health care impacts and costs for all populations living in and near these areas, including minority, low-income, and indigenous populations.⁴ Clean Fuels Alliance America, through our continued partnership with Trinity Consultants, released Phase 2 of our report that

² National Biodiesel Board. Biodiesel.org. (2021). Cutting Carbon: Comparing Biomass-Based Diesel & Electrification for Commercial Fleet Use.

³ Intergovernmental Panel on Climate Change. (2021). Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.

⁴ Trinity Consultants, Assessment of Health Benefits from Using Biodiesel as a Transportation Fuel and Residential Heating Oil, (April 2022). <https://cleanfuels.org/resources/health-benefits-study>

quantifies the health benefits and corresponding economic savings from converting from petroleum-based diesel to B100.⁵

The Trinity Report assesses the health benefits of substituting biomass-based diesel in transportation-related sources currently fueled by conventional ultra-low sulfur diesel (ULSD or diesel fuel) at 14 locations and as a replacement for home heating oil in one location throughout the United States. This study expands upon the Assessment of Health Benefits from Using Biodiesel as a Transportation Fuel and Residential Heating Oil completed by Trinity Consultants in 2021. This study uses a “bottom-up” approach, focusing on specific population groups such as those living in crowded urban housing complexes and portside communities. Even greater total benefits can be seen when considering comparable communities outside of these specific markets and locations.

Combining Phase 1 and Phase 2 of the study, researchers found that switching to 100% biodiesel in the 28 transportation and home heating oil sectors studied would provide immediate community health improvements that include more than 436,000 fewer/reduced asthma cases per year; more than 142,000 fewer sick days per year; cancer cases reduced by nearly 9,400 (over a 70-year timeframe); the prevention of more than 910 premature deaths per year; over \$7.5 billion in avoided health costs annually; and a 45% reduction in cancer risk when legacy heavy-duty trucks such as older semis use B100, and an 86% reduced risk when biodiesel is used for home heating oil, known as Bioheat® fuel.⁶

By replacing petroleum diesel with lower-carbon biodiesel in high-risk air quality communities, clean fuels can eliminate harmful transportation emissions, reducing communities' medical costs and healthcare burdens. In California, Trinity examined Long Beach and Port of Los Angeles, San Bernardino, South Fresno, and West Oakland. All these environmental justice communities would experience a decrease in both cancer and asthma attacks by increasing the use of biodiesel.

Location	Lower Cancer Burden	Fewer Asthma Attacks
Long Beach and Port of Los Angeles	44%	122,000
San Bernardino	42%	13,000
South Fresno	44%	2,500
West Oakland	44%	12,000

The immediacy of these health benefits, especially for disadvantaged communities, is even more critical when one considers the decades it will take to pursue zero emission locomotives.

To that end, California has failed to consider the time-related benefits of cumulative GHG emissions avoided by switching away from petroleum-based fuels with drop-in, commercially available renewable alternatives that rely on the fast carbon cycle for their energy source.⁷

⁵ *id.*

⁶ *id.*

⁷ See Frank et al. (2022) “Quantifying and comparing the cumulative greenhouse gas emissions and financial viability of heavy-duty transportation pathways for the Northeastern, United States,” *Fuel* 323; 124243, available online at <https://doi.org/10.1016/j.fuel.2022.124243>

It must be stated, by requiring zero-emission technology that is not yet available, California could force existing locomotives out of service prior to their useful life cycle rather than reduce GHG reductions by utilizing biodiesel and renewable diesel. Biodiesel and renewable diesel require little to no change to existing technologies used by the railroads and hence can be used at scale. From a cost perspective, using biodiesel and renewable diesel does not require railroads to make any changes to their operations including refueling procedures, as they can use the current fueling infrastructure. However, any improvements to existing infrastructure that biodiesel and renewable diesel need today would be derailed as Class 1 railroads would be required to deposit up to \$800 million per year per railroad. EPA must remember that to be compliant with the Clean Air Act, there must be adequate lead time to permit the development of the necessary technology, giving appropriate consideration to the cost of compliance within that time.⁸ California's request does not consider lead time or cost.

California is asking for approval to force a technology that does yet exist to any scale for the industry it is imposing it upon. The state ignores that there are other options that are currently reducing GHG emissions in the state and fails to factor in the health benefits that clean fuels can have on environmental justice communities, while disregarding the direct and indirect costs of implementation. On these grounds and those outlined above, we request that EPA deny California's In-Use Locomotive Regulation request for authorization.

Sincerely,

A handwritten signature in black ink, appearing to read "Kate Shenk". The signature is fluid and cursive, with the first name "Kate" and last name "Shenk" clearly distinguishable.

Kate Shenk
Director of Regulatory Affairs
Clean Fuels Alliance America

⁸ 78 Fed. Reg. 58090, 58092 (Sept. 20, 2013)