April 22, 2024

VIA Federal eRulemaking Portal

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

Re: Docket ID No. EPA–HQ–OAR–2023–0574; Federal Register Vol. 89, No. 39, pp. 14484-14486

Administrator Regan:

We appreciate the opportunity to provide the Environmental Protection Agency (EPA) with comments on whether the California Air Resources Board's (CARB) In-Use Locomotive Regulation meets the criteria for a waiver of federal preemption under section 209 of the Clean Air Act (CAA). The below organizations believe that open, competitive markets can best meet the transportation needs of consumers and drive environmental progress.

Among various restrictions and requirements, CARB's rule prohibits the operation of locomotives that do not comply with its emissions requirements after 2030; it also requires locomotive operators to fund dedicated accounts for the purpose of investing in preferred low and zero-emissions technologies.[1] To fully implement the rule, CARB has requested that EPA waive the CAA's preemptive requirements, which prohibit states and local governments from enforcing standards relating to the control of emissions from certain types of vehicles, including locomotives.[2] To facilitate its decision, EPA is requesting comments on, among other things, whether California needs such standards to meet compelling and extraordinary conditions; and, whether CARB's rule provides adequate time to develop and adopt the necessary technologies to comply (considering costs).[3] If EPA grants CARB's waiver request, the CAA allows additional states to adopt similar standards.[4] For the reasons outlined below, the EPA should not grant CARB's waiver request.

[1] In-Use Locomotive Regulation, *Cal. Code Regs, 13, § 2478 (*2023) https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/locomotive22/fro2.pdf
[2] State standards, 42 U.S.C. § 7543 (2010), https://www.govinfo.gov/app/details/USCODE-2010-title42/USCODE-2010-title42-chap85-subchapII-partA-sec7543
[3] https://www.govinfo.gov/content/pkg/FR-2024-02-27/pdf/2024-03955.pdf
[4] 42 U.S.C. § 7543

The Rule Will Undermine Environmental Progress

CARB's rule will not help the state meet compelling and extraordinary conditions related to climate change or localized air pollutants. According to the U.S. Environmental Protection Agency, freight rail represents only 2 percent of transportation greenhouse gas emissions and 0.5 percent of total greenhouse gas emissions.[5] Consequently, the climate impact of a forced transition to electric freight trains would be negligible.

High regulatory costs would also push freight from rail to truck, which would offset the intended environmental benefits across the range of targeted pollutants. For instance, the CARB rule would force closures of short-line rail, the smaller, local rail companies that connect American businesses with the larger freight rail services. CARB acknowledges this[6] and American Short Line and Regional Railroad Association president Chuck Baker warned that the regulation would "literally bankrupt some small business short lines."[7]

Rail is the most efficient form of on-land freight transportation and far more fuel efficient than trucking: it is roughly one-tenth the emissions intensity of trucking on a per-ton mile basis.[8] Trains can carry one ton of goods nearly 500 miles on a single gallon of diesel fuel.[9] Investments in anti-idling technologies, sensor monitoring, and distributed power systems have improved fuel efficiency, lowered costs, and reduced pollution. Newer and re-manufactured freight trains (Tier 4) lower particulate matter and nitrous oxide emissions by as much as 90 and 80 percent, respectively.[10] And, from 2006 to 2019, greenhouse gas emissions from freight rail have decreased by 18 percent.[11]

While long-haul trucks have also made significant progress in fuel efficiency and emissions reductions, moving more freight to roadways will result in a net increase in pollution and make America's highways less safe.

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[5] *Fast facts on transportation greenhouse gas emissions | US EPA*. (2023, October 31). US EPA. https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions

[6] California Air Resources Board, Public Hearing to Consider the Proposed In-Use Locomotive Regulation Staff Report: Initial Statement of Reasons, (2022, September 20), https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/locomotive22/isor.pdf and The Association of American Railroads (AAR). (2024, March 26). *CARB's In-Use locomotive regulation rule will hurt the American economy*, https://www.aar.org/issue/carb/

[7] Marsh, J. Freight rail advocates sue CARB over new locomotive emissions regs Published June 16, 2023, Accessed March 23, 2024, https://finance.yahoo.com/news/freight-rail-advocates-sue-carb-212340082.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAGhr5uaVU68ST-ivkitZlxJGV_wKpPgYjyZD_pl_LyWNCUTpfN7YcQiZd7Z-p0x2dMW6PRJX-nuh8ZeXzY3_8id_KiwjDRimvsKzfqZXOjLBB71ZHHRoLZwKSJnzg1akgJcZJePrySwy7fMEN7qQXKvhF2jkcJ1nNSL9Y72vDBtP

[8] Alexander Laska, Freight Rail's Role in a Net-Zero Economy, ThirdWay Published June 7, 2021, Accessed March 23, 2024, https://www.thirdway.org/memo/freight-rails-role-in-a-net-zero-economy

[9] *How are locomotives getting more fuel efficient for the railroad industry?*, Union Pacific, Accessed March 23, 2024, https://www.up.com/customers/track-record/tr040522-locomotive-fuel-efficiency-improvements.htm.

[10] AAR, (2024, February). *Moving Miles Ahead on Sustainability*, https://www.aar.org/article/freight-rail-moving-miles-ahead-on-sustainability/

[11] AAR, (2021, March). *Freight Railroads and Climate Change* https://www.aar.org/wp-content/uploads/2021/02/AAR-Climate-Change-Report.pdf

Zero Emissions Technology Is Not Ready For Prime Time

CARB's attempt to force the adoption of zero-emission locomotives or a zero-emission-capable locomotive is premature. Meeting zero-emissions requirements will require rail companies to use electric or hydrogen-powered locomotives – but those technologies must meet rigorous safety and performance requirements before the industry can implement them. CARB's technology feasibility analysis fails to provide any data or evidence of safety, reliability, maintainability, or operability of the locomotives utilizing these technologies.[12] CARB's assurance that it will "publish assessments in 2027 and 2032" to reevaluate its estimation of the availability of zero emissions locomotive technologies does little to cure this glaring defect: it can take years to procure new or remanufactured locomotive engines, rendering CARB's assurance that it will revisit its technology assessment months before the proposed bans take place.

California's regulators implicitly recognize the challenge of compliance by requiring companies to pay into a spending account to purchase or lease zero-emission locomotives in the future. This will force the industry to sideline billions of dollars per year for speculative technology investments.[13] Despite CARB's claims that this will "benefit locomotive manufacturers, engineering and construction firms, and project management firms,"[14] this "broken window" economic theory ignores the opportunity cost of the resources available to the locomotive industry. The reality is that this requirement will force companies to sideline resources that they could have otherwise invested in safety, operational efficiency, and other improvements that comport with technological realities.

One can be optimistic about the future of technology; however, overzealous targets that fail to consider cost, performance, and scalability requirements are more likely to result in demand destruction than have an adaptive impact.

High Compliance Costs Will Ripple Throughout The Economy

CARB estimates that the cost for BNSF and Union Pacific to switch national fleets of line-haul locomotives and to switch all in-state locomotives will be $86 billion.[15] California's locomotive industry will incur $16 billion in direct regulatory costs.[16] However, the impact of granting CARB's waiver request will be much larger: the size and interconnected nature of the rail system, coupled with the fact that additional states will be allowed to adopt similar standards, mean the costs of implementing the rule will be amplified across the industry, and nation, as additional carriers are forced to conform to CARB's requirements.

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[12] California Air Resources Board, Appendix F, Technology Feasibility Assessment for the Proposed In-Use Locomotive Regulation, https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/locomotive22/appf.pdf
[13] BNSF and Union Pacific estimate spending account requirements of between $700-$800 million per year per railroad.
[14] California Air Resources Board, Proposed In-Use Locomotive Regulation, Standardized Regulatory Impact Assessment (SRIA), (2022, May 26), https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/locomotive22/appb.pdf
[15] Ibid.
[16] Ibid.

More expensive freight rail transportation will harm the farmers, manufacturers, and energy producers that depend on locomotives to move their goods cost-effectively. Each year, "railroads move about 1.6 million carloads of grain and other farm products, more than 1.7 million carloads of food products, 1.8 million carloads of motor vehicles and parts, around three million carloads of construction-related materials and about 700,000 carloads of pulp and paper products."[17] As a result, American families and businesses will pay higher prices for products they need daily like food and energy, and they will pay more for major expenses like vehicles and homes.

The regulation will also exacerbate supply chain concerns across the country by shrinking transportation supply amidst rising demand. According to the U.S. Department of Transportation, freight demand by tonnage is expected to increase 30 percent by 2040. Requiring otherwise functional locomotives (over 25,000 according to the American Association of Railroads[18]) to retire and shuttering short-line railroads will squeeze supply chain logistics and create logistical inefficiencies.

Violates the Interstate Commerce Commission Termination Act and the Clean Air Act

Federal law prohibits California from dictating the regulations for new and existing locomotives to the rest of the nation. The federal Surface Transportation Board has the statutory and regulatory authority over economic activities of railroads and pre-empts states from regulating those activities under The Interstate Commerce Commission Termination Act (ICCTA). Steven Bradbury, former general counsel for the U.S. Department of Transportation, writes that "Every part of CARB's locomotive rule is plainly barred by the ICCTA—the requirements to retire older locomotives from service and transition to new locomotive technologies, the restrictions on locomotive emissions and usage, the Spending Account obligations, the idling restrictions, the administrative fees, and even the reporting and recordkeeping obligations. They would all directly affect the management of railroads and impose substantial burdens on their business operations."[19] Given the connectedness of the interstate rail network, Congress expressly preempted the states from regulating locomotive emissions to avoid a patchwork of costly, ineffective policies.[20]

As noted above, CARB's rule fails to meet the CAA's waiver requirements: it will neither help the state meet compelling and extraordinary environmental conditions nor provide adequate time for the industry to develop and adopt the technologies necessary to comply.

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[17] AAR, *Industries Freight Rail Supports*, https://www.aar.org/topic/industries-we-support/.
[18]The Association of American Railroads (AAR). (2024, March 26). *CARB's In-Use locomotive regulation rule will hurt the American economy*, https://www.aar.org/issue/carb/
[19] Steven Bradbury, *Train Wreck Comin': Now California Wants to Dictate Locomotive Technology for Our Nation's Rail System*, The Heritage Foundation, Published September 28, 2023, Accessed March 24, 2023, https://www.heritage.org/the-constitution/report/train-wreck-comin-now-california-wants-dictate-locomotive-technology-our
[20]AAR, Comments on Proposed In-Use Locomotive Regulation, Accessed at https://www.washingtonpost.com/documents/3482ab4e-0b83-4760-9953-75deb8cca367.pdf?itid=lk_inline_manual_36

As evidenced by recent decisions overturning rules embracing broad interpretations of regulatory discretion under the Clean Air Act[21] and Clean Water Act,[22] the courts are applying a more restrictive view of executive powers that go beyond statutory authority. Consequently, we believe a final rule granting CARB's waiver request would be highly vulnerable to judicial review.

Conclusion

While reducing emissions is a laudable goal, we urge EPA to reject CARB's waiver request and work with the industry on a more collaborative approach that takes into consideration the current state of emissions reduction technologies and the economic implications of standards on the industry.

Sincerely,

C3 Solutions

ConservAmerica

American Conservation Coalition

[21] 597 U.S. 697 (2022), https://www.supremecourt.gov/opinions/21pdf/597us2r65_5iel.pdf

[22] 598 U.S. 651 (2023), https://www.supremecourt.gov/opinions/22pdf/21-454_4g15.pdf