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Environmental Protection Agency
EPA West (Air Docket)
Mail Code 6102T
1200 Pennsylvania Ave. NW, Room B108
Washington, DC 20460
Docket No. EPA-HQ-OAR-2022-0332

Re: Comments in Support of Granting California's Waiver Request for the Heavy-Duty Low NOx Omnibus Rule, *Docket No. EPA-HQ-OAR-2022-0332*

The following comments on the U.S. Environmental Protection Agency's (EPA) California's Waiver Request for the Heavy-Duty Low NOx Omnibus Rule*, Docket No. EPA-HQ-OAR-2022-0322* are submitted by the Moving Forward Network (MFN). The listed members submit the following comments both as individual/organizational comments as well as MFN comments:

Backbone Campaign, Center for Community Action and Environmental Justice, Central Coast Alliance United for a Sustainable Economy (CAUSE), Central Valley Ari Quality Coalition (CVAQ), Citizens for a Sustainable Future, Coalition for Healthy Ports, Clean Water Action, South Ward Environmental Alliance, CleanAirNow, Coalition for a Safe Environment, Comite Civico Del Valley, Inc., East Yard Communities for Environmental Justice, Respiratory Health Association, Environmental Justice (EJ) Working Group - Hudson Hill, Greater Frenchtown Revitalization Council, Groundwork Northeast Revitalization Group (Groundwork NRG), Harambee House/ Citizens for Environmental Justice, Ironbound Community Corporation, Little Village Environmental Justice Organization, LowCounty Alliance for Model Communities (LAMC), Mobile Environmental Justice Action Coalition (MEJAC), New Jersey Environmental Justice Alliance, Peoples Collective for Environmental Justice, Regional Asthma Management & Prevention (RAMP), Rethink Energy Florida, Angela Harris Southeast Care Coalition, Texas Environmental justice Advocacy Services, Tallahassee Food Network, Tishman Environment and Design Center, Warehouse Workers for Justice, West Oakland Environmental Indicators Project, West Long Beach Neighborhood Association, Duwamish River Community Coalition, Robert Laumbach MD, MPH, Natural Resources Defense Council, Earthjustice, Union of Concerned Scientists.

In addition, the following organizations sign on in support of The Moving Forward Network comment letter:

Sierra Club, Southern Environmental Law Center, Environmental Defense Fund, Los Angeles County Electric Truck & Bus Coalition, Jobs to Move America, Environmental Advocates NY, Pacific Environment, Progressive Asian Network for Actions (PANA), Environmental Justice Committee of the AAPI Equity Alliance, David Toyoshima, Karlton A. Laster.

The Moving Forward Network (MFN), a national network of member groups that center grassroots, frontline knowledge, expertise, and engagement with communities across the United States that bear the negative impacts from the global freight transportation system. In collaboration with allies and partners, MFN identifies local solutions that call for community, industry, labor, government, and political action that advances equity, environmental justice, and a zero-emissions focused just transition. MFN's vision is to see that negatively burdened communities become healthy, sustainable places by reducing and ultimately eliminating the negative impacts of that system. Core to MFN's values, are our organizations' deep commitment to advancing environmental justice, equity, economic justice, and a just transition.

Time and again, the Biden Administration and EPA continue to note the importance of environmental justice communities and zero-emission solutions to the health and success of the nation. Now, more than ever before, EPA has a duty to do everything in its power to ensure that critical emission-reducing policies are adopted at the state and federal levels. Indeed, at the very least, EPA should not stand in the way of life-saving regulations that California has lawfully adopted to reduce tailpipe pollution in our communities. Frontline environmental justice leaders have spent years working with allies to develop the California rules and advocate for their adoption in other states. For communities closest to port operations, fully or partially denying these waivers will harm communities across the country while perpetuating an already dangerous status quo or, worse, increasing the deadly impacts from medium and heavy-duty vehicles. We urge the EPA to grant California's waiver request in full. Not only is the need for these public health protections devastatingly clear, but under the parameters set forth in Clean Air Act Section 209, EPA has no choice but to do so.

Here, the Omnibus Rule will require all new heavy-duty on-road vehicles to clean up their operations, resulting in up to 90 percent emission reductions. The health benefits and emissions reductions expected to flow from the Omnibus Rule alone are undeniable, and are absolutely critical in helping us address our public health, air quality, and climate crises. For decades, communities across the United States have been fighting for the right to breathe clean air. We have been forced to hold our breath as the EPA has delayed adopting strong emission standards year after year. Meanwhile, California has worked steadily and thoughtfully in invoking its leadership authority, granted to it by Congress in the Clean Air Act, 42 U.S.C. § 7543, to develop and adopt life-saving clean air emission standards.

The EPA should not stand in the way of these health-preserving rules, which California lawfully adopted pursuant to its authority. Our organizations urge the Administrator to grant California's waiver request for the Zero-Emission Rules in full, so that California and other Section 177 states may begin to enforce these life-saving regulations and begin to benefit from the countless lives saved and billions of dollars in expected health benefits from these rules.

I. California's Heavy-Duty Low NOx Omnibus Rule will have tremendous positive impacts on cleaning the air for all Americans.

Medium- and heavy-duty vehicles (MHDVs) are one of the largest sources of nitrogen oxide (NOx) pollution in California, and the country. In California, the heavy-duty trucking

sector is responsible for about one-third of all NOx emissions, despite making up a small fraction of vehicles on the road. Much of this pollution, unsurprisingly, is concentrated in low-income communities of color that are already overburdened by compounding environmental injustices. Diesel-powered vehicles emit fine particulate matter ($PM_{2.5}$) and NOx, which contributes to soot and smog, and when inhaled lead to numerous adverse health outcomes, including premature death. Heavy-duty trucks and buses are also a major source of climate-warming greenhouse gas (GHG) emissions.

People who live near freight hubs or "diesel death zones"—including ports, highways, warehouses, and rail and intermodal yards—are disproportionately exposed to high concentrations of pollution from the combined activity of diesel-fueled heavy-duty trucks, equipment, rail, and vessels. A person's zip code remains the most significant predictor of health and well-being. In fact, low-income communities of color are forced to breathe in an average of almost one-third more NOx pollution than higher-income and majority-white neighborhoods.[1]

In the wake of EPA developing strong rules to control emissions from this heavily polluting sector, Americans across the country are relying on California to adopt strong emission standards using its congressional authority under the Clean Air Act.

a. Overview of the Omnibus Rule.

At the direction of the Board, the California Air Resources Board's (CARB) Executive Officer formally adopted the Omnibus Rule on September 9, 2021. The regulation was approved by California's Office of Administrative Law, was filed with California's Secretary of State, and became operative under state law on December 22, 2021.

The Omnibus Rule establishes more stringent NOx and PM exhaust emission standards for new 2024 and subsequent model year (MY) medium- and heavy-duty diesel and Otto-cycle engines. These emission standards apply to new heavy-duty diesel cycle and Otto-cycle engines used in vehicles over 14,000 lbs in Gross Vehicle Weight Rating (GVWR), and new medium-duty diesel-cycle and Otto-cycle engines used in vehicles between 10,001 and 14,000 lbs in GVWR.

Beginning in 2024 through 2026, the NOx emission standards for heavy-duty diesel and Otto-cycle engines are set at 0.050 g/bhp-hr for Federal Test Procedure (FTP) and Ramped Modal Cycle (RMC) cycles for diesel engines and Otto-cycle engines, and 0.200 for Low-load cycles (LLC). (See Table III-1 below). For new 2027 and subsequent MY heavy-duty diesel and Otto-cycle engines, the exhaust emission standards are set to 0.020 g/bhp-hr for FTP and RMC cycles, and 0.050 for Low-load cycles. (See Table III-2 below). Similarly, the rule establishes a PM exhaust emission standard of 0.005 g/bhp-hr for 2024 and subsequent MY engines.

[1] Demetillo, Mary Angelique G. et al., Space-Based Observational Constraints on NO2 Air Pollution Inequality from Diesel Traffic in Major US Cities, *Geophys*. Research Letters, Vol. 48 No. 17 (Aug. 25, 2021) https://doi.org/10.1029/2021GL094333.

Table III-1. Medium- and Heavy-Duty Diesel- and Otto-Cycle Engine NOx Standards for 2024 through 2026 MYs

MY	Diesel-Cycle Engines[29]				Otto-Cycle Engines[30]
	FTP (g/bhp-hr)*	RMC (g/bhp-hr)	LLC (g/bhp-hr)	Idling (g/hr)**	FTP (g/bhp-hr)
2024-2026	0.050	0.050	0.200	10	0.050

*grams per brake-horsepower-hour
** grams per hour

Table III-2 Medium- and Heavy-Duty Diesel- and Otto-Cycle Engine NOx Standards (2027 and Subsequent MYs)

Test Procedure	Medium-Duty, Light Heavy- and Medium Heavy-Duty Diesel Engines[31]	Medium-Duty and Heavy-Duty Otto-Cycle Engines[32]
FTP cycle (g/bhp-hr)	0.020	0.020
RMC cycle (g/bhp-hr)	0.020	---
Low-load cycle (g/bhp-hr)	0.050	---
Idling (g/hr)	5	---

The Rule also establishes optional Low NOx exhaust emission standards for 2022 and subsequent MY diesel- and Otto-cycle heavy-duty engines that are more stringent than the primary exhaust emission standards, with the goal of encouraging manufacturers to further reduce NOx emission levels. The optional NOx standards are as follows:

Table III-3. Optional Low NOx Standards for Heavy-Duty Diesel-Cycle Engines Used in Vehicles >14,000 lbs GVWR

Model Year	Test Procedure	Oxides of Nitrogen (NOx)	Non-methane Hydrocarbons NMHC	Carbon Monoxide CO	Particulates PM
2022-2023[A]	FTP and RMC	0.10, 0.05, 0.02, or 0.01	0.14	15.5	0.01
2024-2026[A]	FTP and RMC / LLC	0.020 / 0.080	0.14	15.5	0.005
	FTP and RMC / LLC	0.010 / 0.040			
2027 and subsequent Model Year[A]	FTP and RMC/ LLC	0.010 / 0.025	0.14	15.5	0.005

A. A manufacturer may not include an engine family certified to the optional NOx emission standards in the federal or CA Averaging, Banking, and Trading (ABT) programs for NOx, but may include such engine families in the ABT programs for particulate emissions.

Table III.4 Optional Low NOx Standards for Heavy-Duty Otto-Cycle Engines Used in Vehicles >14,000 lbs. GVWR

Optional Low NOx Exhaust Emission Standards for 2024 and Subsequent Model Otto-Cycle Heavy-Duty Engines* (g/bhp-hr)						
Test Procedure	Model Year	Oxides of Nitrogen (NOx)	Non-methane Hydrocarbons NMHC	Carbon Monoxide (CO)	Formaldehyde (HCHO)	Particulates PM
FTP	2022-2023	0.1, 0.05, 0.02, or 0.01	0.14	14.4	0.01	0.01
FTP	2024- 2026	0.010 or 0.020	0.14	14.4	0.01	0.005
FTP	2027 and Subsequent	0.010	0.14	14.4	0.01	0.005

* A manufacturer may not include an engine family certified to the optional NOx emission standards in the federal or California ABT programs for NOx, but may include such engine families in the ABT programs for particulate matter emissions.

The Omnibus Rule also establishes durability demonstration program requirements, including an extended break-in period, standardized aging cycles, and an extension of the required aging hours to full useful life. The regulation also accommodates concerns raised by engine manufacturers by incorporating requested modifications to the requirements for heavy-duty on-board diagnostic system (OBD) and OBD II systems. The rule also holds manufacturers to extended useful life periods for heavy-duty engines used in heavy-duty vehicles, as shown by the table below:

Table III-5 Preexisting and New Heavy-Duty Engine Useful Life Periods

Engine / Vehicle Category (GVWR)	Preexisting Useful Life Periods (Miles)	MY 2027 Useful Life Periods (Miles)	MY 2031 Useful Life Periods (Miles)
Heavy Heavy-Duty Diesel (HHDD)/ Class 8 >33,000 lbs	435,000 10 years 22,000 hours	600,000 11 years 30,000 hours	800,000 12 years 40,000 hours
Medium Heavy-Duty Diesel (MHDD) / Class 6-7 19,501 - 33,000 lbs	185,000 10 years	270,000 11 years	350,000 12 years
Light Heavy-Duty Diesel (LHDD) / Class 4-5 14,001 - 19,500 lbs	110,000 10 years	190,000 12 years	270,000 15 years
Heavy-Duty Otto (HDO) >14,000 lbs	110,000 10 years	155,000 12 years	200,000 15 years

Moreover, the Omnibus Rule updates California's preexisting emission regulatory programs for medium and heavy-duty engines with regard to emissions averaging, banking, and trading (ABT) programs. The regulation also establishes emissions warranty provisions requirements for 2027 and subsequent MYs for heavy-duty engines and vehicles exceeding 14,000 lbs GVWR, as shown in Table III-6 below. The regulation also modifies the reporting thresholds manufacturers must comply with under California's Emissions Warranty Information and Reporting Program.

Table III-6. Emission Warranty Periods for 2027 and Subsequent Model Year Engines and Vehicles > 14,000 lbs GVWR

Engine / Vehicle Category (GVWR)	Preexisting CA*/ Current Federal Warranty (Miles) (Years) [whichever occurs first]	MY 2027 (Miles) (Years) (Operating Hours) [whichever occurs first]	MY 2031 (Miles) (Years) (Operating Hours) [whichever occurs first]
HHDD / Class 8 >33,000 lbs	CA: 350,000 /5	450,000 7 years 22,000 hours	600,000 10 years 30,000 hours
	Federal: 100,000/5		
MHDD / Class 6-7 19,501 - 33,000 lbs	CA: 150,000/5	220,000 7 years 11,000 hours	280,000 10 years 14,000 hours
	Federal: 100,000/5		
LHDD / Class 4-5 14,001 - 19,500 lbs	CA: 110,000/5	150,000 7 years 7,000 hours	210,000 10 years 10,000 hours
	Federal: 100,000/5		
HDO >14,000 lbs	CA and Federal: 50,000/5	110,000 7 years 6,000 hours	160,000 10 years 8,000 hours

* The preexisting California emission warranty periods reflect the lengthened emissions warranty periods established by a separate rulemaking action that amended California's emissions warranty provisions for heavy-duty diesel engines and vehicles in 2018 (the 2018 HD Warranty Amendments). CARB has submitted a separate waiver request for that rulemaking action.

The rule also amends California's heavy-duty in-use compliance program, establishes optional powertrain certification procedures for heavy-duty hybrid vehicles, and amends California's heavy-duty vehicle idling requirements, California's Phase 2 GHG regulations, and medium-duty engine provisions. Finally, the rule establishes compliance flexibilities and exemptions.

The projected statewide benefits of California's Omnibus Rule are valued at $37.4 billion between 2022 and 2050, the majority of which are health benefits.[2] In particular, the rule is expected to cut NOx emissions from heavy-duty trucks by roughly 75 percent below current standards beginning in 2024 and 90 percent in 2027.[3] These emission reductions will amount to $36 billion in statewide health benefits from 3,900 avoided premature deaths and 3,150 hospitalizations from 2022 to 2050.[4] The rule contains additional workforce-related health

[2] California Air Resources Board. *Public Hearing to Consider the Proposed Heavy-Duty Engine and Vehicle Omnibus Regulation and Associated Amendments*, 2022. https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2020/hdomnibuslownox/isor.pdf

[3] *Id.*

[4] *Id.*

benefits as it is expected to decrease occupational exposure to air pollution for California truck operators and other employees who work and live around truck traffic.[5]

The rule is also projected to result in $651 million in non-health benefits. Some of these non-health benefits will accrue to California and non-California based businesses (in-state and out-of-state technology suppliers) and are related to reduced repair costs for fleets from lengthened warranty and useful life provisions leading to the production of more durable truck technology and increased business for repair facilities due to vehicle owners being more likely to pursue timely repairs as a result of the extended warranties, among other economic benefits.

b. Benefits of the Omnibus Rule.

Moreover, while only California can apply for a Section 209(b) waiver, states with areas designated as "non-attainment" for national ambient air quality standards may adopt regulations identical to California's under Section 177 of the Clean Air Act, provided certain conditions are met, including that both California and the Section 177 state adopt the standards at least two years before commencement of the model year(s) affected.[6]

The effect of this is tremendous in that the public health benefits of these rules may extend far beyond California's borders. Indeed, the combined benefits of California's Heavy-Duty NOx Omnibus Rule with the Advanced Clean Truck Rule (ACT) will be far-reaching. In addition to the significant public health benefits anticipated in California, the Omnibus Rule is poised to deliver cleaner air from coast to coast. Oregon and Massachusetts have already opted into the Omnibus Rule, and several other Section 177 States, including New York, Washington, Connecticut, and others are in the process of adopting the rule. The Omnibus Rule, while not a zero-emissions rule, nevertheless plays a vital role in reducing harmful emissions from combustion-powered vehicles as statewide fleets begin to transition to zero-emissions.

For example, in New York, the total population of medium- and heavy-duty trucks is projected to increase by over 40 percent from 2020 to 2050. Even under this boom in truck population, adoption of the Omnibus Rule in New York will result in a 13 percent decrease in cumulative NOx emissions over this same period compared to business-as-usual.[7] On top of this, because these heavy-duty vehicles often travel through communities deeply impacted by air pollution from the freight industry, this decrease in emissions will be particularly meaningful for residents of highly urbanized and freight-adjacent communities.

Moreover, the additive health benefits of opting into *both* the Omnibus Rule and the ACT rule are truly significant. In the less than two years since CARB adopted the final ACT rule, five Section 177 states have formally adopted the rule and therefore committed to requiring

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[5] *Id.*

[6] 42 U.S.C. § 7507.

[7] Minjares, Ray, et al. "Benefits of Adopting California Medium- and Heavy-Duty Vehicle Regulations in New York State." *International Council on Clean Transportation*, 27 May 2022, https://theicct.org/publication/benefits-of-adopting-california-medium-and-heavy-duty-vehicle-regulations-in-new-york-state/.

manufacturers selling heavy-duty vehicles in their states to manufacture and sell an increasing percentage of zero-emission vehicles. When adopted in tandem, the Omnibus Rule and ACT rule will maximize emission reductions from this heavily-polluting industry and therefore public health benefits.

In fact, in some cases, adopting both rules in tandem nearly triples the anticipated benefits of the rules. For instance, Washington State adopted the ACT rule in 2021 and is anticipated to adopt the Omnibus Rule in the coming months. By adopting both rules, Washington State is expected to experience 132 fewer premature deaths and an additional $1.5 billion in monetized health benefits through 2050—which amounts to nearly three times the number of avoided minor health cases compared to Washington adopting the ACT rule alone.[8] Similarly, other states can expect to see significant additive health benefits by adopting both the Omnibus and ACT rules.

Benefits of Adopting the Omnibus and ACT Rules Compared to Adopting the ACT Rule Alone, 2020-2050[9]

Health Metric	Washington[10]	New Jersey[11]	Massachusetts[12]
Avoided Premature Deaths	116%	168%	138%
Avoided Hospital Visits	111%	170%	142%
Avoided Minor Cases	120%	171%	136%
Monetized Value, 2020$ (billions)	$1.55	$1.67	$1.02

[8] Lowell, Dana, et al. Natural Resources Defense Council and the Union of Concerned Scientists., 2021, *Washington Clean Trucks Program: An Analysis of the Impacts of Zero-Emission Medium- and Heavy-Duty Trucks on the Environment, Public Health, Industry, and the Economy*, https://www.ucsusa.org/sites/default/files/2021-09/wa-clean-trucks-report_0.pdf.

[9] Numbers adapted from "Cumulative Public Health Benefits of Clean Trucks Policy Scenarios, 2020-2050" tables in referenced studies

[10] (Lowell, 2021)

[11] Lowell, Dana, et al. Natural Resources Defense Council and the Union of Concerned Scientists, 2021, *New Jersey Clean Trucks Program: An Analysis of the Impacts of Zero-Emission Medium- and Heavy-Duty Trucks on the Environment, Public Health, Industry, and the Economy*, https://www.ucsusa.org/sites/default/files/2021-10/nj-clean-trucks-report.pdf.

[12] Seamonds, David, et al. Natural Resources Defense Council and the Union of Concerned Scientists, 2021, *Southern New England Clean Trucks Program: An Analysis of the Impacts of Zero-Emission Medium- and Heavy-Duty Trucks on the Environment, Public Health, Industry, and the Economy*, https://www.ucsusa.org/sites/default/files/2022-01/southern-ne-clean-trucks-report.pdf.

II. Section 209 of the Clean Air Act dictates that the Administrator grant California's waiver request for the Omnibus Rule.

While generally the Clean Air Act prohibits states from adopting emission standards for new motor vehicles[13], Congress explicitly gave California authority to develop and adopt emission standards that go above and beyond federal levels, so long as California receives a waiver of preemption from EPA to enforce the state's vehicle emission standards.[14] As the legislative history makes clear, in adopting Section 209 of the Clean Air Act, Congress recognized the need for California's leadership in pushing the vehicle industry to develop cleaner technology. Indeed, "unique local conditions virtually demand that California retain strict and hopefully total control over all efforts to reduce emissions within her boundaries."[15]

Importantly, there are only narrow circumstances in which EPA is authorized to *deny* California's request for a waiver. In fact, the Administrator *must* grant a waiver to California—so long as the state has determined that its standards will be, in the aggregate, at least as protective of public health and welfare as applicable federal standards—unless the Administrator finds one of three scenarios: that (1) the state's protectiveness determination is arbitrary and capricious, (2) California does not need separate state standards to meet compelling and extraordinary conditions, or (3) the state's standards and accompanying enforcement procedures are not consistent with section 202(a) of the Clean Air Act.[16] Critically, it is the parties opposing California's waiver request who bear the burden of persuading the Administrator that the waiver request should be denied.[17] In other words, EPA should presume that California has satisfied the criteria for granting a waiver request.[18]

EPA itself has confirmed the limits of its authority to deny such a waiver. The agency has specifically noted that "[t]he law makes it clear that the waiver request cannot be denied unless

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[13] 42 U.S.C. § 7543(a).

[14] 42 U.S.C. § 7543(b). Likewise, states that are not in compliance with national ambient air quality standards, *i.e.*, Section 177 states, are entitled to adopt standards identical to California's vehicle emission standards. *Id.* § 7507. Section 177 states must adopt the standards at least two years before commencement of the model year regulated and the state must have a plan approved by the federal government for attaining compliance with the federal air quality standards. *Id.*

[15] H. Rpt. 90-728 at 96-97.

[16] 42 U.S.C. § 7543(b).

[17] *See* 78 Fed. Reg. 2112, 2116 (Jan. 9, 2013) ("California must present its regulations and findings at the hearing and thereafter the parties opposing the waiver request bear the burden of persuading the Administrator that the waiver request should be denied."); *Motor & Equip. Mfrs. Ass'n v. EPA*, 627 F.2d 1095, 1121 (D.C. Cir. 1979).

[18] Moreover, section 209(e)(2) establishes almost identical waiver requirements for California standards relating to controlling emissions from new and in-use nonroad engines that are not preempted by section 209(e)(1), *i.e.*, new engines less than 175 hp used in farm and construction equipment and vehicles and new engines used in new locomotives and locomotive engines. Therefore, to the extent the Administrator finds that section 209(e)(2) applies to the Omnibus Rule, the EPA should apply the same test set forth under section 209(b).

the specific findings designated in the statute can properly be made."[19] Likewise, EPA has repeatedly acknowledged that California maintains discretion in determining issues of public policy that may be ambiguous or controversial in nature.[20] For instance, EPA noted that "the text, structure, and history of the California waiver provision clearly indicate both a congressional intent and appropriate EPA practice of leaving the decision on 'ambiguous and controversial matters of public policy' to California's judgment."[21]

Under this standard, there is no basis for EPA to lawfully deny California's waiver for the Omnibus Rule, because (1) California's protectiveness determination is neither arbitrary nor capricious, (2) there are very clearly compelling and extraordinary conditions that necessitate separate state standards here, and (3) the standards at issue are not inconsistent with section 202(a) of the Clean Air Act. Therefore, EPA must grant California's waiver request for the Omnibus Rule.

a. California's determination that the Omnibus Rule is at least as protective of public health and welfare as the federal standards is not arbitrary or capricious.

Under Section 209, if California has determined that its standards, in the aggregate, are at least as protective of the public health and welfare as applicable federal standards, EPA cannot deny California's waiver request unless the agency concludes California's determination is arbitrary or capricious.[22] In evaluating California's protectiveness determination, EPA compares the stringency of the California and federal standards at issue in a given waiver request.[23] But, importantly, each individual state standard does not need to be at least as stringent as comparable federal standards. Instead, EPA must undertake this comparison within the broader context of the previously waived California program, which itself relies on protectiveness determinations that EPA has already found were not arbitrary and capricious.[24] If the Administrator finds, based on clear and compelling evidence, that California's determination is arbitrary or capricious, then denial of California's waiver request is appropriate.

Here, the CARB Board made its protectiveness finding for the Omnibus Rule in Resolution 20-23, in which it resolved:

> BE IT FURTHER RESOLVED that the Board hereby determines that the regulations adopted herein will not cause California motor vehicle and off-road engine emission standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards.

There is no reason for the Administrator to find the Board's determination arbitrary or capricious. To start, the Administrator has previously granted waivers to California's heavy-duty

[19] 40 Fed. Reg. 23,102, 23,104 (May 28, 1975).
[20] 78 Fed. Reg. at 2115-16.
[21] *Id.* (quoting 40 Fed. Reg. 23104; 58 Fed. Reg. 4165, 4166 (Jan. 13, 1993)).
[22] 42 U.S.C. § 7543(b).
[23] 77 Fed. Reg. 9239, 9243 (Feb. 16, 2012).
[24] *Id.*

and medium-duty engine and vehicle emission regulations, and these approved protectiveness determinations establish the broader context of California's emission control program. Specifically, California's preexisting emission standards and emissions-related requirements are, in the aggregate, at least as protective as the corresponding federal standards. For example, EPA has previously granted waivers for California heavy-duty regulations for preexisting diesel engine standards[25] and Otto-cycle engine standards,[26] as well as for various regulations applicable to heavy-duty diesel engines and vehicles[27] and heavy-duty Otto-cycle engines and vehicles,[28] including California's OBD regulations,[29] heavy-duty diesel in-use compliance regulation,[30] emissions warranty and recall programs,[31] heavy-duty diesel engine idling regulation,[32] off-road compression engine emission standards,[33] and certification procedures for hybrid-electric buses and heavy-duty vehicles.[34]

On top of this, California's Omnibus Rule is significantly more stringent than the comparable federal standards. The federal emission standards do not contain either of the more stringent primary NOx or PM exhaust emission standards included in the Omnibus Rule. Indeed, EPA last updated its particulate matter and nitrogen oxide standards for heavy-duty trucks in 2001, in a rule which, when fully phased in by 2013, requires new heavy-duty trucks to average 0.2 g NO_X per brake-horsepower-hour (g NO_X/bhp-hr). In 2008, CARB introduced a one-of-a-kind fleet program to accelerate turnover of virtually all active heavy-duty trucks in the state to

[25] 70 Fed. Reg. 50,322 (Aug. 26, 2005).
[26] 75 Fed. Reg. 70,238 (Nov. 17, 2010).
[27] 69 Fed. Reg. 59,920 (Oct. 6, 2004); 53 Fed. Reg. 7,021 (March 4, 1988); 52 Fed. Reg. 20,777 (June 3, 1987); 49 Fed. Reg. 39,731 (Oct. 10, 1984); 46 Fed. Reg. 36,742 (July 15, 1981); 46 Fed. Reg. 26,371 (May 12, 1981); 43 Fed. Reg. 36,679 (Aug. 18, 1978); 42 Fed. Reg. 31,639 (June 22, 1977); 36 Fed. Reg. 8,172 (April 30, 1971).
[28] 69 Fed. Reg. 59,920 (Oct. 6, 2004), 53 Fed. Reg. 7,022 (March 4, 1988), 53 Fed. Reg. 6,197 (March 1, 1988), 49 Fed. Reg. 39,731 (Oct. 10, 1984), 46 Fed. Reg. 36,742 (July 15, 1981), 46 Fed. Reg. 26,371 (May 12, 1981), 43 Fed. Reg. 20,549 (May 12, 1978), 42 Fed. Reg. 31,637 (June 22, 1977), 42 Fed. Reg. 31,639 (June 22, 1977), 36 Fed. Reg. 8,172 (April 30, 1971), 34 Fed. Reg. 7,348 (May 6, 1969), and 33 Fed. Reg. 10,160 (July 16, 1968).
[29] 81 Fed. Reg. 78,143 (Nov. 7, 2016); 73 Fed. Reg. 52,042 (Sept. 8, 2008); 77 Fed. Reg. 73,459 (Dec. 10, 2012).
[30] 82 Fed. Reg. 4,867 (Jan. 17, 2017).
[31] 44 Fed. Reg. 61,096 (Oct. 23, 1979); 49 Fed. Reg. 43,502 (Oct. 2, 1984); 55 Fed. Reg. 28,823 (July 13, 1990); 70 Fed. Reg. 50,322 (Aug. 26, 2005).
[32] 77 Fed. Reg. 9,239 (Feb. 16, 2012); 82 Fed. Reg. 4,867 (Jan. 17, 2017).
[33] 75 Fed. Reg. 8,056 (Feb. 23, 2010).
[34] 78 Fed. Reg. 44,112 (July 23, 2013).

meet this standard by January 1, 2023.[35] However, even under these requirements, California is not expected to be able to meet its federal air quality requirements under the Clean Air Act.[36]

In 2013, California introduced voluntary low-NOX standards (0.1, 0.05, and 0.02 g NO_X/bhp-hr), recognizing a need to drive beyond EPA's regulatory targets. Those voluntary standards were further supported by incentives—between 2008 and 2015, California spent nearly $3 billion in funding the demonstration and deployment of vehicles that could achieve these voluntary standards,[37] and from 2017-2021, the State spent an additional $120 million through its incentive programs solely on heavy-duty trucks achieving at least a 0.02 g NO_X/bhp-hr standard,[38] with substantial additional investment from the Volkswagen settlement, not to mention hundreds of millions of dollars in funding through the federal Diesel Emissions Reduction Act helping to incentivize the deployment of low-NO_X and zero-emission vehicles.

As part of this work, in 2013, the State initiated a research program with Southwest Research Institute to study the technical feasibility of achieving a 90 percent reduction in NOx emissions, as measured by the Federal Test Procedure (FTP). The research developments resulting from this work have been presented at least 16 times to the program's advisory group, which includes a broad array of stakeholders, including industry, and CARB staff have presented

[35] California Air Resources Board. "Rulemaking to Consider Adoption to the Statewide Truck and Bus Regulations." *Statewide Truck and Bus Regulations*, California Environmental Protection Agency, 11 Dec. 2022, https://www.arb.ca.gov/regact/2008/truckbus08/truckbus08.htm.

[36] California Air Resources Board, *Staff Report: Initial Statement of Reasons on the Proposed Heavy-Duty Inspection and Maintenance Regulation, p II-2*. 2021. https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2021/hdim2021/isor.pdf

[37] South Coast Air Quality Management District, Petition to EPA for Rulemaking to Adopt Revised NOx Exhaust Standards, p. 9. 2016.

[38] White, Vicki. "South Coast AQMD Incentives Update." California Air Resources Board, 26 Jan. 2020, http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/printer-friendly-combind-hd-trucks-carb-biz-aqmp-presentations-1-26-21.pdf?sfvrsn=14

the work publicly on at least 66 occasions since 2016.[39] Conclusions from the first phase of this work were published in 2017,[40] additional reports published in 2020[41] and 2021.[42]

In California's 2016 State Implementation Plan, lower NOx standards for heavy-duty trucks (first announced in 2015[43]) and a "Lower In-Use Emission Performance Level" were noted as critical strategies to meet the state's 2031 air quality targets.[44] These twin pillars would form the basis of California's Omnibus Rule, a comprehensive regulatory strategy to reduce real-world NOx emissions from heavy-duty trucks. This formal process began in November 2016, with the first of a series of stakeholder meetings and workshops.[45] After years of stakeholder engagement around the design of the program, as well as cost and feasibility, CARB proposed its rule in 2020, and finalized it in 2021.

The Omnibus rule addresses a number of distinct areas of regulation simultaneously to rectify a central problem with the federal 2007/2010 heavy-duty truck regulations, which is that the reductions on lab test results do not produce lasting on-road reductions over the lifetimes of the vehicle.[46] To address this, the rule included changes to: numerical stringency on existing test

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[39] California Air Resources Board, *Staff Report: Initial Statement of Reasons on the Proposed Heavy-Duty Inspection and Maintenance Regulation, Appendix G*. 2021. https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2021/hdim2021/isor.pdf

[40] Sharp, Christopher. "Evaluating Technologies and Methods to Lower Nitrogen Oxide Emissions from Heavy-Duty Vehicles," *Southwest Research Institute*, ARB Contract 13-312, SwRI® Project Number 19503, Final Report, April, 2017.

[41] Sharp, Christopher. "Heavy-Duty Engine Low-Load Emission Control Calibration, Low-Load Test Cycle Development, and Evaluation of Engine Broadcast Torque and Fueling Accuracy During Low-Load Operation, Low NOx Demonstration Program – Stage 2," *Southwest Research Institute*, ARB Contract 15MSC010, SwRI® Project Number 03.22496, Final Report, May 6, 2020.

[42] Sharp, Christopher. "Further Development and Validation of Technologies to Lower Oxides of Nitrogen Emissions from Heavy-Duty Vehicles, Low NOx Demonstration Program – Stage 3," *Southwest Research Institute*, ARB Contract 16MSC010, SwRI® Project Number 03.23379, Final Report, April 16, 2021.

[43] Environmental Protection Agency, *Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles - Phase 2 Response to Comments Document for Joint Rulemaking*, EPA-420-R-16-901, August 2016

[44] California Air Resources Board. *2016 State Strategy for the State Implementation Plan*, 2017.https://ww2.arb.ca.gov/resources/documents/2016-state-strategy-state-implementation-plan-federal-ozone-and-pm25-standards.

[45] Staff of the Mobile Source Control Division Mobile Source Regulatory Development Branch. California Air Resources Board, 2019, *California Air Resources Board Staff Current Assessment of the Technical Feasibility of Lower NOx Standards and Associated Test Procedures for 2022 and Subsequent Model Year Medium-Duty and Heavy-Duty Diesel Engines*, p. 5.

[46] Concern about diesel emissions controls' reliability on 2007/2010-compliant engines were raised at least as far back as in 2013 in a report funded by the South Coast Air Quality

procedures for NOx and PM; lab test procedures; in-use verification; and warranty and vehicle lifetime. Each of those changes are described below, in comparison to the current federal program. Taken both individually and in total, these changes are significantly more protective of public health than the current federal requirements.

i. Numerical stringency on current test procedures

The certified levels of NOx and PM emissions for heavy-duty engines are measured via the transient FTP and the supplemental steady-state emissions test (SET) procedure. Compared to the current average requirements on the FTP/SET cycles, the Omnibus rule achieves a 75 percent reduction in NOx emissions in 2024 and a 90 percent reduction in 2027 (Table TABLE **1**).[47] Thus, the Omnibus program is considerably more protective, as measured by the current federal requirements.

TABLE 1. Required FTP/SET engine NO_X certification levels, at full useful life (FUL)

Class[48]	Current federal standard	Omnibus standard, 2024	Omnibus standard, 2027	Omnibus standard, 2031
LHDD	0.2 g/bhp-hr	0.05 g/bhp-hr	0.02 g /bhp-hr	0.02 g /bhp-hr
MHDD	0.2 g/bhp-hr	0.05 g/bhp-hr	0.02 g /bhp-hr	0.02 g /bhp-hr
HHDD	0.2 g/bhp-hr	0.05 g/bhp-hr	0.02 g/bhp-hr (IUL[49]) 0.035 g/bhp-hr	0.02 g/bhp-hr (IUL) 0.04 g/bhp-hr
HDO	0.2 g/bhp-hr	0.05 g/bhp-hr	0.02 g/bhp-hr	0.02 g/bhp-hr

In the case of PM, the Omnibus Rule reduces the required standards by 50 percent compared to current federal requirements (Table TABLE **2**). While many engines today are certified well below the current federal standard, recently manufacturers have been backsliding on $PM_{2.5}$ emissions, choosing to deploy weaker (but still compliant) controls for $PM_{2.5}$. Thus,

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Management District (Miller, Wayne, et al. South Coast Air Quality Management District, 2013, In-Use Emissions Testing and Demonstration of Retrofit Technology for Control of On-Road Heavy-Duty Engines, https://lazerinitiative.org/wp-content/uploads/2019/04/2013_AQMD_in-use_retrofit_Miller.pdf.), and CARB followed up with a more extensive demonstration of the failure of diesel emissions controls to effectively reduce emissions in many on-road cycles with a more comprehensive real-world study published in 2018 (Jiang, Yu, et al. "Characterizing Emission Rates of Regulated Pollutants from Model Year 2012 + Heavy-Duty Diesel Vehicles Equipped with DPF and SCR Systems." Science of The Total Environment, vol. 619-620, 1 Apr. 2018, pp. 765–771., https://doi.org/10.1016/j.scitotenv.2017.11.120.).

[47] These reductions refer to the full useful life for light- and medium-heavy-duty diesel engines as well as heavy-duty Otto-cycle engines, and to the intermediate useful life of 435,000 miles for heavy-heavy-duty diesel engines.

[48] Light heavy-duty diesel (LHHD); medium heavy-duty diesel (MHHD); heavy heavy-duty diesel (HHDD); heavy-duty Otto-cycle (HDO).

[49] IUL = Intermediate Useful Life, equivalent to the current full useful life (FUL) for HHDD engines of 435,000 miles.

California's adjustment to the particulate matter is more protective than the federal program by greatly limiting the amount of backsliding on progress reducing particulate matter emissions.

TABLE 2. Required FTP/SET engine $PM_{2.5}$ certification levels, at FUL

Class	Current federal standard	Omnibus standard, 2024+
All HD engines	0.010 g/bhp-hr	0.05 bhp-hr

ii. Additional lab test procedures.

In order to better capture real-world operations, the Omnibus Rule has two lab test cycle requirements that the current federal standards do not. The first is an additional requirement on engine idling. While California first introduced the Clean Idle standard for diesel engines in 2008, the federal program has no such requirement. In addition to updating the Clean Idle standard, the Omnibus rule introduces a new test cycle, the low-load test cycle, meant to capture emissions under low-load and low-speed urban driving operations where today's emissions controls are most frequently operating at suboptimal efficiency.[50] These test procedures are required for all heavy-duty diesel engines. Because there is no current federal requirement, by definition these requirements are more protective (Table TABLE **3**).

TABLE 3. California NOx standards for test cycles not required under federal emissions standards

Class	Idling Requirement			Low-Load Cycle Requirement	
	Current (CA)	2024 Omnibus	2027+ Omnibus	2024 Omnibus	2027+ Omnibus
LHDD	30 g/hr	10 g/hr	5 g/hr	0.2 g/bhp-hr	0.05 g/bhp-hr
MHDD	30 g/hr	10 g/hr	5 g/hr	0.2 g/bhp-hr	0.05 g/bhp-hr
HHDD	30 g/hr	10 g/hr	5 g/hr	0.2 g/bhp-hr	0.05 g/bhp-hr (IUL) 0.05 g/bhp-hr

iii. In-use requirements

The current federal in-use testing program requires that an engine not exceed a certain level of emissions within a specific range of engine operation (the so-called "not to exceed" (NTE) requirement), as measured by a portable emissions measurement system (PEMS) on the vehicle. However, with a significant number of exemptions related to engine and emissions control operating conditions, as well as changes to the way in which modern diesel engines operate, nearly all data collected by the agency is removed from the dataset used to measure

[50] Jiang, Yu, et al. "*Characterizing Emission Rates of Regulated Pollutants from Model Year 2012 + Heavy-Duty Diesel Vehicles Equipped with DPF and SCR Systems*." Science of The Total Environment, vol. 619-620, 1 Apr. 2018, pp. 765–771., https://doi.org/10.1016/j.scitotenv.2017.11.120.

compliance with the current heavy-duty in-use testing (HDIUT) requirements, making the current federal HDIUT program virtually toothless.

For example, in a recent collection of 160 PEMS tests over 26 engine families for model years 2010-2016, 91.3 percent of the data collected was ignored.[51] For 24 of the 160 tests, no data met the requirements of the HDIUT program, requiring an automatic retest. Thus, a significant amount of operation is completely ignored by the current program.

The impact that this has on pollution is significant. According to the data, just 6 out of 26 engine families had any data above the allowance which would trigger a failure under the HDIUT protocol, and because of additional requirements allowing for retests and requiring additional thresholds related to the number of failures, the number of engine family failures against the HDIUT is less than the observed 6 datasets. And yet, when looking across all data collected, 18 of the 26 engine families across 147 of the 160 tests exceeded the 0.3 g NOx/bhp-hr in-use threshold at some point in the test. On average, excluding idling, the observed trucks emitted more than double the certification level (0.42 g/bhp-hr compared to 0.2), with an average level at low speeds (1 to 25 mph) exceeding 7 times the certification level (1.41 g/bhp-hr compared to 0.2).

In the Omnibus Rule, CARB sought to address this disconnect, to ensure that real-world operation of emissions controls matches the requirements of their test procedures. As a result, they adopted a new HDIUT program based on a "moving average window" (MAW) approach found in Europe. While there are still some exemptions for low-frequency events, the modified approach moved from an NTE that captured 4.9 percent of test time and just 5.7 percent of emitted NOx to a MAW test that included 60.1 percent of test time and 61.6 percent of emitted NOx.[52] This increased the failure rate from just 9.2 percent to 88.4 recent, better reflecting the frequency of suboptimal operation of current emissions control systems.[53]

EPA has proposed in its next round of heavy-duty engine emissions standards an in-use program nearly identical to what CARB has already adopted in the Omnibus Rule, citing as part of its justification the "significant operation not covered by NTE standards" and noting that "manufacturers are responding to the European [MAW] certification standards by designing their emission controls to perform well under low-load operations, as well as highway operations."[54]

By changing in-use test procedures, the Omnibus Rule better ensures that emissions reductions observed in the lab test procedures are replicated under a broader range of operating

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[51] Badshah, Huzeifa, et al. International Council on Clean Transportation, 2019, *Current State of NOx Emissions From In-Use Heavy-Duty Diesel Vehicles in the United States*, https://theicct.org/wp-content/uploads/2021/06/NOx_Emissions_In_Use_HDV_US_20191125.pdf

[52] California Air Resources Board, *Staff Report: Initial Statement of Reasons on the Proposed Heavy-Duty Inspection and Maintenance Regulation*, Figure II-6. 2021. https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2021/hdim2021/isor.pdf

[53] *Id.*

[54] 87 Fed. Reg. 17,414, 17,472 (March 28, 2022).

conditions in the real-world, particularly under the low-load operations likely to be experienced in urban environments. These conditions represent both a significant local public health hazard and a blind spot in current federal regulations, making CARB's adjustment to the HDIUT program significantly more protective of public health than the current federal requirements.

iv. Warranty and lifetime mileage adjustments

Emissions warranties and lifetime mileage requirements have long been a tool of California to clarify to consumers, manufacturers, and the vehicle service industry the rights and responsibilities regarding engine and emissions controls. In the case of both light- and heavy-duty vehicles, California's warranty requirements predate those at the federal level.[55]

The federal warranty requirements have not been adjusted since 1983.[56] Since then, engine technology and durability has improved significantly. Heavy-duty diesel engines last well beyond the current useful lifetime, with 90 percent of engines lasting nearly double the current regulatory requirement, and 50 percent of Class 8 engines nearly triple (

FIGURE 1).[57] This extends to the warranty period, where the standard 100,000-mile warranty requirement is only a very small fraction of the expected lifetime of the engine and is

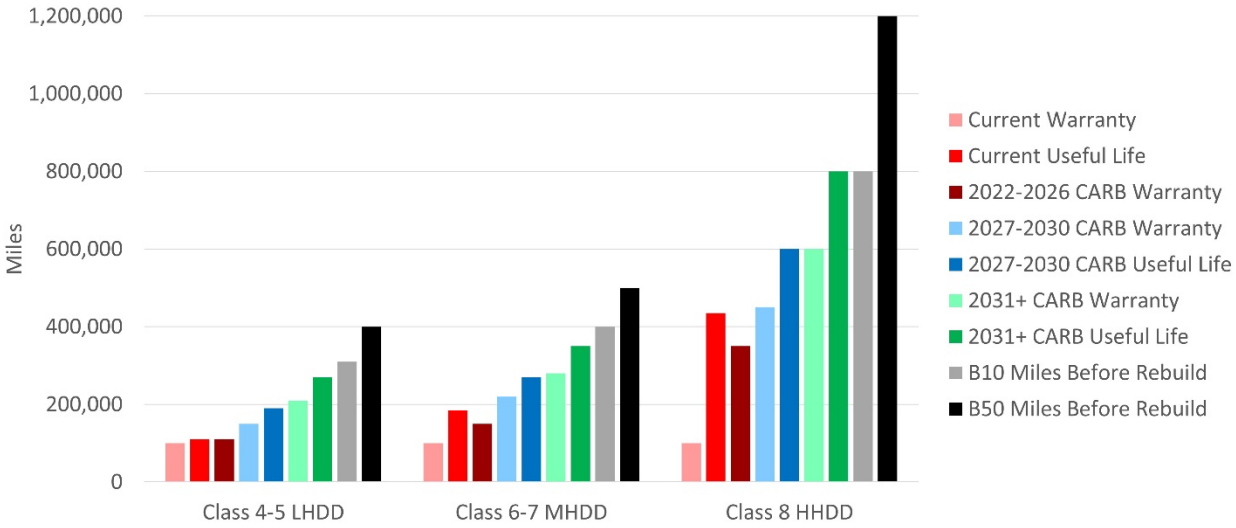
[55] 13 CCR § 2039, December 14, 1978 ("Emission Control System Warranty Regulations"); 47 Fed. Reg. 49,802 (Nov. 2, 1982); 49 Fed. Reg. 24,320 (June 12, 1984).

[56] 48 Fed. Reg. 52,170 (Nov. 16, 1983).

[57] B10 is defined as the mileage before which 10 percent of the fleet will require a major repair, overhaul, or replacement. Similarly, B50 is defined as the mileage before which 50 percent of the fleet will require a major repair, overhaul, or replacement. Data on the B10/B50 statistics are presented by CARB.
South Coast Air Quality Management District. "Proposed Heavy-Duty Vehicle (HDV) Warranty Period Amendments Public Workshop." *California Air Resources Board*, 12 July 2017, https://ww2.arb.ca.gov/sites/default/files/classic/msprog/hdlownox/files/workshop071217/warrantyws_presentation.pdf.

well behind typical manufacturer warranties and extended warranties of 250,000 and 500,000 miles.

FIGURE 1. Engine warranty and useful-life periods, compared to average rebuild mileage



In 2018, CARB approved increases to heavy-duty vehicle warranties, applicable beginning in model year 2022 (Table TABLE **4**). These were followed by adjustments to both warranty length and full useful life (FUL) in the Omnibus Rule (Table TABLE **4**). For HHDD engines, an intermediate useful life (IUL) requirement was also added, to account for additional levels of degradation over the longer FUL while still ensuring the 90 percent reduction over the current FUL.

TABLE 4. Current and future vehicle and engine warranty and useful life periods

Class:	**LHDD**	**MHDD**	**HHDD**	**HDO**
Effective year	**Warranty (miles)**			

Current (federal)	50,000 5 years	100,000 5 years	100,000 5 years	50,000 5 years
2022-2026 (CA)	110,000 5 years	150,000 5 years	350,000 5 years	50,000 5 years
2027-2030 (CA)	150,000 7 years/7k hrs.	220,000 7 years/11k hrs.	450,000 7 years/22k hrs.	110,000 7 years/6k hrs.
2031+ (CA)	210,000 10 years/10k hrs.	280,000 10 years/14k hrs.	600,000 10 years/30k hrs.	160,000 10 years/8k hrs.
	Useful life (miles)			
Current (federal)	110,000 10 years	185,000 10 years	435,000 10 years/22k hrs.	110,000 10 years
2027-2030 (CA)	190,000 12 years	270,000 11 years	600,000 11 years/30k hrs.	155,000 12 years
2031+ (CA)	270,000 15 years	350,000 12 years	800,000 12 years/40k hrs.	200,000 15 years

The useful life is critical to ensure adequate testing such that emissions controls are functional for the life of the engine. The warranty period, however, is even more important, to minimize tampering or disrepair, and shifts the cost of failures onto the manufacturer rather than the driver. Repair costs and downtime can be a significant burden for drivers, and survey data has shown that there is a significant interest in coverage that better reflects the operational lifetime of the vehicle.[58] Nearly one-quarter of respondents in that study already opt for an extended warranty, with a substantial share of those respondents choosing warranties that exceed the current useful-life requirements of the engine. A majority of owner-operators suggested future warranty coverage should meet or exceed 500,000 miles, well above the current minimum. This is borne out in more recent analysis of the market, which shows that 85 percent of the market already opts for an extended warranty, with just about half of those users opting for warranty coverage of at least 500,000 miles.[59]

Federal warranty and useful life lengths are woefully out of date and inconsistent with modern diesel engines. The Omnibus Rule significantly increases both the warranty and useful life length, which increases the guaranteed mileage over which emissions controls will be active, including by reducing costs for operators to reduce levels of malmaintenance. In doing so, CARB's Omnibus requirements are again more protective than the federal status quo.

[58] Kerschner, B., and D. Barker. California Air Resources Board. *Survey and analysis of heavy-duty vehicle warranties in California (15MSC009)*. December 2017. https://ww3.arb.ca.gov/regact/2018/hdwarranty18/apph.pdf.

[59] California Air Resources Board, *Staff Report on the Warranty Cost Study for 2022 and Subsequent Model Year Heavy-Duty Diesel Engines,* 2022. https://ww2.arb.ca.gov/sites/default/files/2022-01/warranty_cost_study_final_report.pdf

In sum, there can be little doubt that California's determination that the Omnibus Rule is at least as protective as federal standards is not arbitrary or capricious. California's waiver request clearly satisfies the protectiveness criterion under section 209(b)(1)(A).

b. There can be no doubt that California continues to need a separate motor vehicle emissions control program to meet the State's compelling and extraordinary conditions.

EPA has consistently acknowledged that California experiences "compelling and extraordinary conditions" that warrant the State's need to adopt its own motor vehicle emissions control program. Indeed, EPA has *never* disputed California's need to reduce emissions of criteria pollutants as it relates to the Section 209(b)(1)(B) inquiry.[60] Because the conditions in California have not changed, there is no doubt that California continues to need its own motor vehicle control program to meet its compelling and extraordinary conditions.

The Administrator's review under section 209(b)(1)(B) relates to "California's need for its program, as a whole, for the class or category of vehicles being regulated, as opposed to its need for individual standards."[61] Indeed, EPA has recognized that California's need is not

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[60] In 2019, in "The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program" (SAFE I), 84 Fed. Reg. 51,310 (Sept. 27, 2019), EPA withdrew a portion of a waiver it had already granted to California as part of its Advanced Clean Cars (ACC) program—specifically, the waiver for California's zero-emission vehicle mandate and GHG emission standards. EPA based its withdrawal in part on its determination that California did not need the *specific* emission standards in ACC to address the State's compelling and extraordinary conditions. This determination relied on a novel interpretation of "compelling and extraordinary conditions" that does not apply here.

First, critically, the Administrator expressly noted in the docket for this waiver request that "EPA intends to use [the] traditional interpretation in evaluating California's Omnibus Low NOx Regulations." EPA, Docket No. EPA-HQ-OAR-2022-0332, Notice of Opportunity for Public Hearing and Comment. EPA explained that the traditional interpretation "mean[s] that California needs a separate motor vehicle program as a whole in order to address environmental problems caused by conditions specific to California and/or effects unique to California (the 'traditional' interpretation)." *Id.*

Second, the agency's novel interpretation of "compelling and extraordinary conditions" does not apply to this waiver request regardless. Indeed, in SAFE I, the Administrator expressly noted that its novel interpretation of section 209(b)(1)(B) applies only to waiver requests for GHG emission-reducing standards. *See* 84 Fed. Reg. at 51,341 n.263 ("EPA does not determine in this document and does not need to determine today how this determination may affect subsequent reviews of waiver applications with regard to criteria pollutant control programs.").

Because the Administrator explicitly concluded the agency will apply the traditional interpretation here, and on top of this, because the Zero-Emission Rules address criteria pollutants, the novel interpretation of "compelling and extraordinary conditions" does not apply here.

[61] 76 Fed. Reg. 34,693, 34,697 (June 14, 2011). *See also Dalton Trucking, Inc. v. EPA*, 846 Fed. App'x 442, 443-44 (9th Cir. 2021) (upholding EPA's determination that California continues to

dependent on the program achieving specific levels of improvement in air quality, or standards regulating to specified levels of stringency.[62] Rather, Congress intended for EPA to defer to California's judgments regarding whether to regulate specific pollutants[63], or how stringently to regulate pollutants.[64] Put another way, the inquiry here relates to "California's need for its program, as a whole, for the class or category of vehicles being regulated, as opposed to its need for individual standards."[65]

Likewise, in reviewing waivers under section 209(b), the Administrator has determined that "compelling and extraordinary conditions" refers not to the levels of pollution directly, but "primarily to the factors that tend to produce higher levels of pollution—geographical and climactic conditions . . . that, when combined with large numbers and high concentrations of automobiles, create serious air pollution problems."[66]

California's unique geography and topography, as well as the considerable and continued growth in on-road motor vehicles—thanks in large part to the recent boom in the freight industry, makes it clear that California has compelling and extraordinary conditions. California continues to experience some of the worst air quality in the nation: of the nineteen areas designated as nonattainment in the State, ten areas in California are classified as Moderate and above.

Statewide, more than 21 million out of over 39 million Californians live in areas that exceed the federal ozone standards; within these areas, medium and heavy-duty vehicles, as well as the industries they support, contribute to pollutant levels significantly higher than the federal standards. As seen in the below table, both the South Coast and San Joaquin Valley Air Basins are in severe non-attainment of the national ambient air quality standards for PM2.5 and ozone. The South Coast represents many of southern California's coastal counties and contains the Ports of Los Angeles and Long Beach, the two largest ports in the nation. The San Joaquin Valley contains major freight corridors and is responsible for a significant amount of the agricultural production coming out of California.[67]

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experience compelling and extraordinary conditions even under the novel test, while also holding that the novel test only applied in this context because EPA conceded as much there).

[62] 79 Fed. Reg. 45,256, 46,262 (Aug. 7, 2014) ("But nothing in section 209(b)(1)(B) calls for California to quantify specifically how its regulations would affect attainment of the national ambient air quality standards in the state. . . . [T]he relevant question is whether California needs its own motor vehicle pollution program to meet compelling and extraordinary conditions, and not whether the specific standards that are the subject of this waiver request are necessary to meet such conditions.").

[63] 43 Fed. Reg. 25,729, 25,735 (June 14, 1978).

[64] 49 Fed. Reg. 18,887, 18,891 (May 3, 1984) (EPA deferring to California's decision to require even marginal improvements of air quality in adopting diesel particulate emission standards for 1985 and later model year passenger cars, light-duty trucks, and medium-duty vehicles).

[65] 76 Fed. Reg. at 34,697.

[66] 74 Fed. Reg. 32,744, 32,759 (July 8, 2009) (internal quotation marks and citation omitted).

[67] California Agricultural Resource Directory, *Agricultural Statistical Review. 2020* https://www.cdfa.ca.gov/Statistics/PDFs/2020_Ag_Stats_Review.pdf

California's Ozone Nonattainment Areas for 70 ppb 8-Hour Ozone Standard[68]

Nonattainment Area	Classification	Attainment Year	2020 Design Value (ppb)
South Coast Air Basin	Extreme	2037	114
San Joaquin Valley	Extreme	2037	93
Western Mojave Desert	Severe	2032	90
Coachella Valley	Severe	2032	88
San Diego County	Severe	2032	79
Ventura County	Serious	2026	75[25]
Sacramento Metro	Serious[26]	2026	86
Eastern Kern County	Serious[25]	2026	86
Western Nevada County	Serious[25]	2026	75[27]
Mariposa County	Moderate[28]	2023	79
Amador County	Marginal	2020	69
Butte County	Marginal	2020	70[29]
Calaveras County	Marginal	2020	69[30]
Imperial County	Marginal	2020	78
San Francisco Bay Area	Marginal	2020	69
E. San Luis Obispo County	Marginal	2020	70[31]
Sutter Buttes	Marginal	2020	70[32]
Tuolumne County	Marginal	2020	70[33]
Tuscan Buttes-Tehama	Marginal	2020	70[34]

[68] California Air Resources Board. *Draft 2022 State Strategy for the State Implementation Plan*, 2022, pp. 17, 41 https://ww2.arb.ca.gov/sites/default/files/2022-01/Draft_2022_State_SIP_Strategy.pdf

The South Coast has never met *any* of the federal ozone standards established pursuant to the Clean Air Act.[69] In fact, heavy-duty vehicles represent the largest source of NOx emissions needed to attain the 2015 8-hour ozone National Ambient Air Quality Standards (NAAQS) in the South Coast. Moreover, the freight industry has seen a rapid and accelerated boom in recent years, in part due to increased online purchasing as a result of the COVID-19 pandemic. San Bernardino County, which is partly located in the South Coast, has seen some of the most rapid expansion of goods movement over the last five years. New warehouses and distribution centers pop up every day, and heavy-duty diesel trucks are typically the trucks transporting these goods around the region. The following chart demonstrates just how important and central California's medium- and heavy-duty vehicle regulations are to the attainment strategy for the South Coast Air Basin.[70]

Control Measures	**Expected Reductions by 2037 (tons/day)**		
	NOx	VOC	PM25
Stationary Source Measures	20.78	9.10	0.00
Heavy Duty Vehicle Measures (ACT/HDO/ACF/HD I&M)	**36.60**	**0.57**	**0.56**
Other On-Road Measures	5.74	6.99	3.14
Off-Road Measures	61.73	53.39	1.06
Incentive Measures	10.03	0.00	0.17
Total	**157.77**	**76.70**	**5.44**

Source: South Coast Air Quality Management District 2022 Draft Air Quality Management Plan

The San Joaquin Valley sees increased NOx emissions due to the major freight and agricultural corridors that run through the region, contributing to elevated ozone and PM2.5 concentrations. The San Joaquin Valley has some of the nation's worst air quality, resulting from the valley's topography—surrounding mountain ranges trap air pollutants—and pollution sources, including heavy truck traffic on I-5 and Highway 99.[71] In order to attain the 2015 8-hour ozone NAAQS by 2037, the San Joaquin Valley will need to achieve a nearly 40% reduction in emissions. The Heavy-Duty Omnibus Rule alone represents an approximately 11% reduction in emissions by 2037, making it a critical strategy to improving air quality in the San Joaquin Valley.[72]

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[69] *See* 40 C.F.R. § 81.305.

[70] South Coast Air Quality Management District, *Draft 2022 Air Quality Management Plan Appendix V*, 2022, http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/combined-appendix-v.pdf?sfvrsn=8.

[71] US Environmental Protection Agency, *EPA Activities for Cleaner Air*; https://www.epa.gov/sanjoaquinvalley/epa-activities-cleaner-air.

[72] California Air Resources Board. *Draft 2022 State Strategy for the State Implementation Plan*, 2022, https://ww2.arb.ca.gov/sites/default/files/2022-01/Draft_2022_State_SIP_Strategy.pdf

CARB has repeatedly concluded that the agency must pursue emission reductions from all sources under its authority in order to meet its obligations under the federal Clean Air Act, particularly because California's air pollution is some of the worst in the country.[73] Likewise, EPA has time and again reaffirmed CARB's demonstrations that California experiences compelling and extraordinary conditions warranting the State's own motor vehicle control program.[74] There are no compelling reasons that would justify the Administrator concluding any differently here, so we urge the EPA to once again find that California has satisfied this criterion.

c. California's Omnibus Rule is consistent with section 202(a) of the Clean Air Act.

Moreover, EPA should grant California's waiver request here because the Omnibus Rule is not inconsistent with Section 202(a) of the Clean Air Act. Under Section 209(b)(1)(c), the *only* scenario in which EPA may *not* grant a waiver for a state tailpipe standard is if the agency finds that the state standard is "not consistent with" Section 202(a). Because California's Omnibus Rule is technologically feasible and consistent with federal test procedures, EPA may not deny the State's waiver request under Section 202(a).

EPA itself has clearly articulated the sole requirements for whether a California waiver request is inconsistent with Section 202(a). The only circumstances under which the agency may deny a waiver request under Section 202(a) are, as the agency has put it, "if there is inadequate lead-time to permit the development of technology necessary to meet those requirements, giving appropriate consideration to the cost of compliance within that time,"[75] or "if the federal and California test procedures [are] not consistent."[76] On top of this, EPA's review under Section 202(a) is, critically, a "narrow" one.[77] Indeed, this inquiry is "*limited* to whether those opposed to the authorization or waiver have met their burden of establishing that California's standards are technologically infeasible, or that California's test procedures impose requirements inconsistent with the federal test procedure."[78] Nothing more is required.

The agency's interpretation of Section 202(a) is additionally supported by Congress's clear affirmation in the 1977 Amendments to the Clean Air Act that the waiver provision was designed "to afford California the broadest possible discretion in selecting the best means to

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[73] CARB Resolution 20-23 (Aug. 27, 2020), at 18.

[74] 70 Fed. Reg. 50,322, 50,323 (Aug. 26, 2005) (EPA found that "CARB has continually demonstrated the existence of compelling and extraordinary conditions justifying the need for its own motor vehicle pollution control program"); 74 Fed. Reg. 32,744, 32,761 (July 8, 2009) ("California's ongoing need for dramatic emission reductions generally . . . is abundantly clear"); 79 Fed. Reg. 46,256, 46,262 (Aug. 7, 2014); 82 Fed. Reg. 4,867, 4,871 (Jan. 17, 2017).

[75] 77 Fed. Reg. 9244.

[76] *Id.*

[77] *Id.*

[78] *Id.* (emphasis added).

protect the health of its citizens and the public welfare."[79] Likewise, the D.C. Circuit in *Motors & Equipment Manufacturers Association v. Nichols (MEMA II)*, 142 F.3d 449, 463 (D.C. Cir. 1998) confirmed the narrow inquiry that EPA is authorized to perform under Section 202(a). The court in *MEMA II*[80] explained that Section 202(a), in the waiver context, "relates in relevant part to technological feasibility and to federal certification requirements."[81] As the Court clarified, the technological feasibility element of Section 202(a) "obligates California to allow sufficient lead time to permit manufacturers to develop and apply the necessary technology," giving appropriate consideration to the cost of compliance in the time frame provided.[82] The federal certification component "ensures that the Federal and California test procedures do not 'impose inconsistent certification requirements."[83]

Contrary to what some members of the Engine Manufacturers Association (EMA) contend, there is no requirement that California-promulgated emission standards have a four-year lead time and three years of stability. Indeed, as EPA and the D.C. Circuit have expressly noted time and again, "[n]either the court nor the agency has ever interpreted compliance with section 202(a) to require more."[84]

Here, California's rules comply with the technological feasibility and certification procedures requirements under Section 202(a).

i. The Omnibus Rule is technologically feasible and not inconsistent with Federal test procedures.

CARB has demonstrated that California's Omnibus rule complies with the technological feasibility and cost of compliance requirements under Section 202(a). After evaluating the technical feasibility of the emission standards and accompanying enforcement procedures, CARB concluded that those standards and accompanying enforcement procedures were attainable within the specified lead times because the technologies that manufacturers will likely use to comply with the 2024 model year emission standards are presently commercially available at reasonable costs within the specified lead times.[85] CARB further determined that

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[79] *Ford Motor Co. v. EPA*, 606 F.2d 1293, 1297 (D.C. Cir. 1979) (quoting H.R.Rep. No. 95-294, 95th Cong., 1st Sess. 301-302 (1977)).

[80] MEMA II arose in part from the context of Section 202(m), and as relevant here, in part from the context of Section 202(a). *Id.*

[81] *Ford Motor Co.*, 606 F.2d at 1296 n.17; *see also Motor & Equip. Mfrs. Ass'n, Inc. v. EPA (MEMA I)*, 627 F.2d 1095, 1101-11 (D.C. Cir. 1979).

[82] *MEMA II*, 142 F.3d at 463.

[83] *Id.* (citing Waiver of Federal Preemption, 46 Fed. Reg. 26,371, 26,372 (1981)).

[84] *Id.* (citing *MEMA I*, 627 F.2d at 1101, 1111; *Ford Motor Co.*, 606 F.2d at 1296 n.17; *Am. Motors Corp. v. Blum*, 603 F.2d 978, 981 (D.C. Cir. 1979); Waiver of Federal Preemption, 46 Fed. Reg. at 26,372); 77 Fed. Reg. at 9,247.

[85] California Air Resources Board, *Responses to Comments on the Environmental Analysis for The Proposed Heavy-duty Engine and Vehicle Omnibus Regulation and Associated Amendments,* August 6, 2022.

manufacturers will have sufficient time to develop and implement future technologies or to refine existing emission control technologies needed to comply with the 2027 and subsequent model year emission standards.[86] CARB even individually addressed concerns raised on lead time concerns in its "Responses to Comments on the Environmental Analysis" for this rule.[87]

ii. Compliance pathways for NOx and PM2.5 emission standards.

The Omnibus regulation is technology-neutral, meaning manufacturers can use any combination of engine and aftertreatment technologies to comply with the standards for 2024 and subsequent model years. In its waiver request to EPA, CARB details examples of what many of these compliance technologies could look like. For example, manufacturers would likely need to utilize a combination of emission control strategies that provide improved thermal management of exhaust temperatures and improved Selective Catalytic Reduction (SCR) conversion efficiency during cold starts and at lower engine loads to comply with the standards. Such strategies to do this could include engine calibration strategies, such as higher exhaust gas recirculation (EGR) rates to reduce engine-out NOx and higher idle speeds to reduce engine warm-up time to better control cold start emissions, among other kinds of improvements. Additionally, to meet the proposed 2027 and subsequent model year heavy-duty engine NOx standards, manufacturers could use additional engine calibration strategies, engine hardware changes (such as cylinder deactivation and variable valve actuation), as well as advanced aftertreatment systems (such as dual SCR systems with dual dosing and a light-off catalyst close-coupled to the engine). Essentially, there are multiple pathways to compliance that manufacturers have at their disposal within the lead time provided for the various classes and engine types.[88]

iii. Compliance pathways for extended useful life requirements.

CARB also determined that the extended useful life periods in the rule present no issues of technical feasibility, because the technical feasibility of the underlying emission standards has been demonstrated in the rule's proposal. For example, the Southwest Research Institute (SwRI) demonstrated the feasibility of complying with the 2027 NOx emission standards for 435,000 miles and manufacturers may elect to either: (1) design and utilize emission components that are more durable than existing emission control components to comply with the extended useful life periods, or to (2) utilize existing components, specify their emissions maintenance intervals that such components must be repaired or replaced at intervals that are shorter than the designated useful life periods, and pay for any emissions related parts that are designated not replaceable (*i.e.*, the EGR system, turbochargers, diesel particulate filters (DPFs), and catalytic converter beds). Additionally, a manufacturer could elect to comply with the 800,000 mile/12 year/40,000

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https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2020/hdomnibuslownox/res20-23attbrtc.pdf

[86] *Id.*

[87] Heroy-Rogalski, Kim, and Alex Wang. "Clean Air Act § 209(b) Waiver And § 209(e) Authorization Request Support Document Submitted by the California Air Resources Board." *California Air Resources Board*, 31 Jan. 2022.

[88] (Heroy-Rogalski, 2022).

hour useful life of a heavy heavy-duty diesel engine by either utilizing more durable components that are capable of controlling emissions throughout the useful life period without needing repairs or replacements, or by using existing components (which are subject to existing useful life periods of 435,000 miles/10 years/22,000 hours), specifying that eligible parts must be repaired and replaced no less frequently than the intervals requested by the rule and pay for the designated repairs and replacement.[89]

iv. Additional flexibility provided through exemptions and compliance provisions.

The Omnibus rule also provides exemptions and compliance provisions to offer manufacturers increased flexibility to comply with the requirements applicable to new 2023 and subsequent model year medium- and heavy-duty engines and vehicles. Moreover, to address manufacturers' concerns regarding lead time, CARB established a number of flexibilities relevant to the time needed to develop and certify engines by the 2024 model year. Examples of these flexibilities are outlined in CARB's waiver request and includes the following: options that reduce the time needed to demonstrate durability; provisions to accrue credits by certifying engines to standards that are more stringent than the applicable primary exhaust emission standards or by certifying engines to the primary exhaust emission standards earlier than required; creation of the zero-emission averaging set; and also allowing manufacturers to use California's On-Board Diagnostic II Regulation (OBD II) and Heavy-Duty On-Board Diagnostic System Regulation (HD OBD) malfunction emission thresholds that are based on the preexisting exhaust emission standards, rather than the newly established exhaust emission standards.[90]

v. Cost of compliance.

CARB appropriately considered the cost of compliance of the Omnibus rule by estimating the costs and savings associated with every element of the Regulation that affects the costs of affected engines and vehicles. For example, CARB conducted an "all-in" cost analysis of the elements of the rule that did the following: (1) established more stringent NOx and PM emission standards, (2) amended the durability demonstration program, (3) extended the useful life periods, (4) established the California Averaging, Banking and Trading (ABT) program, (5) lengthened the emissions warranty periods, (6) amended the Emissions Warranty Information Reporting (EWIR) and corrective action procedures, and (7) amended the heavy-duty in-use test procedures.

CARB even conducted updated cost analyses that included the adoption of the ACT Regulation. These updated cost analyses indicated that the incremental lifetime costs associated with all elements of this rule constitute a small fraction of the purchase prices of new engines and vehicles. For example, the incremental lifetime cost for a heavy-duty vehicle powered by a 2031 model year heavy-duty Otto-cycle engine is $710, representing 0.7 percent of the purchase price, the incremental lifetime cost for a medium-duty vehicle powered by a 2031 model year

[89] (Heroy-Rogalski, 2022).
[90] (Heroy-Rogalski, 2022).

medium-duty diesel engine is $4,355, which represents 8.3 percent of the purchase price, and the incremental lifetime costs for light-, medium-, and heavy-duty diesel engines are $5,773, $6,347, and $6,057, respectively, representing 10 percent, 6.1 percent, and 3.5 percent of the purchase prices of light-, medium-, and heavy-duty diesel vehicles, respectively.[91]

vi. Feasibility of lengthened maintenance schedules and emissions warranty periods for emissions-related components.

CARB has also proven that the maintenance schedules for emissions-related components for heavy-duty diesel engines and heavy-duty Otto cycle engines are feasible. To determine what maintenance intervals to propose, CARB examined the owner's manual survey results and looked for the shortest (*i.e.*, most frequent) repair/replacement maintenance interval specified for emission-related parts, by any manufacturer and reflected this methodology in the standards set in the rule.

For example, CARB details how manufacturers of Otto-cycle engines will be able to comply with the 2024 to 2026 NOx emission standards by simply implementing adjustments to calibration strategies and by making minor refinements to existing compliance technologies, in addition to making available the option for manufacturers to request certain flexibilities, like manufacturer-specific maintenance schedules. Given that these new maintenance schedule flexibilities also extend to alternative fueled diesel engines, these new maintenance schedules do not present any technical feasibility or lead time concerns for any of the regulated model years either.[92]

Likewise, the Emissions Warranty Amendments satisfy the federal certification component of Section 202(a). CARB has proven that the elements of the Omnibus rule that lengthen the emission warranty periods present no issues regarding technical feasibility. CARB, in its waiver request submission to EPA, illustrated this by highlighting that manufacturers and third-party warranty providers currently offer emissions warranties that are longer than the warranty periods established by its 2018 rulemaking action that amended emissions warranty provisions for on-road heavy-duty diesel engines and vehicles. Additionally, emission warranties with coverage periods for up to one million miles are already available, provided vehicles satisfy initial inspection requirements and are maintained in accordance with OEM recommendations.[93]

III. Contentions from the Engine Manufacturers Association are inapposite.

Some members of the EMA contend that EPA is not authorized to grant a California waiver request unless the regulation meets the lead time and stability requirements under Section 202(a)(3)(C). But this is a flawed reading of the statute that both the D.C. Circuit and EPA itself have concluded is incorrect.

Section 202(a)(3)(C), entitled "Lead time and stability," provides:

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[91] (Heroy-Rogalski, 2022).
[92] (Heroy-Rogalski, 2022).
[93] (Heroy-Rogalski, 2022).

> Any standard promulgated or revised under this paragraph and applicable to classes or categories of heavy-duty vehicles or engines shall apply for a period of no less than 3 model years beginning no earlier than the model year commencing 4 years after such revised standard is promulgated.[94]

Yet, Section 202(a)(3)(C) is not part of the waiver inquiry requirements under Section 209(b)(1)(C). Indeed, as articulated above, EPA and the D.C. Circuit have clarified that the technological feasibility requirement under Section 202(a) only "obligates California to allow sufficient lead time to permit manufacturers to develop and apply the necessary technology."[95] Likewise, the federal certification component ensures the federal and state test procedures "do not impose inconsistent certification requirements."[96] The Court said nothing about a requirement that California's rules have at least a four-year lead time and three-year stability requirement.

Moreover, EPA has specifically addressed the very issue of what "not consistent" under Section 209(b)(1)(C) means in relation to Section 202(a)(3)(C)'s lead time requirements in a California waiver request. In a case concerning a California waiver request for a proposed alternative power supply (APS) rule for diesel heavy-duty vehicles, the American Trucking Association (ATA) argued that EPA should deny California's request because "CARB ha[d] not complied with the lead time and stability requirements of section 202(a)(3)(C)."[97] Yet, the Administrator concluded otherwise, stating explicitly that "[t]his comment . . . does not comport with the section 209 criteria."[98] Specifically, EPA determined that "the lead-time inquiry EPA undertakes relates to technological feasibility," and "consistency with section 202(a) requires the Administrator to first determine whether adequate technology already exists; or if it does not, whether there is adequate time to develop and apply the technology before the standards go into effect."[99] Indeed, the Administrator explicitly noted that, beyond this, "EPA then has no further inquiry into lead-time, because no additional requirement is imposed by the section 209 criteria."[100] As shown above, California has satisfied these requirements here.

We also direct the Administrator's attention to pages 53-72 of CARB's analysis on the lead time question in California's waiver request to EPA for the Heavy-Duty Low NOx Omnibus Rule, dated January 31, 2022. EPA should review this analysis in connection with CARB's waiver application to show that EPA is not limited to granting a waiver request with a four-year lead time.

Finally, EPA's interpretation of "not consistent" discussed above is similarly corroborated by the explicit wording of Section 202(a)(3)(C) as well as the order, organization,

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[94] 42 U.S.C. § 7521(a)(3)(C).
[95] *MEMA II*, 142 F.3d at 463.
[96] *Id.* (citing Waiver of Federal Preemption, 46 Fed. Reg. at 26,372 (quotation marks omitted)).
[97] 77 Fed. Reg. at 9249 (internal quotation marks omitted).
[98] *Id.*
[99] *Id.*
[100] *Id.*

and structure of the statute. First, quite simply, Section 202(a)(3)(C) on its face does not apply to standards promulgated by a state agency under state law, such as California's waiver requests here.[101] Nor does it apply to the Section 177 states that choose to adopt California's regulations. Indeed, the statute does not reference California or any other state at all.

Second, the structure of the subsections in Section 202(a) make clear that they describe or limit the powers of *the Administrator*, not of any State. Indeed, Section 202(a)(1) begins with a description of the powers of the Administrator. Section 202(a)(1) provides:

> The Administrator shall by regulation prescribe (and from time to time revise) in accordance with the provisions of this section, standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.[102]

Moreover, the subsections that follow, *i.e.*, Sections 202(a)(2)–(a)(6), describe specific authorities or requirements imposed on the Administrator. For example,

> Section 202(a)(2) provides that ***the Administrator*** must provide appropriate lead time for any regulation promulgated under Section 202(a)(1).
>
> Section 202(a)(3)(A) provides that ***the Administrator*** must determine the greatest degree of emissions reduction available.
>
> Section 202(a)(3)(B) provides for standards for heavy duty vehicles to be promulgated ***by the Administrator***.
>
> Section 202(a)(3)(C), quoted above, pertains to heavy duty standards ***promulgated "under this paragraph"*** and does not specify the Administrator or any state.
>
> Section 202(a)(3)(D) provides for promulgation of rebuilding standards ***by the Administrator.***
>
> Section 202(a)(3)(E) provides for promulgation of motorcycle standards ***by the Administrator.***
>
> Sections 202(a)(4)(A) and a(4)(B) provide that ***the Administrator*** must determine whether unreasonable risk exists with respect to any emission control device.
>
> Section 202(a)(5)(A) provides for fill pipe standards set ***by the Administrator***.

[101] 42 U.S.C. § 7521(a)(3)(C).
[102] *Id.* § 7521(a)(1).

> Section 202(a)(5)(B) specifies lead time for regulations promulgated ***by the Administrator*** under Section 202(a)(5)(A).
>
> Section 202(a)(6) provides that onboard vapor recovery rules must be promulgated ***by the Administrator***.

The text throughout these subsections makes plain that Section 202(a)(3)(C) only applies to the Administrator's authority to promulgate emission standards for heavy-duty vehicles. Not only does every other subsection refer directly to "the Administrator"—and not to the States, but Section 202(a)(3)(C) at issue here pertains to "[a]ny standard promulgated or revised under this paragraph."[103] As noted above, this paragraph otherwise only concerns standards promulgated by the Administrator. Accordingly, the most reasonable reading of Section 202(a)(3)(C) given this context is that it is meant to bind EPA, not California or any other state. To reach any other conclusion would be to disregard not only EPA's own interpretation of the Section 202(a) requirement, but also to rewrite Section 202(a)(3)(C) to insert words not put there by Congress.

Moreover, contrary to what EMA may contend, *American Motors Corporation v. Blum*, 603 F.2d 978 (D.C. Cir. 1979) does not compel a different result. This case arose in the light duty context where a statute was enacted specifically to protect the relatively small automakers American Motors Corporation and Avanti against incurring extraordinary expense by designing their own emissions reduction devices rather than buying them from bigger manufacturers. The pertinent statute, not at issue here, imposed a two-year lead time requirement. EPA granted California a waiver for an emissions standard with a shorter lead time and the plaintiffs sued, claiming that the California rule was inconsistent with Clean Air Act Section 202(b)(1)(B)—notably, plaintiffs did *not* argue the rule was inconsistent with Section 202(a).

There, the court recognized that Section 209(b) of the Clean Air Act refers to consistency with Section 202(a), not 202(b), but found that "We think the effect of this congressional mandate is to assimilate or incorporate in section 202(a)(2) the proviso of section 202(b)(1)(B)" and ruled that the two-year lead time in Section 202(b)(1)(B) applied and could not be waived by EPA. Yet, the fact pattern of the *American Motors Corporation* case, arising out of special Congressional concern for small manufacturers of light-duty vehicles, is inapposite here. As we have shown above, the reasoning in that case does not reflect the EPA or D.C. Circuit's current reading of the heavy-duty vehicle lead time section of the statute.

Likewise, language by then EPA Assistant Administrator Mary Nichols in a 1994 EPA docket memo, while on its face favors a strict four-year lead time and three-year stability requirement, is no longer relevant here. There, EPA Assistant Administrator Nichols wrote:

> In light of the plain language and Congressional intent of sections 202 and 209, and applying the rationale of [*American Motors Corp. v. Blum*, 630 F.2d 978 (D.C. Cir. 1979)], I find that the opposing parties have provided persuasive

[103] *Id.* § 7521(a)(3)(C).

> arguments that California is subject to the four year lead time requirement under section 202(a)(3)(b) of the Act and is required to provide four years of lead time for the proposed MDV standards.

But this conclusion predates the EPA response to ATA comments and the *MEMA II* opinion. In the 28 years since, neither Congress nor the EPA has done anything to approve or ratify its conclusion—or the reasoning in the *American Motors Corporation* case—and indeed EPA reached the opposite conclusion in 2012 in the APS diesel truck matter described above.

In sum, EPA should find that California satisfied the requirements under Section 202(a).

IV. EPA's public hearing process for California's waiver requests was inadequate and must be improved.

The public hearing process on California's waiver requests was woefully inadequate. Section 209(b) of the Clean Air Act requires the Administrator to provide "notice and opportunity for public hearing" when considering whether to authorize California to adopt and enforce emission standards.[104] While the EPA did provide opportunity for public comment here, there were critical deficiencies. We submit the following recommendations for how the EPA should design public hearing processes on all future and ongoing rulemakings and waiver requests going forward.

First, the EPA should promote public participation during the hearing process by engaging affected stakeholders early on. Unlike other stakeholders and EPA staff, most members of impacted communities are the actual experts, since they are directly exposed to and live with the impacts of EPA's decisions. Their expertise is vital to ensuring that the decisions do not add harm but in fact reduce risk. They are not compensated for their time and engagement in the decision-making process. Consequently, the agency should provide additional time for individuals and impacted community organizations to become familiar with technical material and to engage with experts and community members before registering and giving testimony.

Second, the EPA must engage and coordinate with environmental justice communities to ensure that hearings are accessible and held at times and in places that facilitate attendance and participation by affected community members and the public. This is needed to promote greater public participation from affected communities. California's waiver request will impact communities in many states, but Californians in particular. The public hearings should have accommodated California's time zone, rather than prioritizing the Washington, D.C. time zone. The hearings should not have started at 6am PST and ended at 2:00pm PST. Likewise, EPA should add evening and weekend hearings to promote public participation from working

[104] 42 U.S.C. § 7543(b).

community members. The agency should advertise the meetings or public hearings widely. Participants should be allotted more than 7 days to register for public hearings.

Third, EPA's hearings must also be accessible to non-English speakers. The following are targeted suggestions for improving the agency's language accessibility:

- Registration must be offered in key languages spoken throughout the nation, especially in communities of interest and those most impacted. Follow-up instructional emails and zoom calendar invites should be available in the language selected by the registrant.
- Materials should be available in the key languages spoken throughout the nation, especially in communities of interest. EPA is responsible for providing translated material, not community members or non-profit organizations.
- Public comment announcements should be made in multiple languages to facilitate the greatest level of public participation.
- Sign language interpretation and simultaneous language translation should be made available for all virtual and in-person listening sessions, hearings, and materials.
- Interpreters should be screened or trained to become familiar with climate change, environmental justice, environmental health and fossil fuel terminology. Interpreters should be available upon request to ask questions during proceedings. The lack of access to simultaneous translation and sign language interpretation was a glaring omission in EPA's public hearing sessions, limiting participation from communities already marginalized by the hearing process.
- EPA should consult impacted communities to determine which language translation services are necessary to support maximum access to information and participation from community members.
- Translation may require additional time. Time management and flexibility must be considered when ensuring public access to the comment process.
- Technical support should be made available when, for instance, the language button does not work and interpretation is then not available.

Fourth, during testimony, interruptions by EPA staff or translators can cause speakers to become distracted or rushed since it could extend time, conflicting with speakers' other obligations. Interruptions during public comment (by an agency interpreter or notetaker, for example) should be discouraged so that individuals have a full and fair opportunity to state their views and concerns. There needs to be clear guidelines that if the Agency interrupts public comment, then the respondent is able to start the clock over and not where they left off. Moreover, EPA should engage Public Participation Specialists to work with community members at specific sites to determine the preferred approaches to engage with communities.

Fifth, the agency should have made information, including reports, documents, and data relevant to the hearing, available to the public at least 30 days before the hearing. The earlier the agency can make materials available, the better it will be for informed public participation. EPA can also increase transparency by preparing a transcript, recording, or other complete record of public hearing proceedings and making it available for public review.

Sixth, EPA must prioritize minimizing interruptions during public comments. It is important that all equipment be tested and seating arranged with the goal of maximizing interactions from participants. Technical support needs to be on hand to assist the public if needed in providing testimony. Testimony was missed during this hearing because technical support could not be given to the environmental justice leader who was scheduled to speak.

Seventh, time allocated for each speaker needs to be equitable and not favorable for one or the other opposing views. There were several instances where extra time was allotted to some people while others were interrupted to stop.

Finally, the EPA should have allowed the public to sign up for a general timeframe. The EPA assigned time to all of those who signed up but did not give enough time for the public to make sure there were no conflicts and how to reschedule if need be.

V. Conclusion

For the reasons noted above, EPA must fully grant California's Waiver Request for the Heavy-Duty Low NOx Omnibus Rule*, Docket No. EPA-HQ-OAR-2022-0322*. California's pollution reduction regulations are essential to cleaning the air for communities and the climate. The requested waiver will allow California—and Section 177 states—to accelerate the transition to lifesaving, zero-emission medium- and heavy-duty technology. California's rules are critical strategies for reducing dangerous fossil fuel pollution from the freight industry that is plaguing environmental justice communities across the nation. The Zero-Emission Rules are absolutely vital to accelerating the transition to zero-emission vehicle technologies across the country. Indeed, we need every EPA rule, program, and incentive possible to prioritize addressing environmental racism, and protect environmental justice communities in order to address the cumulative impacts effecting our communities and climate crises. The lives of millions are at stake. In sum, we urge EPA to follow decades-long precedent and grant California's waiver request for the Zero-Emission Rules in full, as required by Section 209 of the Clean Air Act.

The Moving Forward Network and our organizations look forward to working together with EPA to create a safer, healthier environment for all communities across the country. We are looking to EPA to be a leader in advancing zero emission, clean air solutions that protect and prioritize the mandatory reduction of pollution in overburdened and underserved environmental justice communities across the freight transportation system. Thank you for the opportunity to provide input on this important rulemaking. If you have any follow up questions, please contact Molly Greenberg, MFN Campaign Manager at greenbergm@oxy.edu.

These comments are submitted on behalf of the entire MFN Network and our over 50 member organizations and the following supporters.

Sincerely,

The Moving Forward Network Advisory Board

Dr. Mildred McClain
Harambee House/ Citizens for Environmental Justice
Southeast Region

Ramsey Sprague
Mobile Environmental Justice Action Coalition
Southeast Region

Rachel Jefferson
Groundwork Northeast Revitalization Group
Missouri/Kansas Region

Beto Lugo Martinez
CleanAirNow
Missouri/Kansas Region

Melissa Miles
New Jersey Environmental Justice Alliance
New York/New Jersey Region

Kim Gaddy
South Ward Environmental Alliance and Clean Water Action
New York/ New Jersey Region

Taylor Thomas
East Yard Communities for Environmental Justice
Southern California Region

mark! Lopez
East Yard Communities for Environmental Justice
Southern California Region

Juan Parras
Texas Environmental Justice Advocacy Services
Houston/Gulf Region

Dr. Bruce Strouble, Jr.
Citizens for a Sustainable Future
Research/Scientific At-Large Advisory Board Member

Dr. Qasimah Boston
Tallahassee Food Network
Research/Scientific At-Large Advisory Board Member

Melissa Lin Perrella
Natural Resource Defense Council
Legal/Policy At-Large Board Member

With additional signatures from:

Backbone Campaign, Center for Community Action and Environmental Justice, Central Coast Alliance United for a Sustainable Economy (CAUSE), Central Valley Air Quality Coalition (CVAQ), Citizens for a Sustainable Future, Coalition for Healthy Ports, Clean Water Action, South Ward Environmental Alliance, CleanAirNow, Coalition for a Safe Environment, Comite Civico del Valle, INC. (CCV), East Yard Communities for Environmental Justice, Respiratory Health Association, Environmental Justice (EJ) Working Group - Hudson Hill, Greater Frenchtown Revitalization Council, Groundwork Northeast Revitalization Group (Groundwork NRG), Harambee House/ Citizens for Environmental Justice, Ironbound Community Corporation, Little Village Environmental Justice Organization, LowCounty Alliance for Model Communities (LAMC), Mobile Environmental Justice Action Coalition (MEJAC), New Jersey Environmental Justice Alliance, Peoples Collective for Environmental Justice, Regional Asthma Management & Prevention (RAMP), Rethink Energy Florida, Angela Harris Southeast Care Coalition, Texas Environmental justice Advocacy Services, Tallahassee Food Network, Tishman Environment and Design Center, Warehouse Workers for Justice, West Oakland Environmental Indicators Project, West Long Beach Neighborhood Association, Duwamish River Community Coalition, Robert Laumbach MD, MPH, Natural Resources Defense Council, Earthjustice, Union of Concerned Scientists.

And sign on in support of The Moving Forward Network comment letter from:

Sierra Club, Southern Environmental Law Center, Environmental Defense Fund, Los Angeles County Electric Truck & Bus Coalition, Jobs to Move America, Environmental Advocates NY, Pacific Environment, Progressive Asian Network for Actions (PANA), Environmental Justice Committee of the AAPI Equity Alliance, David Toyoshima, Karlton A. Laster.