California State Nonroad Engine Pollution Control Standards; In-Use Off-Road Diesel Fueled Fleets

Decision Document

United States Environmental Protection Agency

California State Nonroad Engine Pollution Control Standards; In-Use Off-Road Diesel Fueled Fleets

Decision Document

Office of Transportation and Air Quality
U.S. Environmental Protection Agency

United States Environmental Protection Agency

EPA-420-R-25-001
January 2025

EPA-420-R-25-001; January 2025

California State Nonroad Engine Pollution Control Standards; In-Use Off-Road Diesel-Fueled Fleets Regulation; Decision Document

On April 26, 2024, the Environmental Protection Agency (EPA) published a *Federal Register* notice announcing receipt of the California Air Resources Board's (CARB's) authorization request for the 2022 Amendments to California's In-Use Off-Road Diesel-Fueled Fleets regulation (2022 Off-Road Amendments).[1] The notice for comment on this authorization request indicated that the request would be open for public comment until June 19, 2024. The Docket ID No. for the authorization is EPA-HQ-OAR-2023-0581. EPA also held a public hearing on the authorization request on May 16, 2024, and the transcript of that hearing is included in the docket. In this Decision Document, EPA is taking final action to authorize CARB's 2022 Off-Road Amendments to the In-Use Off-Road Diesel-Fueled Fleets regulation, pursuant to section 209(e) of the Clean Air Act (CAA).[2] EPA is also providing notice of the availability of this Decision Document in the *Federal Register*.

[1] See "California State Nonroad Engine Pollution Control Standards; In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and In-Use Off-Road Diesel Fueled Fleets; Requests for Authorization; Opportunity for Public Hearing and Comment," 89 FR 32422 (April 26, 2024). For purposes of this Decision Document, EPA is using the term "Off-Road" to denote nonroad engines and equipment.

[2] This Decision Document can be found in the public docket at regulations.gov at EPA-HQ-OAR-2023-0581.

Table of Contents

I. Background

CARB first adopted emission standards and associated test procedures for in-use off-road diesel-fueled fleets (Off-Road Regulations) in 2007.[3] CARB subsequently amended the Off-Road Regulations a number of times and EPA granted an authorization for CARB to enforce the Off-Road Regulations and subsequent amendments.[4] By letter dated November 2, 2023, CARB requested that the EPA authorize the 2022 Off-Road Amendments pursuant to section 209(e) of the CAA.[5]

[3] CARB's Off-Road Authorization Support Document (Off-Road Authorization Support Document), EPA-HQ-OAR-2023-0581-0027 at 2.
[4] 78 FR 58090 (Sept. 20, 2013).
[5] Off-Road Authorization Support Document at 1.

CARB notes that its 2022 Off-Road Amendments, which phase-in starting in 2024 through the end of 2036, are aimed at further reducing emissions from the in-use off-road sector.[6] In-use off-road vehicles subject to the 2022 Off-Road Amendments are used in construction, mining, industrial operations, and other industries.[7] The Amendments will require fleets to phase-out use of the oldest and highest polluting off-road diesel vehicles in California; prohibit the addition of high-emitting vehicles to a fleet; and require the use of R99 or R100 renewable diesel in off-road diesel vehicles.[8] The Amendments also require prime contractors and public works awarding bodies to only hire compliant fleets beginning January 1, 2024, and establish reporting requirements for prime contractors.[9] The Amendments provide flexibility to regulated entities and encourage the adoption of zero-emission technologies through optional zero-emission compliance provisions.[10]

The 2022 Off-Road Amendments will further reduce harmful air pollutants from in-use off-road diesel vehicles that operate in California. The off-road sector, more generally (excluding locomotives, aircraft, waterborne vessels, portable equipment and

---

[6] *Id.* at 6.
[7] *Id*. at ftn 5.
[8] *Id*. at 1. CARB also notes that the renewable diesel fueling requirement constitutes an in-use operational control of nonroad engines that is not preempted by section 209(e) of the Clean Air Act (CAA). *Id.* at 8 n.21 (citing CAA section 209(d); 62 FR67733, 67736 (Dec. 30, 1997)). EPA agrees that the renewable diesel fueling requirement is not preempted, does not require authorization, and cannot be the basis for denying authorization for the Off-Road Amendments more generally.
[9] Off-Road Authorization Support Document at 7-8. The CARB regulations covered by EPA's authorization in this Decision Document consist of amendments to California Code of Regulations, title 13, sections 2449, 2449.1, and 2449.2 (Cal. Code Regs., tit. 13, §§ 2449, 2449.1, and 2449.2). EPA notes that to the extent certain requirements apply to sources other than mobile sources (such as potentially the various recordkeeping and reporting requirements for contractors and public works awarding bodies), those requirements may not be preempted by CAA section 209 and thus may not require authorization. *See also* CAA section 116. To the extent authorization is required, EPA is authorizing the entire 2022 Off-Road Amendments.
[10] Off-Road Authorization Support Document at 9.

agriculture equipment)[11] comprises about 14 percent of the total statewide emissions of nitrous oxide (NOx) and 7 percent of the total statewide emissions for particulate matter (PM).[12]

From 2024 through 2038, the 2022 Off-Road Amendments will generate an additional reduction above and beyond the current regulation of approximately 31,087 tons of NOx and 2,717 tons of fine particle pollution (known as $PM_{2.5}$).[13] About half of those additional reductions are expected to be realized within the first five years of implementation.[14]

II. Principles Governing This Review

A. Clean Air Act Nonroad Engine and Vehicle Authorizations

CAA section 209(e)(1) permanently preempts any state, or political subdivision thereof, from adopting or attempting to enforce any standard or requirement relating to the control of emissions for certain new nonroad vehicles or engines.[15] The CAA also preempts states from adopting and enforcing standards and other requirements related to the control of emissions from all other nonroad engines or vehicles (including "non-new"

[11] CARB Initial Statement of Reasons (ISOR), EPA-HQ-OAR-2023-0581-0026 at 34.
[12] *Id*.
[13] *Id*. at 10.
[14] *Id.*
[15] CAA section 209(e)(1) prohibits states or any political subdivision from adopting or enforcing any standard or other requirement relating to the control of emissions from new nonroad engines which are used in construction equipment or vehicles or used in farm equipment or vehicles, and which are smaller than 175 horsepower, or new locomotives or new engines used in locomotives. *See* 40 CFR section 1074.10(a).

engines).[16] CAA section 209(e)(2)(A), however, requires the Administrator, after notice and opportunity for public hearing, to authorize California to adopt and enforce standards and other requirements relating to the control of emissions from such vehicles or engines not preempted by CAA section 209(e)(1) if California determines that California standards will be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards. However, EPA shall not grant such authorization if it finds that (1) the protectiveness determination of California is arbitrary and capricious; (2) California does not need such standards to meet compelling and extraordinary conditions; or (3) California standards and accompanying enforcement procedures are not consistent with CAA section 209.

On July 20, 1994, EPA promulgated a rule ("the 1994 rule") interpreting the three criteria, as found in CAA section 209(e)(2), that EPA must consider before granting any California authorization request for new nonroad engine or vehicle emission standards.[17] EPA revised these regulations in 1997.[18]

---

[16] *See* CAA section 209(e)(2), 42 U.S.C. 7543(e). *See* 40 CFR section 1074(b). Therefore, states and localities are categorically prohibited from regulating the control of emissions from new nonroad vehicles and engines set forth in section 209(e)(1) of the CAA, but "all other" nonroad vehicles and engines (including non-new engines and vehicles otherwise noted in 209(e)(1) and all other new and non-new nonroad engines and vehicles) are preempted unless and until preemption is waived. *See* EPA's nonroad preemption rulemakings at 59 FR 36969 (July 20, 1994) and revised in 1997 (62 FR 67733). EPA notes that Appendix A to 40 CFR Part 1074, Subpart A sets out EPA's interpretation of what types of state nonroad engine use and operation provisions are not preempted by section 209.

[17] *See* "Air Pollution Control; Preemption of State Regulation for Nonroad Engine and Vehicle Standards," 59 FR 36969 (July 20, 1994).

[18] *See* "Control of Air Pollution: Emission Standards for New Nonroad Compression-Ignition Engines at or Above 37 Kilowatts; Preemption of State Regulation for Nonroad Engine and Vehicle Standards; Amendments to Rules," 62 FR 67733 (December 30, 1997). The applicable regulations are now found in 40 CFR part 1074, subpart B.

As stated in the preamble to the 1994 rule, EPA has historically interpreted the CAA section 209(e)(2)(A)(iii) "consistent with section 209" inquiry to require that California standards and enforcement procedures be consistent with CAA sections 209(a), 209(e)(1), and 209(b)(1)(C).[19] In order to be consistent with CAA section 209(a), California's nonroad standards and enforcement procedures must not apply to new motor vehicles or new motor vehicle engines. To be consistent with CAA section 209(e)(1), California's nonroad standards and enforcement procedures must not attempt to regulate engine categories that are permanently preempted from state regulation. To determine consistency with CAA section 209(b)(1)(C), EPA typically reviews nonroad authorization requests under the same "consistency" criteria that are applied to motor vehicle waiver requests. Pursuant to CAA section 209(b)(1)(C), the Administrator shall not grant California a motor vehicle waiver if he finds that California "standards and accompanying enforcement procedures are not consistent with section 202(a)" of the CAA. Previous decisions granting waivers and authorizations have noted that state standards and enforcement procedures are inconsistent with CAA section 202(a) if: (1) there is inadequate lead time to permit the development of the necessary technology, giving appropriate consideration to the cost of compliance within that time, or (2) the Federal and state testing procedures impose inconsistent certification requirements.[20] When considering whether to grant authorizations for accompanying enforcement

[19] EPA has interpreted CAA section 209(b)(1)(C) in the context of section 209(b) motor vehicle waivers. *See Engine Mfrs. Assoc. v. EPA* (*EMA*), 88 F.3d 1075, 1087 (D.C. Cir. 1996) (". . . EPA was within the bounds of permissible construction in analogizing § 209(e) on nonroad sources to § 209(a) on motor vehicles.")

[20] 59 FR at 36982-83. *See also* 78 FR 58090, 58092 (Sept. 20, 2013).

procedures tied to standards (such as record keeping and labeling requirements) for which an authorization has already been granted, EPA has evaluated (1) whether the enforcement procedures are so lax that they threaten the validity of California's determination that its standards are as protective of public health and welfare as applicable Federal standards, and (2) whether the Federal and California enforcement procedures are consistent.[21]

In light of the similar language of sections 209(b) and 209(e)(2)(A), EPA has reviewed California's requests for authorization of nonroad vehicle or engine standards under section 209(e)(2)(A) using the same principles that it has historically applied in reviewing requests for waivers of preemption for new motor vehicle or new motor vehicle engine standards under section 209(b).[22] These principles include, among other things, that EPA should limit its inquiry to the three specific authorization criteria identified in CAA section 209(e)(2)(A),[23] and that EPA should give substantial deference to the policy judgments California has made in adopting its regulations. In previous waiver decisions, EPA has stated that Congress intended EPA's review of California's decision-making be narrow. EPA has rejected arguments that are not specified in the statute as grounds for denying a waiver:

> The law makes it clear that the waiver requests cannot be denied unless the specific findings designated in the statute can properly be made. The issue of whether a proposed California requirement is likely to result in

---

[21] *See Motor & Equip. Mfrs. Assoc. v. Envtl. Prot. Agency* (*MEMA I*), 627 F.2d 1095, 1112 (D.C. Cir. 1979). California certification test procedures need not be identical to the Federal test procedures to be "consistent." California procedures would be inconsistent, however, if manufacturers would be unable to meet both the state and Federal test requirements with the same test vehicle in the course of the same test. *See, e.g.,* 43 FR 32182, (July 25, 1978).
[22] *See EMA* at 1087.
[23] 59 FR at 36983.

> only marginal improvement in California air quality not commensurate with its costs or is otherwise an arguably unwise exercise of regulatory power is not legally pertinent to my decision under section 209, so long as the California requirement is consistent with section 202(a) and is more stringent than applicable Federal requirements in the sense that it may result in some further reduction in air pollution in California.[24]

This principle of narrow EPA review has been upheld by the U.S. Court of Appeals for the District of Columbia Circuit.[25] Thus, EPA's consideration of all the evidence submitted concerning an authorization decision is circumscribed by its relevance to those questions that may be considered under section 209(e)(2)(A).

B. Deference to California

In previous waiver and authorization decisions, EPA has recognized that the intent of Congress in creating a limited review based on specifically listed criteria was to ensure that the Federal government did not second-guess state policy choices. As the Agency explained in a prior waiver decision:

> It is worth noting . . . I would feel constrained to approve a California approach to the problem which I might also feel unable to adopt at the federal level in my own capacity as a regulator. The whole approach of the Clean Air Act is to force the development of new types of emission control technology where that is needed by compelling the industry to ''catch up'' to some degree with newly promulgated standards. Such an approach … may be attended with costs, in the shaped of reduced product offering, or price or fuel economy penalties, and by risks that a wider number of vehicle classes may not be able to complete their development work in time. Since a balancing of risks and costs against the potential benefits from reduced emissions is a central policy decision for any regulatory agency

---

[24] "Waiver of Application of Clean Air Act to California State Standards," 36 FR 17458 (Aug. 31, 1971). Note that the more stringent standard expressed here, in 1971, was superseded by the 1977 amendments to section 209, which established that California must determine that its standards are, in the aggregate, at least as protective of public health and welfare as applicable Federal standards. In the 1990 amendments to section 209, Congress established section 209(e) and similar language in section 209(e)(1)(i) pertaining to California's nonroad emission standards which California must determine to be, in the aggregate, at least as protective of public health and welfare as applicable federal standards.

[25] *See, e.g., MEMA I.*

> under the statutory scheme outlined above, I believe I am required to give very substantial deference to California's judgments on this score.[26]

Similarly, EPA has stated 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.[27] This interpretation is supported by relevant discussion in the House Committee Report for the 1977 Amendments to the CAA. Congress had the opportunity through the 1977 Amendments to restrict the preexisting waiver provision but elected instead to expand California's flexibility to adopt a complete program of motor vehicle emission controls. The report explains that the amendment is intended to ratify and strengthen the preexisting California waiver provision and to affirm the underlying intent of that provision, that is, to afford California the broadest possible discretion in selecting the best means to protect the health of its citizens and the public welfare.[28]

C. Burden and Standard of Proof

As the U.S. Court of Appeals for the D.C. Circuit made clear in *MEMA I*, opponents of a waiver request by California bear the burden of showing that the statutory criteria for a denial of the request have been met:

> [T]he language of the statute and its legislative history indicate that California's regulations, and California's determinations that they comply with the statute, when presented to the Administrator are presumed to satisfy the waiver requirements and that the burden of proving otherwise is on whoever attacks them. California must present its regulations and findings at the hearing and thereafter the parties opposing the waiver

---

[26] "California State Motor Vehicle Pollution Control Standards; Waiver of Federal Preemption," 40 FR 23102, 23104 (May 28, 1975).
[27] *Id.* at 23103–04.
[28] *MEMA I* at 1110 (citing H.R. Rep. No. 294, 95th Cong., 1st Sess. 301–02 (1977)).

> request bear the burden of persuading the Administrator that the waiver request should be denied.[29]

The Administrator's burden, on the other hand, is to make a reasonable evaluation of the information in the record in coming to the waiver decision. As the Court in *MEMA I* stated: "here, too, if the Administrator ignores evidence demonstrating that the waiver should not be granted, or if he seeks to overcome that evidence with unsupported assumptions of his own, he runs the risk of having his waiver decision set aside as 'arbitrary and capricious.'"[30] Therefore, the Administrator's burden is to act "reasonably."[31]

With regard to the standard of proof, the court in *MEMA I* stated that the Administrator's role in a CAA section 209 proceeding is to "consider all evidence that passes the threshold test of materiality and … thereafter assess such material evidence against a standard of proof to determine whether the parties favoring a denial of the waiver have shown that the factual circumstances exist in which Congress intended a denial of the waiver."[32] The court in *MEMA I* considered the standards of proof under CAA section 209 for the two findings related to granting a waiver for an "accompanying enforcement procedure." Those findings involve: (1) whether the enforcement procedures impact California's protectiveness determination for the associated standards, and (2) whether the procedures are consistent with CAA section 202(a). The principles set forth by the court, however, are similarly applicable to an EPA review of a request for a waiver

---

[29] *MEMA I* at 1121.
[30] *Id.* at 1126.
[31] *Id.*
[32] *Id.* at 1122.

of preemption for a standard. The court instructed that "the standard of proof must take account of the nature of the risk of error involved in any given decision, and it therefore varies with the finding involved. We need not decide how this standard operates in every waiver decision."[33]

With respect to the protectiveness finding, the court upheld the Administrator's position that, to deny a waiver, there must be "clear and compelling evidence" to show that proposed enforcement procedures undermine the protectiveness of California's standards.[34] The court noted that this standard of proof also accords with the Congressional intent to provide California with the broadest possible discretion in setting regulations it finds protective of the public health and welfare.[35]

With respect to the consistency finding, the court did not articulate a standard of proof applicable to all proceedings but found that the opponents of the waiver were unable to meet their burden of proof even if the standard were a mere preponderance of the evidence. Although *MEMA I* did not explicitly consider the standard of proof under CAA section 209 concerning a waiver request for "standards," as compared to accompanying enforcement procedures, there is nothing in the opinion to suggest that the Court's analysis would not apply with equal force to such determinations. EPA's past waiver decisions have consistently made clear that: "[E]ven in the two areas concededly reserved for Federal judgment by this legislation—the existence of 'compelling and extraordinary' conditions and whether the standards are technologically feasible—

---

[33] *Id.*
[34] *Id.*
[35] *Id.*

Congress intended that the standards of EPA review of the State decision to be a narrow one."[36]

D. EPA's Administrative Process in Consideration of California's Request

On April 26, 2024, EPA published a *Federal Register* notice announcing its receipt of California's authorization request. In that notice, EPA invited public comment on the 2022 Off-Road Amendments and announced a public hearing.[37]

EPA requested comment on the 2022 Off-Road Amendments, and whether they meet the criteria for a full authorization. Specifically, EPA requested public comment on: (a) whether CARB's determination that its standards, in the aggregate, are at least as protective of public health and welfare as applicable federal standards is arbitrary and capricious, (b) whether California needs such standards to meet compelling and extraordinary conditions, and (c) whether California's standards and accompanying enforcement procedures are consistent with CAA section 209.

Following the April 2024 *Federal Register* notice, a public hearing was held on May 16, 2024. EPA received written comments from both health and environmental organizations, industry, manufacturers and end users, and individuals, all of which can be found, along with a transcript of the public hearing including all oral testimonies provided, in the public docket. [38]

---

[36] *See, e.g.*, 40 FR at 23103.
[37] 89 FR 32422 (April 26, 2024).
[38] Earthjustice et al. (Earthjustice), EPA-HQ-OAR-2023-0581-0029; California Air Resources Board (CARB I), EPA-HQ-OAR-2023-0581-0030; California Air Resources Board (CARB II), EPA-HQ-OAR-2023-0581-0033; Alliance of Nurse for Healthy Environment et al. (ANHE), EPA-HQ-OAR-2023-0581-

III. Response to Comments Regarding the Authorization Criteria

In this section, EPA addresses the comments received with respect to the three authorization criteria.

A. First Authorization Criterion

CAA section 209(e)(2)(A)(i) instructs that EPA cannot grant an authorization if the Agency finds that California was arbitrary and capricious in its determination that its standards will be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards.

EPA's evaluation of this first authorization prong is performed under the construct explained here. CAA section 209(e)(2)(A)(i) requires EPA to grant an authorization unless the Administrator finds that California has been arbitrary and capricious in its determination that its State standards will be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards. EPA may not disregard California's determination unless there is "clear and compelling evidence" to the contrary.[39] Moreover, "[t]he language of the statute and its legislative history indicate that California's regulations, and California's determination that they comply with the statute, when presented to the Administrator are presumed to satisfy the waiver

---

0035; National Association of Clean Air Agencies (NACAA), EPA-HQ-OAR-2023-0581-0036. American Fuel & Petrochemical Manufacturers (AFPM), EPA-HQ-OAR-2023-0581-0034. EPA also received a comment from American Free Enterprise Chamber of Commerce (EPA-HQ-OAR-2023-0581-0037) which exclusively addresses CARB's request for authorization for its 2022 amendments to the In-Use Diesel-Fueled Transport Refrigeration Units standards. That comment addressed a different proceeding and is thus beyond the scope of this action. An identical comment was posted by American Free Enterprise Chamber of Commerce in response to that authorization request (EPA-HQ-OAR-2024-0030-0034) and is addressed in the corresponding decision document.

[39] *MEMA I* at 1121–22.

requirements."[40] Additionally, "the parties opposing the waiver request bear the burden of persuading the Administrator that the waiver request should be denied."[41]

CARB states that, in adopting the 2022 Off-Road Amendments, the Board determined that the requirements related to the control of emissions associated with the 2022 Off-Road Amendments will not cause California's nonroad engine and equipment emission standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards.[42]

CARB's notes that its initial Off-Road Regulations required owners of in-use off-road diesel fleets to meet fleet average emission rates targets for PM and NOx based on fleet size.[43] Fleet owners could meet these targets by retrofitting their vehicle's exhaust system, replacing the existing engines with cleaner-emitting engines, replace higher-emitting vehicles with cleaner vehicles, retiring higher-emitting vehicles, or designating high-emitting vehicles as low-use vehicles.[44] CARB states that the 2022 Off-Road Amendments strengthen these requirements by requiring fleet owners to phase out, based on fleet size, vehicles powered by Tier 0, 1, and 2 off-road engines and certain model years of on-road engines beginning in 2024 through 2036.[45] The amendments further prohibit fleet owners, based on fleet size, from adding vehicles powered by Tier 3 or 4 off-road engines, as well as model year 2006 and older on-road engines.[46] The

---

[40] *Id. See also Ford Motor Co. v. Envtl. Prot. Agency*, 606 F.2d 1293, 1297 (D.C. Cir. 1979).
[41] *MEMA I* at 1121.
[42] Off-Road Authorization Support Document at 13; CARB Board Resolution 22-19, EPA-HQ-OAR-2023-0581-0010 at 11.
[43] Off-Road Authorization Support Document at 2.
[44] *Id.* at 3.
[45] *Id*. at Table 1.
[46] *Id*. at Table 2.

amendments also eliminate the ability for fleet owners to designate high-emitting vehicles as low-use, which had previously allowed high-emitting vehicles to operate indefinitely.[47]

EPA notes that its traditional practice, followed here, is to examine the specific standards that CARB has submitted for authorization and to compare the stringency of such standards to the relevant federal standards. If CARB's standards are more stringent than the relevant federal standards, then there is no possibility that the submitted standards could render CARB's nonroad program less protective than the federal program. Given this and EPA's prior findings regarding CARB's protectiveness determinations for its nonroad program, that means CARB's determination that its nonroad program is at least as protective as the federal program is not arbitrary and capricious, and the first authorization criterion is satisfied. In addition, in the event that it appears that a specific CARB standard may be less stringent than an applicable federal standard, then EPA will evaluate whether California's standards as a whole are "in the aggregate" as protective of public health and welfare as applicable federal standards for nonroad vehicles and engines.[48] In that circumstance, even if the standards in question are less stringent than the relevant federal standards, so long as California's nonroad standards, in the aggregate, are more stringent than the federal standards, the first authorization criteria is satisfied.

---

[47] *Id.* at 6.

[48] EPA also evaluates the first authorization criterion by assessing the numerical stringency of CARB's standard compared to applicable Federal standards. Section 209(b)(2) supports this approach.

CARB notes that the changes to California's nonroad emissions program that allow fleet owners to comply with the fleet-average emissions target by equipping their vehicles with engines certified to California or federal Final Tier 4 off-road engine standards do not undermine the relative protectiveness of California's standards in the aggregate, as the California Final Tier 4 off-road engine standards are essentially aligned with the federal standards.[49] Similarly, the changes that allow fleet owners to comply with the fleet-average emissions target by equipping their vehicles with 2007 or newer model year engines certified to California's on-road engine standards do not undermine the relative protectiveness of California's standards in the aggregate, because those standards are at least as protective of the public health and welfare as applicable federal standards since EPA does not have in-use nonroad standards.[50]

CARB further notes that the provisions of the 2022 Off-Road Amendments that establish emissions standards and other requirements for in-use off-road engines are unquestionably more protective of public health and welfare than applicable federal requirements, as EPA lacks authority to regulate emissions from in-use engines or equipment under the CAA.[51] Finally, CARB notes that the voluntary zero-emission compliance flexibility provisions of the 2022 Off-Road Amendments are indisputably more protective than applicable federal requirements as it establishes emissions standards requiring new off-road engines to emit no emissions of air pollutants.[52] Thus, CARB concludes that the 2022 Off-Road Amendments cannot be less protective than applicable

[49] *Id*. at 13.
[50] *Id*.
[51] *Id*. at 13-14.
[52] *Id*. at 14.

federal standards as they individually and collectively increase the stringency of California's existing Off-Road Regulations.[53]

EPA received no comments regarding whether the 2022 Off-Road Amendments are less protective of public health and welfare as applicable federal standards. Because CARB's standards are aligned with EPA standards for new off-road engines, and because EPA lacks authority under CAA section 209 to regulate in-use off-road engines, it is readily apparent that CARB's Off-Road standards are at least as protective as corresponding federal standards. Therefore, EPA cannot find that CARB was arbitrary and capricious in its protectiveness determination and cannot deny CARB's authorization request based on a finding under CAA section 209(e)(2)(A)(i).

One commentor argued that CARB was arbitrary and capricious for not considering lifecycle emissions of zero-emission vehicles and for not considering how the 2022 Off-Road Amendments may result in relocation of older, higher emitting nonroad diesel powered engines and equipment out of the state which would reduce expected emissions reductions.[54] This commentor also argues that the 2022 Off-Road Amendments limit consumer choice by phasing out older, higher emitting nonroad engines and equipment and that CARB should have considered carbon reductions achieved by utilizing other liquid fuels.[55] The commentor did not tie these later arguments to any of the three criteria prongs under section 209(e)(2)(A). Because EPA's

[53] *Id*.
[54] AFPM at 3-4.
[55] AFPM at 3.

review of CARB's authorization is limited to the statutory criteria, the commenter's failure to address the statutory criteria is fatal to its arguments.

Regardless, even were EPA to further evaluate this comment on its substantive merits, we would still disagree with the commenter. These arguments seem most closely directed at the arbitrary and capricious review of California's protectiveness determination under the first prong and thus are addressed here. As noted above, EPA's scope of review of CARB's authorization request is narrow and is limited to the criteria in section 209(e)(2)(A). While EPA appreciates this commenter's concern for the accuracy in the emission reduction estimates, neither this commenter nor any other has submitted information, data, or arguments as to why claimed inaccuracies would render CARB's standards, whether alone or in the aggregate, to be less protective than applicable federal standards. Any emission reductions from California's regulation of in-use nonroad vehicles or engines, including those from off road diesel fleets, would support a finding that the State's standards are as protective as the federal standards since EPA does not establish any in-use emission standards for nonroad vehicles or engines. This would be true whether the State's standards are considered in the aggregate or individually. The commenters' claim that reductions resulting from the submitted standards may not be as large as estimated by CARB, even if true, would not undermine the State's protectiveness determination.

Further, EPA disagrees that California must consider life cycle emissions, including emissions from stationary sources, in the protectiveness determination. The CAA does not require California to conduct a specific kind of public health and welfare analysis, prescribe a method that California must use to make a protectiveness

determination, or specifically require the State to consider emissions from sources other than those regulated by the standards submitted for authorization. The text of CAA section 209(e)(2) requires a comparison of State and Federal emission standards and does not suggest that in reviewing the State's determination EPA may deny the waiver based on emissions from sources other than the regulated nonroad engines and vehicles.

Finally, EPA has recognized that the intent of Congress in creating a limited review based on specifically listed criteria was to ensure that the Federal government did not second-guess state policy choices.[56] As such, it would be inappropriate for EPA to consider CARB's policy choices and objectives in adopting its nonroad vehicle and engine standards designed to achieve long term emission benefits in this action. The impact of the state standards on the consumer goods market or whether California should have considered alternative means of emissions reduction are issues left to the sound discretion of the state in selecting the best means to protect the health of its citizens and the public welfare.[57]

Accordingly, for the reasons noted above, EPA cannot find that CARB's protectiveness finding is arbitrary and capricious, nor can we deny CARB's request for authorization of its 2022 Off-Road Amendments based on this criterion.

B. Second Authorization Criterion

Under CAA section 209(e)(2)(A)(ii), EPA must grant an authorization for California nonroad vehicle and engines standards and accompanying enforcement

[56] *See*, 40 FR at 23103.
[57] *MEMA I* at 1110 (citing H.R. Rep. No. 294, 95th Cong., 1st Sess. 301–02 (1977)).

procedures unless EPA finds that California "does not need such State standards to meet compelling and extraordinary conditions." EPA has traditionally interpreted this provision, consistent with its interpretation of similar language in CAA section 209(b)(1)(B), as requiring consideration of whether conditions in California justify the need for a separate nonroad vehicle and engine program to meet compelling and extraordinary conditions, and not whether any given standard or set of standards is necessary to meet such conditions.[58]

Congress has not disturbed this reading of CAA section 209(b)(1)(B), and 209(e)(2)(A)(ii), as calling for EPA review of conditions in California rather than the standards being considered for waiver or authorization. With two exceptions, EPA has consistently interpreted this provision as requiring the Agency to consider whether California needs a separate motor vehicle emission program (or nonroad program) rather than the specific standards in the request at issue to meet compelling and extraordinary conditions. Congress intended to allow California to address its extraordinary environmental conditions and foster its role as a laboratory for motor vehicle emissions control. The Agency's longstanding practice therefore has been to evaluate CARB's requests with the broadest possible discretion to allow California to select the means it determines best to protect the health and welfare of its citizens in recognition of both the harsh reality of California's air pollution and the importance of California's ability to serve as a pioneer and a laboratory for the nation in setting new motor vehicle emission

[58] *See e.g.,* 82 FR 6525 (January 19, 2017); 78 FR 58090 (September 20, 2013).

standards and developing control technology.[59] EPA notes that "the statute does not provide for any probing substantive review of the California standards by federal officials."[60] As a general matter, EPA has applied the traditional interpretation in the same way for all air pollutants, criteria and GHG pollutants alike.[61]

In a departure from its long-standing interpretation, EPA has on two separate instances limited its interpretation of this provision to California motor vehicle standards that are designed to address local or regional air pollution problems.[62] In both instances EPA determined that the traditional interpretation was not appropriate for standards designed to address a global air pollution problem and its effects and that it was appropriate to address such standards separately from the remainder of the program (what became known as the "alternative interpretation").[63] However, shortly after both instances, EPA explained that the reinterpretation of the second waiver prong in this manner is flawed and the alternative interpretation is inappropriate, finding that the

---

[59] *See, e.g.*, S. Rep. No. 403, 90th Cong., 1st Sess. 33 (1967) (The waiver of preemption is for California's "unique problems and pioneering efforts."); 113 Cong. Rec. 30950, 32478 ("[T]he State will act as a testing agent for various types of controls and the country as a whole will be the beneficiary of this research.") (Statement of Sen. Murphy).

[60] *Ford Motor* at 1300.

[61] 74 FR 32744, 32763 (July 8, 2009); 76 FR 34693 (June 14, 2011); 79 FR 46256 (Aug. 7, 2014); 81 FR 95982 (Dec. 29, 2016); 88 FR 20688 (Apr. 6, 2023).

[62] 73 FR 12156 (March 8, 2008); 84 FR 51310 (September 27, 2019).

[63] In SAFE 1, EPA withdrew a portion of the waiver it had previously granted for California's Advanced Clean Cars (ACC) program— specifically, the waiver for California's zero emission vehicle (ZEV) mandate and the GHG emission standards within California's ACC program. EPA based its action, in part, on its determination that California did not need these emission standards to meet compelling and extraordinary conditions, within the meaning of section 209(b)(1)(B) of the CAA. That determination was in turn based on EPA's adoption of a new, GHG-pollutant specific interpretation of section 209(b)(1)(B). In any event, EPA expressly stated that its new interpretation of section 209(b)(1)(B) only applied to waiver requests for GHG emission reducing standards, SAFE 1 at 51341, n. 263. Therefore, even if EPA still maintained the SAFE 1 interpretation (which EPA does not agree with for the reasons explained in the SAFE 1 Reconsideration Decision (87 FR 14332 (March 14, 2022)), EPA's traditional interpretation would still apply to this nonroad authorization request given all of the standards at issue are related to the reduction of criteria pollutant emissions.

traditional interpretation—in which EPA reviews the need for California's motor vehicle program as a whole—is the best interpretation.[64]

CARB states that, under either EPA's traditional interpretation of this criterion, or under an alternative interpretation that considers California's need for particular standards, EPA has no basis to deny this authorization request under this criterion.[65] CARB notes that the Administrator has consistently recognized that California satisfies the second criterion for waivers and authorizations—that the State has "compelling and extraordinary conditions" and therefore continues to need its own motor vehicle and motor vehicle engine, and nonroad engine and equipment emissions control programs, respectively.[66]

CARB further notes that California, particularly in the South Coast and San Joaquin Valley Air Basins, continues to experience some of the worst air quality in the nation. Four areas in California are in nonattainment with the National Ambient Air Quality Standards (NAAQS) for $PM_{2.5}$. California's South Coast and San Joaquin Valley Air Basins, in particular, continue to be in extreme non-attainment with NAAQS for ozone and in serious non-attainment with NAAQS for PM.[67] Currently, 17 areas within California, are non-attainment areas for NAAQS for ozone, with 9 of those classified as Moderate and above the 70 parts per billion (ppb) ozone standard.[68] CARB identified emissions from nonroad engines subject to the 2022 Off-Road Amendments as a

---

[64] 74 FR 32744 (July 8, 2009); SAFE 1 Reconsideration Decision at 14333–34, 14352–55, 14358–62.
[65] Off-Road Authorization Support Document at 14.
[66] *Id.*
[67] https://www3.epa.gov/airquality/greenbook/ancl.html#CA, last consulted December 19, 2024, located at EPA-HQ-OAR-2023-0581.
[68] Off-Road Authorization Support Document at 15.

significant source of NOx emissions and concluded that the Amendments "are necessary to achieve additional criteria emissions reductions in order to meet California's SIP targets and attain the NAAQS in California.[69]

CARB maintains that even if EPA applies a narrower standards-specific inquiry, the record demonstrates that California "needs" the emissions-related requirements of the 2022 Off-Road Amendments to reduce criteria emissions in California. CARB's findings confirmed that nonroad diesel vehicles regulated by the Amendments are a significant source of fine PM and NOx emissions statewide, accounting for 7 percent of statewide PM emissions and 14 percent of statewide NOx emissions in 2022.[70] The Amendments are a critical component of California's 2022 State Implementation Plan (SIP), which requires a reduction of NOx emissions by four tons per day by 2037,[71] and will reduce health risks including premature deaths caused by exposure to emissions from nonroad diesel engines, especially in communities that experience disproportionate burdens from exposure to toxic air contaminants.[72] CARB concludes that EPA has consistently found that California "needs" emissions standards to address the compelling and extraordinary conditions resulting from criteria pollutants as described above, and therefore has no basis to find that the 2022 Amendments do not satisfy the "compelling and extraordinary" criterion.[73]

---

[69] *Id*.
[70] *Id.* at 16.
[71] ISOR at 43.
[72] Off-Road Authorization Support Document at 16-17.
[73] 53 FR7022 (Mar. 4, 1988); 55 FR43029, 43031 (Oct. 25, 1990); 69 FR 60995 (Oct. 14, 2004); 79 FR at 46261-62; 84 FR51344, 51346 (Sept. 27, 2019).

EPA did not receive any comments challenging California's need for its nonroad engines and vehicles emission program (including the 2022 Off-Road Amendments) to address compelling and extraordinary conditions under section 209(e)(2)(A)(ii). Based on a review of the record, the opponents of authorization have not demonstrated that California does not need its nonroad emissions program, including the 2022 Off-Road Amendments, to meet compelling and extraordinary conditions. Therefore, EPA cannot deny the authorization request under CAA section 209(e)(2)(A)(ii) based on EPA's traditional interpretation of the criterion. In addition, in the event that the need for CARB's 2022 Off-Road Amendments is to be independently evaluated, the opponents of authorization have not demonstrated that California does not need the 2022 Off-Road Amendments to meet compelling and extraordinary conditions. As noted above, there continues to be compelling and extraordinary conditions in California that are giving rise to serious air quality issues throughout the state. The Amendments, based on information in the record, will reduce statewide emissions of criteria pollutants that are designed to help mitigate the serious air quality conditions.[74] Therefore, EPA cannot deny the authorization request under CAA section 209(e)(2)(A)(ii), under an alternative interpretation that requires an assessment of each CARB standard within this second criterion.[75]

[74] Off-Road Authorization Support Document at 1.
[75] EPA does not believe the alternative interpretation is correct but nevertheless provides its analysis and conclusion under this interpretation.

C. Third Authorization Criterion

CAA section 209(e)(2)(A)(iii) instructs that EPA cannot grant an authorization if California's standards and enforcement procedures are not consistent with "this section." As noted above, EPA's 1994 rule sets forth, among other things, regulations providing the criteria, as found in CAA section 209(e)(2)(A), which EPA must consider before granting any California authorization request for new nonroad engine or vehicle emission standards.[76] EPA has historically interpreted the CAA section 209(e)(2)(A)(iii) "consistency" inquiry to require, at minimum, that California standards and enforcement procedures be consistent with CAA section 209(a), section 209(e)(1), and section 209(b)(1)(C) (as EPA has interpreted that subsection in the context of section 209(b) motor vehicle waivers).[77]

1. Consistency with CAA section 209(a)

To be consistent with CAA section 209(a), California's 2022 Off-Road Amendments must not apply to new motor vehicles or new motor vehicle engines. This is the case. The Amendments expressly apply only to nonroad engines and do not apply to motor vehicles or engines used in motor vehicles as defined by CAA section 216.We did not receive any comments on California's consistency with CAA section 209(a). Therefore, EPA cannot deny California's request on the basis that California's 2022 Off-Road Amendments are not consistent with CAA section 209(a).

[76] *See* 40 CFR Part 1074.
[77] 59 FR at 36982–83.

2. Consistency with CAA section 209(e)(1)

To be consistent with CAA section 209(e)(1), California's 2022 Off-Road Amendments must not affect new farm or construction equipment or vehicles that are below 175 horsepower, or new locomotives or new engines used in locomotives. CARB notes that its 2022 Off-Road Amendments do not affect such permanently preempted vehicles of engines.[78] EPA did not receive any comments regarding California's consistency with section 209(e)(1). Therefore, EPA cannot deny California's request on the basis that California's 2022 Off-Road Amendments are not consistent with section 209(e)(1).[79]

3. Consistency with CAA section 209(b)(1)(C)

a. Historical Context

The requirement that California's standards be consistent with CAA section 209(b)(1)(C) effectively requires consistency with CAA section 202(a). EPA has interpreted consistency with CAA section 202(a) using a two-pronged test: (1) whether there is sufficient lead time to permit the development of technology necessary to meet the standards and other requirements, giving appropriate consideration to the cost of compliance in the time frame provided, and (2) whether the California and Federal test procedures are sufficiently compatible to permit manufacturers to meet both the state and

[78] Off-Road Authorization Support Document at 17.

[79] EPA notes that 40 CFR, Part 1074, section 1074.10(a) codifies the prohibition in CAA section 209(e)(1) and provides that state and localities are preempted from adopting and enforcing standards or other requirements relating to the control of emissions from new engines smaller than 175 horsepower that are primarily used in farm or construction equipment or vehicles, as defined in Part 1074. 40 CFR 1074.5 provides definitions of the terms used in 40 CFR 1074.10(a). EPA anticipates that CARB will implement its Off-Road regulations consistent with these federal regulatory provisions.

Federal test requirements with one test vehicle or engine.[80] We often refer to the first element by the shorthand of technological feasibility (or technological infeasibility). The scope of EPA's review of whether California's action is consistent with CAA section 202(a) is narrow. The determination is limited to whether those opposed to authorization 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 procedures.[81]

Under CAA section 209(b)(1)(C), EPA must grant California's waiver (and authorization) request unless the Agency finds that California standards and accompanying enforcement procedures are "not consistent" with CAA section 202(a). CAA section 202(a)(2) specifies that standards are to "take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period."

EPA has long limited its evaluation of whether California's standards are consistent with CAA section 202(a) to determining if: (1) There is inadequate lead time to permit the development of the necessary technology giving appropriate consideration to the cost of compliance within that time period; or whether (2) California and Federal test procedures are incompatible so that a single vehicle could not be subjected to both tests. EPA has also explained that "the import of section 209(b) is not that California and

[80] *See* 61 FR 53371, 53372 (Oct. 11, 1996).
[81] *MEMA I* at 1126.

Federal standards be identical, but that the Administrator not grant a waiver of Federal preemption where compliance with the California standards is not technologically feasible within available lead time."[82] Further, EPA's review is limited to the record on feasibility of the technology. Therefore, EPA's review is narrow and does not extend to, for example, whether the regulations under review are the most effective, whether the technology incentivized by California's regulations are the best policy choice, whether EPA has the authority under the CAA to set such standards (versus California's sovereign authority to set its standards), or whether better choices should be evaluated. The Administrator has thus long explained that "questions concerning the effectiveness of the available technology are also within the category outside my permissible scope of inquiry," under section CAA 209(b)(1)(C).[83]

California's accompanying enforcement procedures would also be inconsistent with CAA section 202(a) if the Federal and California test procedures conflicted, i.e., if manufacturers would be unable to meet both the California and Federal test requirements with the same test vehicle.

In determining whether there is inadequate lead time to permit the development of technology, EPA considers whether adequate technology is presently available or already in existence and in use. If technology is not presently available, EPA will consider whether California has provided adequate lead time for the development and application

---

[82] 46 FR 22032, 22034–35 (April 15, 1981).
[83] 41 FR 44209, 44210 (October 7, 1976); 47 FR 7306, 7310 (February 18, 1982) (''I am not empowered under the Act to consider the effectiveness of California's regulations, since Congress intended that California should be the judge of 'the best means to protect the health of its citizens and the public welfare.''' (Internal citations omitted)).

of necessary technology prior to the effective date of the standards for which a waiver is being sought.

Additionally, the D.C. Circuit has held that "[i]n the waiver context, section 202(a) relates in relevant part to technological feasibility and to federal certification requirements. The technological feasibility component of section 202(a) obligates California to allow sufficient lead time to permit manufacturers to develop and apply the necessary technology. The federal certification component ensures that the Federal and California test procedures do not impose inconsistent certification requirements. Neither the Court nor the agency has ever interpreted compliance with section 202(a) to require more."[84]

Regarding the costs portion of the technology feasibility analysis, when cost is at issue EPA evaluates the cost of developing and implementing control technology in the actual time provided by the applicable California regulations. The D.C. Circuit has stated that compliance cost "relates to the timing of a particular emission control regulation."[85] The Court, in *MEMA I*, opined that CAA section 202's cost of compliance concern, juxtaposed as it is with the requirement that the Administrator provide the requisite lead time to allow technological developments, refers to the economic costs of motor vehicle emission standards and accompanying enforcement procedures.[86]

---

[84] *Motor Equipment Manufacturers Association v Nichols* (*MEMA II*) 143 F.3d 449 (D.C. Cir 1998).
[85] *MEMA I* at 1119.
[86] *Id. See* S. Rep. No. 192, 89th Cong., 1st Sess. 5–8 (1965); H.R. Rep. No. 728 90th Cong., 1st Sess. 23 (1967), reprinted in U.S. Code Cong. & Admin. News 1967, p. 1938. It relates to the timing of a particular emission control regulation rather than to its social implications.

b. CARB's 2022 Off-Road Amendments and Comments Received

CARB notes that the 2022 Off-Road Amendments present no compliance issues regarding technical feasibility or lead time because the technologies needed to comply with the requirements exist and are readily available. Tier 3 engines have been available since the 2006 model year, Tier 4 Interim engines have been available for more than a decade, and Tier 4 Final engines have been manufactured since 2014.[87] CARB further notes that its Tier 4 Final standards are essentially aligned with the Federal Tier 4 Final standards, and EPA fully considered the technological feasibility and economic costs associated with the Federal Tier 4 Final standards in its rulemaking action promulgating those standards.[88] CARB also notes that the zero-emission flexibility provisions do not pose issues of technical feasibility or lead time as the provisions are voluntary compliance flexibility options and do not impose any requirements on fleets.[89]

Regarding costs, CARB provides estimates of the costs of compliance associated with the 2022 Off-Road Amendments for fleets of different sizes, and fleets operated by state and federal government. CARB also considered research and development costs and costs of compliance for prime contractors. In its analysis, CARB considered direct incremental costs—vehicle capital costs, off-road diesel vehicle Tier 4 final maintenance costs, and administrative costs for reporting and review of fleet certificates associated with the public works awarding bodies and prime contractors provisions. CARB concluded that costs to fleets are higher in the earlier years of the 2022 Off-Road

[87] Off-Road Authorization Support Document at 18-19.
[88] *Id*. at fn 66; 75 FR 8056, 8057 (Feb. 23, 2010).
[89] Off-Road Authorization Support Document at 19.

Amendments and reduced in later years.[90] A typical ultra-small fleet[91] would see an increased incremental cost of $35,906 during the analysis period from 2023-2038.[92] In that same fifteen year time period, a typical small fleet would see an increased cost of $2,351;[93] a typical medium fleet would see an increased cost of $209,840;[94] and a typical large fleet would see an increased cost of $338,002.[95] CARB then compared the maximum amortized annual cost of compliance with the average revenues of businesses in affected industries, concluding that the maximum amortized cost for a large fleet would represent less than 1 percent of average annual revenues for firms with 100 employees or greater and the maximum amortized cost for an ultra-small fleet would represent between 0.2 to 1.7 percent of average annual revenues for firms with fewer than 100 employees.[96]

Regarding consistency of test procedures, CARB argues in their authorization request that the 2022 Off-Road Amendments present no issues of inconsistency between federal and California test procedures because the Amendments do not alter the test procedures for certifying in-use engines.[97] CARB notes that engines are required to be certified to applicable nonroad emission standards set by EPA or CARB for the engine family, under test procedures associated with those emission standards. Additionally, CARB states that EPA does not have in-use standards and test procedures and lacks the

---

[90] *Id.* at 20.
[91] An ultra-small fleet is a subset of small fleets that have less than 500 total hp. The 2022 Off-Road Amendments included some delayed compliance deadlines for these smallest fleets.
[92] Final Statement of Reasons 399 Form (FSOR 399), EPA-HQ-OAR-2023-0581-0015 at 37.
[93] *Id.* at 44.
[94] *Id.* at 41-42.
[95] *Id.* at 39.
[96] *Id.* at 44-45.
[97] Off-Road Authorization Support Document at 21.

authority to adopt such requirements.[98] EPA did not receive any comments regarding the consistency of California's test procedures with federal test procedures.

One commenter asserted that CARB's 2022 Off-Road Amendments are infeasible without providing any information, data, or arguments to support the claim. As stated above, the requisite technologies to comply with the 2022 Off-Road Amendments are already commercially available and have been since at least 2014. The commenter later states that the amendments would add "significant costs" to operate a diesel fleet, but again provides no evidence demonstrating how much costs would increase.[99]

While costs may indeed increase because of the 2022 Off-Road Amendments, this does not in and of itself call for denial of CARB's request under this criterion, even if the increase is significant.[100] Indeed, to deny CARB's authorization request on the basis of the cost of compliance under CAA section 209(b)(1)(C), EPA must find that the costs are excessive.[101] Further, CARB's analysis shows a small increase in compliance cost

---

[98] *Id*.
[99] AFPM at 1, 3.
[100] *See ATA v EPA*, 600 F.3d 624, 629 (D.C. Cir. 2010) ("In approving the California TRU rule, EPA adequately considered those costs. EPA explained that businesses can comply with the TRU rule for about $2,000 to $5,000 per unit. J.A. 584. EPA also determined that the phased implementation of the rule would help minimize its cost. Although the costs of the TRU rule are not insignificant, EPA's duty under this portion of the statute is simply to consider those costs. It did so here. EPA's conclusion — namely that California's rule was consistent with § 7521(a)(2) — was reasonable and reasonably explained.").
[101] *See* 88 FR at 20705-06 ("Previous waiver decisions are fully consistent with *MEMA I*, which indicates that the cost of compliance must reach a very high level before the EPA can deny a waiver. Therefore, past decisions indicate that the costs must be excessive to find that California's standards are infeasible and therefore inconsistent with section 202(a).") (citing 47 FR 7306, 7309 (Feb. 18, 1982); 43 FR 25735 (Jun. 14, 1978); 46 FR 26371, 26373 (May 12, 1981)). EPA has followed this approach in a number of previous waivers. *See, e.g.*, 38 FR 30136 (Nov. 1, 1973); 40 FR 30311 (July 18, 1975); 71 FR 335 (Jan. 4, 2006) (2007 Engine Manufacturers Diagnostic standards); 70 FR 50322 (August 26, 2005) (2007 California Heavy-Duty Diesel Engine Standards); 77 FR 9239 (February 16, 2012) (HD Truck Idling Requirements); 78 FR 2111, 2132 (Jan. 9, 2013); 79 FR 46256 (Aug. 7, 2014) (the first HD GHG emissions standard waiver, relating to certain new 2011 and subsequent model year tractor-trailers); 81 FR 95982 (December 29, 2016) (the second HD GHG emissions standard waiver, relating to CARB's "Phase I" regulation for 2014 and subsequent model year tractor-trailers); 82 FR 4867 (January 17, 2017) (On-Highway Heavy-Duty Vehicle In-Use Compliance Program).

compared to annual revenues of the regulated entities. In addition, given that Tier 4 technology exists, and operators can sell older equipment on the secondary market, cost increases are ameliorated. The commenter failed to address these considerations or CARB's evaluation of costs in any meaningful way. Given CARB's detailed quantitative and conceptual analysis of costs, the commenter's vague speculations about cost increases are insufficient to meet the waiver opponents' burden of proof.

c. CARB's 2022 Off-Road Amendments are Consistent with Section 202(a)

As explained above, EPA has historically applied a consistency test under CAA section 202(a) that calls for the Administrator to first review whether adequate technology already exists, and if it does not, whether there is adequate time to develop and apply the technology before the standards go into effect. After a review of the record, information, and comments received in this proceeding, EPA has determined that the opponents of the authorization request have not demonstrated that CARB's 2022 Off-Road Amendments are inconsistent with section 202(a). As noted above, CARB's authorization request indicated that the requisite emissions control technology is commercially available and has been for at least a decade. Regarding the zero-emissions compliance flexibility provisions, CARB noted that the provisions are voluntary and thus do not present issues regarding technical feasibility or lead time. The opponents of authorization have not demonstrated why the regulatory compliance options, considered either separately or together, render the 2022 Off-Road Amendments inconsistent with section 202(a). Therefore, based on the record before us, EPA cannot find that the opponents of the 2022 Off-Road Amendments authorization have met their requisite burden of proof to demonstrate that such requirements are inconsistent with CAA section

202(a). Thus, EPA cannot deny CARB's 2022 Off-Road Amendments authorization request on this basis, and therefore EPA cannot deny the authorization request based on the third authorization criterion.

IV. Other Issues

EPA has long construed CAA section 209 as limiting the Agency's authority to deny California's requests for waivers and authorizations to their respective three listed criteria under CAA section 209(b) and section 209(e)(2)(A). This narrow review approach is supported by decades of waiver and authorization practice and judicial precedent. In *MEMA I*, the D.C. Circuit held that the Agency's inquiry under CAA section 209(b) is "modest in scope."[102] The D.C. Circuit further noted that "there is no such thing as a 'general duty' on an administrative agency to make decisions based on factors other than those Congress expressly or impliedly intended the agency to consider."[103] In *MEMA II*, the D.C. Circuit again rejected an argument that EPA must consider a factor outside the 209(b) statutory criteria concluding that doing so would restrict California's ability to "exercise broad discretion."[104] EPA's duty, in the authorization context, is thus to grant California's authorization request unless one of the three listed criteria is met. "[S]ection 209(b) sets forth the only waiver standards with which California must comply . . . If EPA concludes that California's standards pass this test, it is obligated to approve California's waiver application."[105] This narrow scope of

[102] *MEMA I* at 1105.
[103] *Id.* at 1116.
[104] *MEMA II* at 453.
[105] *Id.* at 463.

review also precludes consideration of constitutional claims,[106] which EPA has declined to consider in the context of a waiver or authorization proceeding since at least 1976.[107] EPA has therefore consistently declined to consider factors outside the three statutory criteria listed in CAA section 209(b) and 209(e)(2)(A).

A commenter alleged in passing various constitutional violations, including the Major Questions Doctrine, Takings Clause of the Fifth Amendment, Dormant Commerce Clause, dormant foreign affairs preemption doctrine of the Supremacy Clause, equal sovereignty doctrine, Import-Export Clause, Privileges and Immunities Clause, and the Full Faith and Credit Clause.[108] They also alleged violations of the California Environmental Quality Act.[109]

The arguments in this comment were minimally developed. In any event, as discussed above, EPA does not consider constitutional challenges in the authorization proceeding context. EPA's task is limited to consideration of the factors included in CAA section 209(e)(2)(A). Likewise, EPA's jurisdiction does not extend to considering the validity of CARB's rules under California law.[110] Such concerns are the province of state

---

[106] *MEMA I* at 1115 (stating "[t]he waiver proceeding produces a forum ill-suited to the resolution of constitutional claims.").
[107] *See, e.g.*, 41 FR 44212 (Oct. 7, 1976) (declining to consider a due process violation claim); 43 FR 32182, 32184 (July 25, 1978) (rejecting constitutional objections as beyond the "narrow" scope of the Administrator's review).
[108] AFPM at 2.
[109] *Id*.
[110] EPA notes that CAA section 209(e)(2)(A)'s criteria stand in marked contrast to other sections of the CAA that do authorize or obligate EPA to evaluate whether the State has legal authority to carry out its plans. *See, e.g.*, CAA section 110(a)(2)(E) (requiring Title I State Implementation Plans to "provide (i) necessary assurances that the State … will have adequate personnel, funding, and authority under State (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of Federal or State law from carrying out such implementation plan or portion thereof)"), CAA section 112(l)(5) (requiring disapproval of section 112(l) State programs where "adequate authority does not exist, or adequate resources are not available, to implement the program").

regulators and state courts, and challengers have had opportunity to address these concerns throughout the state's regulatory and judicial process.[111]

V. Decision

After evaluating CARB's authorization request and the Off-Road regulations, the public comments and other materials contained in the administrative record, EPA is granting an authorization for the 2022 Off-Road Amendments that CARB submitted for an authorization under CAA section 209(e)(2)(A).

Section 307(b)(1) of the CAA governs judicial review of final actions by the EPA. Petitions for judicial review of this action must be filed within 60 days from the date notice of this final action is published in the *Federal Register*.

VI. Statutory and Executive Order Reviews

As with past authorization and waiver decisions, this action is not a rule as defined by Executive Order 12866. Therefore, it is exempt from review by the Office of Management and Budget as required for rules and regulations by Executive Order 12866.

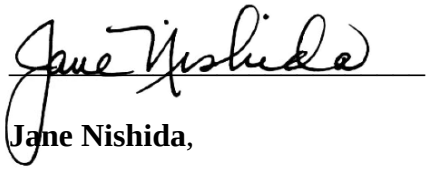
In addition, this action is not a rule as defined in the Regulatory Flexibility Act, 5 U.S.C. § 601(2). Therefore, EPA has not prepared a supporting regulatory flexibility analysis addressing the impact of this action on small business entities.

---

[111] The commenter cites generally to its earlier filings in the Advanced Clean Cars II waiver proceeding and in Ohio v. EPA, No. 22-1081, but fails to elaborate how those filings are applicable to this proceeding, which involves entirely different regulatory requirements and even different regulated entities. Such skeletal assertions are insufficient to exhaust these issues within the administrative process. Regardless, to the extent relevant to respond to this or other comments, EPA incorporates by reference the agency's decision document for that action, see California State Motor Vehicle and Engine Pollution Control Standards; Advanced Clean Cars II; Waiver of Preemption Decision Document, EPA-420-R-24-023 (December 2024), as well as the relevant merits arguments made in EPA's response brief in *Ohio, see* Final Brief of Respondents, *Ohio v. EPA*, No. 22-1081 (D.C. Cir. 2023).

Further, the Congressional Review Act, 5 U.S.C. § 801, *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, does not apply because this action is not a rule for purposes of 5 U.S.C. § 804(3).[112]

Dated: January 3, 2025



Jane Nishida,

Acting Administrator.

[112] The U.S. Government Accountability Office (GAO) has issued a decision (in the context of its review of EPA's SAFE I Reconsideration decision) that the Congressional Review Act does not include adjudicatory orders and also excludes certain categories of rule from coverage, including rules of particular applicability. As part of this decision, the GAO also determined that even if the SAFE I Reconsideration waiver action were to satisfy the Administrative Procedure Act's definition of a rule, it would be considered a rule of particular applicability, and, therefore, would still not be subject to the CRA's submission requirement. https://www.gao.gov/products/b-334309.